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Topic 1 - Question Set 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

Correct Answer: D

Community vote distribution

D (100%)

- shandy

Highly Voted

2 years, 3 months 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 not correct because configuring a new load balancer would require a new or different SSL and DNS records which conflicts with the requirements to 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 implementation behind the old API. Moreover, it introduces unnecessary risk in case bugs or incompatibilities are discovered in the new API.

upvoted 47 times
- AWS56

Highly Voted

2 years, 3 months ago

agreed, The answer is D

upvoted 15 times
- AJRD

Most Recent

3 weeks, 4 days ago

Selected Answer: D

D is the correct answer.

upvoted 1 times
- anjuagrawal

4 weeks, 1 day ago

Selected Answer: D

D is the answer because HTTP(S) load balancer can direct traffic reaching a single IP to different backends based on the incoming URL.

upvoted 1 times
- sasithra

1 month ago

Answer is D

upvoted 1 times
- JohnDoeSSS

1 month, 2 weeks ago

Selected Answer: D

Vote D

upvoted 1 times
- Moss2011

1 month, 3 weeks ago

Selected Answer: D

Because they want to have the same SSL and DNS

upvoted 1 times
- cuongnd

1 month, 4 weeks ago

Selected Answer: D

vote D

upvoted 1 times
- PhuocT

2 months ago

Selected Answer: D

Vote D

upvoted 2 times
- cloud_enthusiast_in

2 months, 4 weeks ago

ans is D

upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago

Go for D.

upvoted 2 times

  **joe2211** 3 months ago

Selected Answer: D

Vote D

upvoted 1 times

  **nqthien041292** 3 months, 1 week ago

Selected Answer: D

Vote D

upvoted 1 times

  **GuilhermeAlteia** 3 months, 2 weeks ago

Selected Answer: D


The answer is D

upvoted 2 times

  **vincy2202** 3 months, 3 weeks ago

Option D is the correct choice.

upvoted 2 times

  **exam_war** 3 months, 4 weeks ago

go with D

upvoted 1 times

  **fwfw** 4 months, 2 weeks ago

DDD can configure existed Load Balancer

upvoted 1 times

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

Correct Answer: A

BigQuery is Google's serverless, highly scalable, low cost enterprise data warehouse designed to make all your data analysts productive. Because there is no infrastructure to manage, you can focus on analyzing data to find meaningful insights using familiar SQL and you don't need a database administrator.

BigQuery enables you to analyze all your data by creating a logical data warehouse over managed, columnar storage as well as data from object storage, and spreadsheets.

Reference:

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



Community vote distribution

A (100%)

  **Eroc** Highly Voted 2 years, 4 months 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 23 times

  **kinghin** 1 month, 2 weeks ago

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

upvoted 3 times

  **tartar** 1 year, 6 months ago

A is ok

upvoted 14 times

  **clouddude** Highly Voted 1 year, 9 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 11 times

  **anjuagrawal** Most Recent 4 weeks, 1 day ago

Selected Answer: A

BigQuery - SQL and Petabytes of data for analysis.

upvoted 2 times

  **Moss2011** 1 month, 3 weeks ago

Selected Answer: A

Because they want to query the data set

upvoted 2 times

  **cuongnd** 1 month, 4 weeks ago

vote A

upvoted 1 times

  **Atnafu** 2 months ago

A- is correct



B- is not because of the size



Cloud SQL for MySQL has a limit of 10,000 tables for an instance. Too many tables can significantly impact the performance of a Cloud SQL instance. Instances that exceed this limit are not covered by the SLA. When a table size reaches 16 TB, the maximum size for Linux partitions, more data files cannot be added to it.

MySQL instances

Up to 64 TB, depending on the machine type.



PostgreSQL and SQL Server instances
Up to 64 TB, depending on whether the instance has dedicated or shared vCPUs.
upvoted 1 times



  **haroldbenites** 2 months, 4 weeks ago
Go for A
upvoted 1 times



  **nqthien041292** 3 months, 1 week ago



Selected Answer: A



Vote A
upvoted 1 times



  **vincy2202** 3 months, 3 weeks ago
B seems to be closer, however Cloud SQL can't handle multi peta bytes of dataset, hence option A is the correct answer. Also requirement of Analytics makes option A as a perfect choice.
upvoted 1 times



  **exam_war** 3 months, 4 weeks ago
A is correct
upvoted 2 times



  **FERIN_02** 4 months ago
A.is right for sure, Same time Option.C also make sense. Bigquery can query data from Cloud Store with out having store data into Big Query. BQ can query flat files (in CSV format) stored in cloud storage. Infact this is most economical way.
upvoted 2 times



  **fwfw** 4 months, 2 weeks ago
AAA analytics+SQL+PBData
upvoted 2 times



  **mum_lalitha0508** 4 months, 4 weeks ago
Option A is perfect for the combo Analysis+sql
upvoted 2 times

  **babuu2021** 6 months, 1 week ago
A is good.
upvoted 2 times

  **amxexam** 6 months, 1 week 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 1-2 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** 5 months, 3 weeks ago
Hence Option A
upvoted 2 times

  **bala786** 7 months, 4 weeks ago
Option A is correct, for Analysis we can select BigQuery
upvoted 2 times

  **aviratna** 8 months, 1 week ago
A is correct as it support SQL query which can be used by Business Analysts and it will support Peta Byte of data for analysis
upvoted 2 times

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

Correct Answer: ADE

References:

<https://cloud.google.com/appengine/docs/standard/java/tools/uploadinganapp>

<https://cloud.google.com/appengine/docs/standard/java/building-app/cloud-sql>

Community vote distribution

CDE (64%)	ACE (28%)	8%
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- rishab86**

Highly Voted

9 months ago

CDE seems to be correct to me.

upvoted 34 times
- J19G**

4 months, 3 weeks ago

Sorry ACE, A 9takes care of Infra)

upvoted 3 times
- rishab86**

5 months, 2 weeks ago

ACE seems to correct now

upvoted 2 times
- rishab86**

5 months, 2 weeks ago

ACD sorry

upvoted 2 times
- hareesh123**

4 months, 3 weeks ago

CDE looks like correct .

Porting a J2EE application to App Engine will not work as its is - there are three approach for migration -

There are three major types of migrations:

Lift and shift

Improve and move

Rip and replace

So Option A can be discarded .

So the answer is CDE .

upvoted 6 times
- hareesh123**

4 months, 3 weeks ago

From the OPERATIONS Manager pespective CDE is the answer .

upvoted 3 times
- NapoleonBorntoparty**

Highly Voted

8 months, 1 week 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 25 times
- anjugrawal**

Most Recent

4 weeks, 1 day ago

Selected Answer: ADE

The question is about migration and not debugging or monitoring. So, ruling out other options.

upvoted 1 times

  **AWS56** 1 month ago



CDE. Are correct

upvoted 1 times

  **Tan1234** 1 month, 1 week ago

Does anyone know the correct answer for this question? The discussion is very confusing

upvoted 3 times

  **Sav94** 1 month, 1 week ago

Selected Answer: CDE

For me is CDE



upvoted 4 times

  **JohnDoeSSS** 1 month, 2 weeks ago

Selected Answer: CDE

A is not a best practice. You can containerize it and deploy it on any cloud. And the question only asked about recommended practices for "Migration to the cloud" not asking for the recommended way to migrate to GCP.

upvoted 7 times



  **nymets** 1 month, 2 weeks ago

Selected Answer: CDE

The Question mentions "...migrating a J2EE application to the cloud". Note the use of "the cloud", not "Google Cloud". I believe this is a question around "best practices" that can be used against ANY cloud.

PS: I acknowledge "C" contains a reference to "StackDriver Debug". But note that the sentence uses the phrase "a tool LIKE..."

upvoted 3 times

  **blurk** 1 month, 4 weeks ago

Selected Answer: ADE

cloud debugger is not for monitoring <https://cloud.google.com/debugger/docs/setup/java>

upvoted 1 times

  **OrangeTiger** 2 months 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

  **ashehzad** 2 months ago

Selected Answer: ACE

ACE is the right answer. If we recommend AppEngine than we don't need to provision the infrastructure.

upvoted 3 times

  **ehgm** 2 months, 1 week 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 2 times

  **ABO_Doma** 2 months, 2 weeks ago

Selected Answer: ACE

D is not correct as the App engine takes care of the Infrastructure already

upvoted 1 times

  **americoleonardo** 2 months, 3 weeks ago

Selected Answer: ACE


ACE seems to be correct to me

upvoted 1 times

  **gcp_learner** 2 months, 3 weeks ago

CDE seems to be the right answer to me. I am not sure the question asks about the options for GCP service to use - nothing in the question tells me App Engine is necessarily the solution

upvoted 2 times

  **anjuagrawal** 2 months, 3 weeks ago

ACE seemed to be more correct than ADE.

upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago

Go for CDE

upvoted 1 times

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()
```

praw709528

- 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

Correct Answer: A

Community vote distribution

A (100%)

 **JoeShmoe** Highly Voted 2 years, 3 months ago

A is correct

upvoted 26 times

 **AWS56** Highly Voted 2 years, 1 month ago

A is the answer

upvoted 11 times

 **vincy2202** Most Recent 2 months, 1 week ago

Selected Answer: A

A is the correct answer

upvoted 2 times

 **haroldbenites** 2 months, 4 weeks ago

o for A

upvoted 1 times

 **duocnh** 3 months ago

Selected Answer: A



vote A

upvoted 1 times

 **exam_war** 3 months, 4 weeks ago



I'll go with A

upvoted 2 times

  **Papafel** 8 months, 1 week ago


A is the correct answer

upvoted 2 times

  **victory108** 9 months, 2 weeks ago

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



upvoted 3 times

  **Amber25** 9 months, 2 weeks ago

Answer A.

During peak load it might be possible that Uttar connect through different session and since session is declared locally it will overwrite previous watched videos

upvoted 1 times


  **changronon** 9 months, 3 weeks ago

I would choose "B" because in code

```
" news_articles = news.get_new_news (user, seasion [user]
["viewed"])"
```

look like get back user already viewed news.

upvoted 1 times

  **un** 9 months, 3 weeks ago

A is correct

upvoted 1 times

  **kumar2009** 10 months ago

A is correct. There is nothing related to datastore here.

upvoted 1 times

  **Ausias18** 11 months, 1 week ago

Answer is A

upvoted 1 times

  **Joyjit_Deb** 1 year ago

I would go with Option "A".



Don't see how Datastore came into discussion.

upvoted 1 times

  **BobBui** 1 year, 1 month ago

A is correct

upvoted 1 times

  **svjl** 1 year, 2 months ago

A is correct

upvoted 1 times

  **VedaSW** 1 year, 5 months ago

I think the answer is A.

C, D is rule out, because of this statement " During peak load, users report that they can see news articles they already viewed". C & D got nothing to with peak load.



Left A and B.

From the codes, I cannot conclude data store or any form of database is involved (unless you got the source code to the function that retrieve the data)

So, this rules out B.

Therefore, I will pick A.

upvoted 5 times

  **willrof** 1 year, 2 months ago

i believe A as well, as it's directly related to peak load (thus, autoscaling), not an expert but I believe if B was the issue it would happen even when load are not at peak.

upvoted 1 times

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

Correct Answer: C

Community vote distribution

A (71%) C (29%)

- dummyemailforexam**

Highly Voted

1 year, 10 months ago

A. This is GCP exam. They will always promote their services. Not a third party solution.
upvoted 50 times
- willrof**

1 year, 2 months ago

Totally Agree. offering Stackdriver Logging is what they want from a GCA. answer is A.
upvoted 3 times
- Ziegler**

1 year, 9 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 6 times
- kkhurana**

1 month, 1 week ago

logging agent is required for compute engine too.
upvoted 1 times
- try_jai**

8 months, 1 week 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 2 times
- MeasService**

Highly Voted

2 years, 4 months ago

C should be the correct answer here
upvoted 43 times
- techalik**

1 year, 3 months 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 hybrid cloud platforms consistently and predictably.

Ref: <https://cloud.google.com/logging/docs/agent>
upvoted 3 times
- penelop**

5 months, 2 weeks 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 going to recommend everything that has google on its name. You need to understand client requirements first.
upvoted 2 times
- aceton999**



3 weeks, 6 days ago



Actually it does. A lot of questions guide you to the, in best case, fully managed GCP services. They should rename the certificate to "Professional Google Cloud Sales Person".
upvoted 1 times
- okixavi**

1 year, 2 months ago



Why do you think they are using VM on GCE?
upvoted 1 times



  **haroldbenites** 2 months, 4 weeks ago
Someone fail the examn xD
upvoted 2 times



  **lynx256** 11 months, 1 week 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 4 times



  **nitinz** 12 months ago
their current logging tool will not meet their needs for their new cloud-based product.



How do you know its going to be GCP, or AWS. It can be alibaba cloud. So C makes the most sense unless you are assuming stuff. As architect you are not supposed to assume.
upvoted 4 times



  **kkhurana** 1 month, 1 week ago
GCP stackdriver is be installed in another cloud products too.
upvoted 1 times



  **VT001** Most Recent 2 weeks, 5 days ago
Selected Answer: C
I got this question in the exam.
upvoted 1 times

  **anjuagrawal** 2 weeks, 6 days ago
Selected Answer: C
C is correct. A is also very close but I guess two things that eliminate that options 1) Stack driver logging agent can be installed on the google VMs. For On-prem Google partners with Bindplane tool from Bluemedora which sends the metrics to cloud logging for analysis 2) It is not clearly mentioned if the cloud based solution is Google Cloud or some other cloud.
upvoted 1 times



  **burner_1984** 1 month ago
Selected Answer: A
Should be A as can be easily achieved by agent
upvoted 1 times



  **RCasagrande** 1 month, 1 week ago
Selected Answer: A
Google always promote their own services.
upvoted 2 times



  **sjmsummer** 1 month, 2 weeks ago
Between A &C, since it is Google test and they tend to use the test to promote their own solution, I will vote A.
upvoted 1 times



  **lxgywil** 1 month, 3 weeks ago
C.

The question doesn't specify where exactly the app is deployed. At the same time, the Stackdriver Logging agent is only compatible with GCE VMs and AWS E2 instances, so it makes a lot of sense to define the requirements and assess viable logging tools - https://cloud.google.com/logging/docs/agent/logging#supported_vms
upvoted 1 times

  **OrangeTiger** 2 months ago
I think C.
Because they say 'capture errors'.This refers to 'Error reporting' or 'debugger'. These do not use agents.
upvoted 1 times

  **vincy2202** 2 months, 1 week ago
C is the correct answer.
upvoted 1 times

  **ABO_Doma** 2 months, 1 week ago
Selected Answer: A
You could refine the implementation by following logging best practices, but if the tool itself does not support the requirements, there is not much you can do.
upvoted 2 times

  **isupportopendiscussion** 2 months, 3 weeks ago
C: Architect can recommend best solution if he gets better clarity on requirements.
upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago

Go for A

upvoted 1 times

  **vincy2202** 3 months, 3 weeks ago

Answer A seems to be the correct choice.

upvoted 1 times

  **exam_war** 3 months, 4 weeks ago

A is correct answer

upvoted 2 times

  **MaxNRG** 4 months, 1 week ago

A – direct them to download and install Stackdriver Logging Agent.

C is also good but is way generic. A is a particular implementation of C in a Google recommended way.

Loggin Agent also integrates with "Google Stackdriver Logging" for logs analysis. Quote from this page:

"In its default configuration, the Logging agent streams logs from common third-party applications and system software to Logging; see the list of default logs. You can configure the agent to stream additional logs; see Configuring the Logging agent for details on agent configuration and operation.

It is a best practice to run the Logging agent on all your VM instances. The agent runs under both Linux and Windows. To install the Logging agent, see Installing the agent."

upvoted 3 times

  **dineshdct** 4 months, 2 weeks ago

Answer A is correct because the Stackdriver has the capabilities to read and filter log entires which in this case to filter errors. It also has the capability to export logs to Cloud Storage, BigTable or Pub/Sub to notify errors. Log metrics can also be derived out of it. Having all these extensive features which satisfies their need, why we need to review the requirement again and suggest a new tool?

upvoted 3 times


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.)



- 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



Correct Answer: AC



Community vote distribution



AC (100%)



  **jd Pinto** Highly Voted 9 months ago
A & C for me
upvoted 24 times



  **JustJack21** Highly Voted 6 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 microservice to 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 binary 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, real 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 6 times



  **OrangeTiger** Most Recent 2 months ago
Selected Answer: AC
A & B seems either is OK. But B is wrong. Canary include test
C Helps identify corrections by narrowing the area affected by the error.
D, E Rollback in the problem statement has nothing to do with the database.
upvoted 2 times

  **examination** 2 months, 2 weeks ago
I know about blue green deployment. see link below - <https://cloud.google.com/architecture/implementing-deployment-and-testing-strategies-on-gke>
But did not know there was something like green-blue deployment? what is the difference? or is it a typo in the question?
upvoted 1 times


  **haroldbenites** 2 months, 4 weeks ago
Go for A & C. As the QA already improved , the B is no too relevant.
upvoted 1 times

  **duocnh** 3 months ago
Selected Answer: AC
vote AC
upvoted 1 times

  **TheCloudBoy77** 3 months, 2 weeks ago
AC is most appropriate answer
upvoted 1 times


  **RCasagrande** 3 months, 2 weeks ago
Selected Answer: AC
AC is correct.
upvoted 2 times



 **vincy2202** 3 months, 3 weeks ago

A& C are the right choices. Canary releases are associated with Production environment (Reals Users get impacted) & not with QA. Hence replacing QA environment with Canary (Option B) doesn't makes any sense.

upvoted 2 times


  **amxexam** 6 months, 1 week ago

B is tricky, but if you replace QA with actual user there would be more rollbacks on Canary before coming to the stable version.

D and E won't help in any way so eliminating.

So will go with A and C.



upvoted 3 times

  **victory108** 8 months ago

A. Introduce a green-blue deployment model

C. Fragment the monolithic platform into microservices

upvoted 3 times

  **aviratna** 8 months, 1 week ago

A & C is correct. B initially looks correct but QA system is already improved and reduced 80% issue, so replacing it will not be the correct ans.

upvoted 2 times

  **rishab86** 9 months ago

B & C should be the answer

upvoted 2 times

  **rishab86** 9 months ago



After digging further A,C are correct B is not correct because 80% of issues resolved with QA environment so removing it will definitely wont help.

upvoted 2 times

  **__INSIDEOUT__** 8 months, 2 weeks ago

But A (blue-green approach) does not reduce rollbacks; switching back from blue to green is a rollback, isn't it ?

upvoted 3 times

  **cugena** 8 months, 2 weeks ago

I'd say A&C after reading carefully the question and answers. QA reduced the number of issues so it is not convenient to get rid of them, therefore B is not correct. Any of the application deployments and testing strategies will be valid

(<https://cloud.google.com/architecture/application-deployment-and-testing-strategies>), although Roll updates has slow rollbacks.

Microservices is the key in terms of the reducing rollbacks, not the deployment strategies.

Hope it helps.

upvoted 3 times

To reduce costs, the Director of Engineering has required all developers to move their development infrastructure resources from on-premises virtual machines (VMs) to Google Cloud Platform. These resources go through multiple start/stop events during the day and require state to persist. You have been asked to design the process of running a development environment in Google Cloud while providing cost visibility to the finance department. Which two steps should you take? (Choose two.)

- A. Use the -no-auto-delete flag on all persistent disks and stop the VM
- B. Use the -auto-delete flag on all persistent disks and terminate the VM
- C. Apply VM CPU utilization label and include it in the BigQuery billing export
- D. Use Google BigQuery billing export and labels to associate cost to groups
- E. Store all state into local SSD, snapshot the persistent disks, and terminate the VM
- F. Store all state in Google Cloud Storage, snapshot the persistent disks, and terminate the VM

Correct Answer: AD

Community vote distribution

AD (100%)

  **[Removed]** Highly Voted 5 months ago



I spent all morning researching this question. I just popped over and took the GCP Practice exam on Google's website and guess what... this question was on it word for word, but it had slightly different answers, but not by much here is what I learned. The correct answer is 100% A / D and here is why. On the sample question, the "F" option is gone. "A" is there but slightly reworked, it now says: "Use persistent disks to store the state. Start and stop the VM as needed" which makes much more sense. The practice exam says A and D are correct. Given the wording of this question, if A and B, where there then both would be correct because of the word "persistent" and not because of the flag. The "no-auto-delete" makes A slightly safer than B, but it is the "persistent disk" that makes them right, not the flag. Hope that helps! F is not right because that is a complex way of solving the issue that by choosing Persistent Disk solves it up front. HTH

upvoted 23 times

  **vincy2202** 2 months, 1 week ago

Very aptly summarized.

upvoted 1 times

  **ZAvenge** 4 months, 3 weeks ago

Thank you, it really helps!!

upvoted 1 times

  **rishab86** Highly Voted 9 months ago

A and D looks correct as per <https://cloud.google.com/sdk/gcloud/reference/compute/instances/set-disk-auto-delete#--auto-delete> ; <https://cloud.google.com/billing/docs/how-to/export-data-bigquery>

upvoted 17 times

  **RKS_2021** 7 months, 3 weeks ago

-no-auto-delete flag does not have effect on the state of the application. I believe D and F are correct ANS, <https://cloud.google.com/compute/docs/instances/stop-start-instance>

upvoted 3 times

  **VT001** Most Recent 2 weeks, 5 days ago

I got this question on my exam. Options were different though.



upvoted 1 times

  **sjmsummer** 1 month, 2 weeks ago

Selected Answer: AD

Agree with A&D for the reasons other commented.

upvoted 1 times

  **Aiffone** 1 month, 3 weeks ago

Two things are key. Provide cost visibility. D.Secondly pass no auro delete on disks that need to persist. A.

upvoted 1 times


  **OrangeTiger** 2 months ago

About cost visibility


It seems either is ok C or D.But I chose D.

Because I think labels to associate cost to groups is necessary.


upvoted 2 times

-  **OrangeTiger** 2 months ago


About a require state to persist.
E is wrong.Because SSD is volatile.
F is wrong.Because no need Store all state in Google Cloud Storage if take a snap-shot.
All that remains is A or B. From the contents of the flag A.

upvoted 1 times
-  **andeu** 2 months, 2 weeks ago


Answers: A is correct because persistent disks will not be deleted when an instance is stopped.
D is correct because exporting daily usage and cost estimates automatically throughout the day to a BigQuery dataset is a good way of providing visibility to the finance department. Labels can then be used to group the costs based on team or cost center.

upvoted 1 times
-  **anjuagrawal** 2 months, 3 weeks ago

D is definitely correct.
Option F says - store the state in cloud storage. Generally states are stored in PDs and not cloud storage. Hence, the confusion between A&F.

upvoted 1 times
-  **haroldbenites** 2 months, 4 weeks ago


Go for D & F.
In the Free test of Google is this question and It says the answer is D-F.
<https://docs.google.com/forms/d/e/1FAIpQLSdvf8Xq6m0kvyloysdr8WZYCG32WHENStftiHTSdtW4ad2-0w/viewform>

upvoted 1 times
-  **pondai** 1 month ago


In the Free test of Google is this question answer is
A. Use persistent disks to store the state. Start and stop the VM as needed.
A is correct because persistent disks will not be deleted when an instance is stopped.

D. Use BigQuery billing export and labels to relate cost to groups.
D is correct because exporting daily usage and cost estimates automatically throughout the day to a BigQuery dataset is a good way of providing visibility to the finance department. Labels can then be used to group the costs based on team or cost center.


So I think I'll pick A&D even set --auto-delete flag is a No meaningful action when you just star/stop vm

upvoted 1 times
-  **vincy2202** 3 months, 3 weeks ago


D & F are the correct answers.

upvoted 1 times
-  **vincy2202** 2 months, 1 week ago


Sorry. A & D are the correct answer

upvoted 1 times
-  **JoeJoe** 4 months, 2 weeks ago


I think it's definitely D & F.
"D" clearly meets the cost reporting requirement
"F" option is the only cheaper way to save machine state because when stopping an instance "the VM shuts down the guest OS and loses its application state" as it is clearly stated here <https://cloud.google.com/compute/docs/instances/stop-start-instance>

upvoted 3 times
-  **JoeJoe** 4 months, 2 weeks ago

Forgot to say that "E" is wrong because local disk are scratched on a instance shut down as said at the same URL above apart from the fact that using a local disk is also an expensive choice


upvoted 1 times
-  **dineshdct** 4 months, 2 weeks ago

Answers are A & D. The difference between A & F is more of a design when the developer systems are moved from on-prem VM to Cloud. Usually it will be associated with local disk and migrating to Cloud VM with persistent VM is the suitable Option. Restoring snapshot, and creating new VM will definitely take time. However, the option F doesn't seem to be a bad option but the pricing will be increased during longer time depends on the number of developers, restarts and the size of each snapshot. At sometime, the storage cost will start increasing which would be of no use. Later need to configure time period to clear existing snapshots.

upvoted 1 times
-  **JustJack21** 6 months ago

The key confusion here seems to be between A and F:
A: The --no-auto-delete provides additional safety. You don't want to rebuild a VM multiple times a day. It's a waste of time and saves you no money. So just stop/start it.
F. Cloud Storage is an "Object store"; unless the developers were using object store on-prem to store the application state, this means unnecessary redesign. Again, snapshot, and rebuild multiple times a day?

A and D it is.
B.

upvoted 3 times
-  **amxexam** 6 months ago

Let's go with option elimination

A. Use the --no-auto-delete flag on all persistent disks and stop the VM

>> There are no these kinds of flags but there is a deleteProtection flag, hence we will eliminate this option

B. Use the --auto-delete flag on all persistent disks and terminate the VM

>> There are no these kinds of flags but there is deleteProtection flag, hence we will eliminate this option

upvoted 2 times

  **amxexam** 6 months ago

C. Apply VM CPU utilization label and include it in the BigQuery billing export

>> This option won't help. Lets eliminate the option.

D. Use Google BigQuery billing export and labels to associate cost to groups

>> Is the GCP suggested way to monitor cost.

E. Store all state into local SSD, snapshot the persistent disks and terminate the VM

>> Not an ideal way to take a backup - let's eliminate this option

upvoted 1 times

  **amxexam** 6 months ago

F. Store all-state in Google Cloud Storage, snapshot the persistent disks and terminate the VM

>> Is an option to backup VM during the termination and to be created from snapshot reduces the config time, retaining the configurations done in the system. This will help in multiple starts and stop.

So D and F is the best combination

URL1 - <https://cloud.google.com/compute/docs/instances/preventing-accidental-vm-deletion>

upvoted 3 times

  **JustJack21** 6 months ago

gcloud compute instances set-disk-auto-delete INSTANCE_NAME (--device-name=DEVICE_NAME | --disk=DISK) [--no-auto-delete] [--zone=ZONE] [GLOUD_WIDE_FLAG ...]

OPTIONAL FLAGS

--auto-delete



Enables auto-delete for the given disk. Enabled by default, use --no-auto-delete to disable.

upvoted 1 times

  **amxexam** 5 months, 3 weeks ago

Anyway this will not help in this requirement.

upvoted 1 times

  **PeppaPig** 6 months, 2 weeks ago

After further digging, it looks D&F is correct

A could be wrong because --no-auto-delete flag only applies when you delete a VM

Persistent disk is maintained when you stop/terminate the VM regardless of this flag

https://cloud.google.com/compute/docs/instances/instance-life-cycle#comparison_table

upvoted 2 times

  **rikoko** 6 months, 2 weeks ago

Not very clear. D and F might be correct. As explained by RKS-2021, state is lost when Compute Engine is stopped

<https://cloud.google.com/compute/docs/instances/stop-start-instance>. F addresses it. However taking daily snapshot disks (even if it has incremental changes) + egress costs might cost more than keeping the persistent disk if it happens several times a day - which in this sense would put A a cheaper solution - but the question insist on keeping the state - not so much on cost.

Side note about A: auto-delete has impact only when the VM is deleted (it does not apply when VM is stopped)

upvoted 3 times

Your company wants to track whether someone is present in a meeting room reserved for a scheduled meeting. There are 1000 meeting rooms across 5 offices on 3 continents. Each room is equipped with a motion sensor that reports its status every second. The data from the motion detector includes only a sensor ID and several different discrete items of information. Analysts will use this data, together with information about account owners and office locations.

Which database type should you use?

- A. Flat file
- B. NoSQL
- C. Relational
- D. Blobstore

Correct Answer: B

Relational databases were not designed to cope with the scale and agility challenges that face modern applications, nor were they built to take advantage of the commodity storage and processing power available today.

NoSQL fits well for:

⇒ Developers are working with applications that create massive volumes of new, rapidly changing data types λ€" structured, semi-structured, unstructured and polymorphic data.

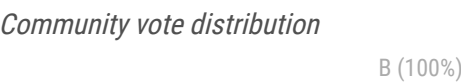
Incorrect Answers:

D: The Blobstore API allows your application to serve data objects, called blobs, that are much larger than the size allowed for objects in the Datastore service.

Blobs are useful for serving large files, such as video or image files, and for allowing users to upload large data files.

Reference:

<https://www.mongodb.com/nosql-explained>





  **clouddude** Highly Voted 1 year, 9 months ago

I'll go with B.

This is time series data. We also have no idea what kinds of data are being captured so it doesn't appear structurd.



A does not seem reasonable because a flat file is not easy to query and analyze.
B seems reasonable because this accommodates unstructured data.
C seems unreasonable because we have no idea on the structure of the data.
D seems unreasonable beacause there is no such Google database type.

upvoted 23 times

  **sasithra** Most Recent 1 week, 3 days ago

B is correct



upvoted 2 times

  **VT001** 2 weeks, 5 days ago

Selected Answer: B

I got this question on my exam.



upvoted 2 times

  **AWS56** 1 month ago

Selected Answer: B



B is the right answer.

upvoted 1 times

  **OrangeTiger** 2 months ago

B is correct.It good for this solution.
C RDB doesnt suppourt 'several different discrete items'.
A&D is not good for analysis.

upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago

Go for B

upvoted 1 times

🗨️ 👤 **vincy2202** 3 months, 3 weeks ago

B is the right answer.

upvoted 1 times

🗨️ 👤 **aviratna** 8 months, 1 week ago

B: Is a correct answer to store unstructured data like sensor data in NoSQL database like BigTable

upvoted 3 times

🗨️ 👤 **Papafel** 8 months, 1 week ago

Yes, B is the correct answer

upvoted 1 times

🗨️ 👤 **Yogikant** 8 months, 2 weeks ago

There is need to join sensor data with "account owners and office locations.". Only relational database can allow this. Also latency requirement is not very low.

Will go with C.

upvoted 3 times

🗨️ 👤 **Pokchok** 8 months, 3 weeks ago

The data is only sending sensor Id and other data. The analyst will still need to do a join with other data like office id and only then they will be able to solve it. Postgresql can hold both json and relational data. To avoid joins, I would go for relational database.

upvoted 1 times

🗨️ 👤 **victory108** 9 months, 2 weeks ago

B. NoSQL

upvoted 4 times

🗨️ 👤 **un** 9 months, 3 weeks ago

B is correct

upvoted 1 times

🗨️ 👤 **GoCloud** 9 months, 4 weeks ago

B - for Bigtable ;)

upvoted 4 times

🗨️ 👤 **Ausias18** 11 months, 1 week ago

Answer is B

upvoted 1 times

🗨️ 👤 **lynx256** 11 months, 1 week ago

IMO - B (eg. Bigtable)

upvoted 2 times

🗨️ 👤 **Joyjit_Deb** 1 year ago

"B" is best suited, most simple & cost effective method in this case.

upvoted 2 times

You set up an autoscaling instance group to serve web traffic for an upcoming launch. After configuring the instance group as a backend service to an HTTP(S) load balancer, you notice that virtual machine (VM) instances are being terminated and re-launched every minute. The instances do not have a public IP address.

You have verified the appropriate web response is coming from each instance using the curl command. You want to ensure the backend is configured correctly.

What should you do?

- A. Ensure that a firewall rules exists to allow source traffic on HTTP/HTTPS to reach the load balancer.
- B. Assign a public IP to each instance and configure a firewall rule to allow the load balancer to reach the instance public IP.
- C. Ensure that a firewall rule exists to allow load balancer health checks to reach the instances in the instance group.
- D. Create a tag on each instance with the name of the load balancer. Configure a firewall rule with the name of the load balancer as the source and the instance tag as the destination.

Correct Answer: C

The best practice when configuration a health check is to check health and serve traffic on the same port. However, it is possible to perform health checks on one port, but serve traffic on another. If you do use two different ports, ensure that firewall rules and services running on instances are configured appropriately. If you run health checks and serve traffic on the same port, but decide to switch ports at some point, be sure to update both the backend service and the health check.

Backend services that do not have a valid global forwarding rule referencing it will not be health checked and will have no health status.

Reference:



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



Community vote distribution



C (100%)



  **Eroc** Highly Voted 2 years, 4 months ago



"A" and "B" wouldn't turn the VMs on or off, it would jsut prevent traffic. "C" would turn them off if the health check is configured to terminate the VM is it fails. "D" is the start of a pseudo health check without any logic, so it also isn't an answer because it is like "A" and "B". Correct Answer: "C" upvoted 27 times



  **nitinz** 12 months ago
C because terminated and relaunch.... something wrong with HC.
upvoted 4 times

  **tartar** 1 year, 6 months ago
C is ok
upvoted 14 times

  **VT001** Most Recent 2 weeks, 5 days ago
Selected Answer: C
I got this question on my exam.
upvoted 2 times

  **AWS56** 1 month ago
Selected Answer: C
C is corect.
upvoted 1 times

  **OrangeTiger** 2 months ago
C is corect.
upvoted 1 times

  **OrangeTiger** 2 months ago
' (VM) instances are being terminated and re-launched every minute. '
Isn't it because the health check is failing.

A & D Maybe already there.curl command passed.
B What are you doing. Absolutely no.
upvoted 1 times



  **haroldbenites** 2 months, 4 weeks ago

Go for C.

This questions is in sample quesitons of Google

<https://docs.google.com/forms/d/e/1FAIpQLSdvf8Xq6m0kvyloysdr8WZYCG32WHENStftiHTSdtW4ad2-0w/viewform>

upvoted 4 times

  **TheCloudBoy77** 3 months, 2 weeks ago



A. Ensure that a firewall rules exists to allow source traffic on HTTP/HTTPS to reach the load balancer. >> not correct, load balancer is not the issue here.

B. Assign a public IP to each instance and configure a firewall rule to allow the load balancer to reach the instance public IP. >> defeats the purpose of getting load balancers , not correct

C. Ensure that a firewall rule exists to allow load balancer health checks to reach the instances in the instance group.>> Correct. if using different port then appropriate FW rule need to be setup to ensure LB can reach backend instances for healthcheck. if healthcheck traffic is blkced, instances will be marked unhealthy and will be restarted.

D. Create a tag on each instance with the name of the load balancer. Configure a firewall rule with the name of the load balancer as the source and the instance tag as the destination.>> tagging is not useful here as the instance is not the source of traffic, just the port need to be opened on FW.

upvoted 1 times

  **vincy2202** 3 months, 3 weeks ago

C is the correct answer.


upvoted 1 times

  **unnikrisb** 4 months, 3 weeks ago

Option C

If curl command is working then traffic exists.. So we need to check why health checks are failing.. so firewall issues for health check done by Google probers

upvoted 2 times

  **amxexam** 6 months, 1 week ago

Let's go with option elimination

A. Ensure that firewall rules exist to allow source traffic on HTTP/HTTPS to reach the load balancer.

>> We don't need a firewall rule to reach LB but VM in the VPN - eliminate the option

B. Assign a public IP to each instance and configure a firewall rule to allow the load balancer to reach the instance public IP.

>> LB don't need a public IP to reach to VM.

C. Ensure that a firewall rule exists to allow load balancer health checks to reach the instances in the instance group.

>> Correct

D. Create a tag on each instance with the name of the load balancer. Configure a firewall rule with the name of the load balancer as the source and the instance tag as the destination.

>> N/w tagging not needed just port opening needed to reach to VM from LB. This is when you want to separate some traffic to reach to particular VM than other <https://cloud.google.com/vpc/docs/add-remove-network-tags>

upvoted 3 times

  **rm_2495** 7 months, 2 weeks ago

C is the answer, as a health check determines if a VM is healthy (thereby stopping).

upvoted 1 times

  **victory108** 9 months, 2 weeks ago

C. Ensure that a firewall rule exists to allow load balancer health checks to reach the instances in the instance group.

upvoted 2 times

  **Ausias18** 11 months, 1 week ago



Answer is C

upvoted 1 times

  **Joyjit_Deb** 1 year ago


"C" is the best answer.

upvoted 2 times

  **Aru23** 1 year, 4 months ago


C is correc

upvoted 1 times

  **gkdinesh** 1 year, 5 months ago

C is correct

upvoted 1 times

  **jespinosar** 1 year, 6 months ago

Agree C

upvoted 1 times

  **mlantonis** 1 year, 8 months ago

C for sure

upvoted 1 times

You write a Python script to connect to Google BigQuery from a Google Compute Engine virtual machine. The script is printing errors that it cannot connect to BigQuery.

What should you do to fix the script?

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

Correct Answer: B

Community vote distribution

C (92%)

8%

🗳️ 👤 **kalschi** Highly Voted 2 years, 3 months ago

A - If client library was not installed, the python scripts won't run - since the question states the script reports "cannot connect" - the client library must have been installed. so it's B or C.

B - <https://cloud.google.com/bigquery/docs/authorization> an access scope is how your client application retrieve access_token with access permission in OAuth when you want to access services via API call - in this case, it is possible that the python script use an API call instead of library, if this is true, then access scope is required. client library requires no access scope (as it does not go through OAuth)

C - service account is Google Cloud's best practice
So prefer C.

upvoted 68 times

🗳️ 👤 **rishab86** 4 months, 3 weeks ago

Access scopes are the legacy method of specifying permissions for your instance. read from > <https://cloud.google.com/compute/docs/access/service-accounts> . So , I would go with C

upvoted 5 times

🗳️ 👤 **Vika** 1 year ago

agreed to comment here . C seems like a good option

upvoted 3 times

🗳️ 👤 **gauravagrawal** 1 year ago

Right.. B might be right only if C was not the option. so i will go with C as it's recommended google's best practice.

upvoted 2 times

🗳️ 👤 **Musk** 1 year, 8 months ago

Might be an old version

upvoted 2 times

🗳️ 👤 **KouShikyou** Highly Voted 2 years, 4 months ago

Why not B? It looks better for me.

upvoted 12 times

🗳️ 👤 **nitinz** 12 months ago

C, no brainer. You need SA for using API period. Thats where your start your troubleshooting.

upvoted 4 times

🗳️ 👤 **nitinz** 12 months ago

I stand corrected, B you need to have scope. It is union of Scope + Service Account. If scope is not there, you are screwed anyways.

upvoted 1 times

🗳️ 👤 **techalik** 1 year, 3 months ago



Configure the Python API to use a service account with relevant BigQuery access enabled. is the right answer.



It is likely that this service account this script is running under does not have the permissions to connect to BigQuery and that could be causing issues. You can prevent these by using a service account that has the necessary roles to access BigQuery.



Ref: <https://cloud.google.com/bigquery/docs/reference/libraries#cloud-console>



A service account is a special kind of account used by an application or a virtual machine (VM) instance, not a person.



Ref: <https://cloud.google.com/iam/docs/service-accounts>
upvoted 5 times



  **tartar** 1 year, 6 months ago
C is ok
upvoted 11 times



  **tartar** 1 year, 6 months ago
Sorry, B is ok. You can create service account, add user to service account, and grant the user role as Service Account User. You still need to enable BigQuery scope to make the Python script running the instance to access BigQuery.
upvoted 14 times



  **cloudguy1** 1 year, 6 months ago
Stop confusing people, B) doesn't make any sense. Why would you use or create a whole new VM just because of a permission issue? If anything, just stop the instance and edit the scope of the default Compute Service Account and grant it the role through IAM. C) is the most appropriate answer since you can only set scopes of the default Compute Service Account, if you're using any other, there's no scope option - its access is dictated strictly by IAM in such scenario. So C) is the answer: Stop the VM, change the Service Account with the appropriate permissions and done. B) would still need to have permission the set through IAM & Admin, the scope isn't enough with the default Compute Service Account.
upvoted 24 times



  **lynx256** 11 months, 1 week ago
I don't know if tartar is confusing people or not but IMO B is the right answer (although about legacy functionality)...
upvoted 1 times



  **chirischiris** Most Recent 1 week, 2 days ago
Selected Answer: B
The correct answer is B. Run your script on a new virtual machine with the BigQuery access scope enabled, I made a test creating a VM with Bigquery enabled and scripts in python works fine
upvoted 1 times

  **shihabvk** 1 month ago
Selected Answer: C
no need to create new VM
upvoted 1 times



  **Angelo2021** 1 month ago
Selected Answer: C
the good one is C
upvoted 1 times



  **AWS56** 1 month ago
Selected Answer: C
agreed to comment here . C seems like a good option
upvoted 1 times



  **GoReplyGCPExam** 1 month, 2 weeks ago
Selected Answer: C
C is a Google's best practice
upvoted 1 times

  **lxgywil** 1 month, 2 weeks ago
I'd go with B - "A best practice is to set the cloud-platform access scope on the instance, then control the service account's API access with IAM roles."
<https://cloud.google.com/compute/docs/access/service-accounts#accessscopesiam>

The question is outdated as back in the day it was only possible to specify the scopes at instance creation time:
<https://stackoverflow.com/questions/26031492#answer-26076617>
upvoted 1 times

  **bou7mis** 1 month, 3 weeks ago
Selected Answer: C
Google recommends that you use fine-grained IAM policies instead of relying on access scopes to control resource access for the service account.
<https://cloud.google.com/compute/docs/access/create-enable-service-accounts-for-instances#changeserviceaccountandscopes>
upvoted 1 times

  **bou7mis** 1 month, 3 weeks ago
For me it's C :
Google recommends that you use fine-grained IAM policies instead of relying on access scopes to control resource access for the service account.
<https://cloud.google.com/compute/docs/access/create-enable-service-accounts-for-instances#changeserviceaccountandscopes>
upvoted 1 times

  **pddddd** 1 month, 3 weeks ago

Default scopes does not include BQ.
https://cloud.google.com/compute/docs/access/service-accounts#associating_a_service_account_to_an_instance
Although legacy, enabling the correct scope is still needed...
upvoted 1 times

  **joheri** 2 months ago

(Not correct) A. Install the latest BigQuery API client library for Python.
Reason: If there is no api client installed, script will be throwing import error not connection error.

(Correct) B. Run your script on a new virtual machine with the BigQuery access scope enabled
Reason: Scope decides the URI Access.

(Not correct) C. Create a new service account with BigQuery access and execute your script with that user
Reason: Even if you run a script with bigquery access, bigquery must be reachable from VM.

(Not correct) D. Install the bq component for gcloud with the command gcloud components install bq.
Reason: Python script doesn't need cli to be installed

upvoted 2 times

  **OrangeTiger** 2 months ago

I think C is correct.

upvoted 1 times

  **OrangeTiger** 2 months ago

I think B or C is the correct answer because I am having trouble accessing it with the question sentence.

upvoted 1 times

  **OrangeTiger** 2 months ago

Whay did i choose C.

If configure a service account, you should be able to access it from a running VM.


upvoted 1 times

  **OrangeTiger** 2 months ago

I did it in quick lab.

<https://www.cloudskillsboost.google/focuses/1038?parent=catalog>



upvoted 1 times

  **Rong2604** 2 months, 1 week ago

Selected Answer: C

C as it's recommended google's best practice.

upvoted 1 times

  **kprcloud** 2 months, 2 weeks ago

C is correct


upvoted 1 times

  **cloud_enthusiast_in** 2 months, 2 weeks ago

C

C is more fundamental to B

upvoted 1 times

  **Veerus** 2 months, 3 weeks ago

I voted C

upvoted 1 times

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

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

Correct Answer: C

Provision users to Google's directory

The global Directory is available to both Cloud Platform and G Suite resources and can be provisioned by a number of means. Provisioned users can take advantage of rich authentication features including single sign-on (SSO), OAuth, and two-factor verification.

You can provision users automatically using one of the following tools and services:

Google Cloud Directory Sync (GCDS)

Google Admin SDK -

A third-party connector -

GCDS is a connector that can provision users and groups on your behalf for both Cloud Platform and G Suite. Using GCDS, you can automate the addition, modification, and deletion of users, groups, and non-employee contacts. You can synchronize the data from your LDAP directory server to your Cloud Platform domain by using LDAP queries. This synchronization is one-way: the data in your LDAP directory server is never modified.

Reference:

<https://cloud.google.com/docs/enterprise/best-practices-for-enterprise-organizations#authentication-and-identity>

Community vote distribution



B (78%)



C (22%)



  **gcp_aws** Highly Voted 1 year, 10 months ago



The correct answer is B.
GCDS tool only copies the usernames, not the passwords. And more over strict security requirements for the passwords. Not allowed to copy them onto Google, I think.



Federation technique help resolve this issue. Please correct me if I am wrong.
upvoted 41 times

  **ExamTopicsFan** 8 months, 3 weeks ago
GCDS synchronises password as well and that is the reason why B is the correct answer. Only in B the password doesn't get copied to GCP.
upvoted 4 times

  **hafid** 1 year, 8 months ago
you mistaken GCDS for GSPS, from google site "GSPS won't sync an Active Directory password with a Google Account until it's changed." this if from google to for GCDC "Using GCDS–The recommended way to add users to your Google Account in an Active Directory environment is with Google Cloud Directory Sync (GCDS). GCDS automatically syncs user accounts in your Google domain with user accounts in your Active Directory system."
upvoted 6 times



  **Eroc** Highly Voted 2 years, 4 months ago
"A" will synchronise passwords between on pre-mise and the GCP, this duplicates the existing strategy plus Google's "built-in" encryption of all the data. "B" does not support the moving to GCP. "C" The directory sync tool copies the filesystem settings between servers, UNIX filesystems have permission settings built in and passwords to log into the permission groups, syncing these would set GCP up the same way their on-premises is, plus Google's "built-in" encryption. "D" disrupts the users, so this is not correct. The debate should be between "A" and "C", "C" includes "A" according to (<https://cloud.google.com/solutions/migrating-consumer-accounts-to-cloud-identity-or-g-suite-best-practices-federation>) so choose "C"
upvoted 13 times



  **nitinz** 12 months ago
B, you dont want to store password as per security guidelines provided in question.
upvoted 3 times



  **cetanx** 1 year, 8 months ago
GCDS syncs user accounts and some other LDAP attributes but not the passwords, with hybrid connectivity to GCP, SAML (or federation) is the preferred method.



Answer should be "B"

<https://cloud.google.com/solutions/patterns-for-authenticating-corporate-users-in-a-hybrid-environment>
https://cloud.google.com/architecture/identity/federating-gcp-with-active-directory-synchronizing-user-accounts#deciding_what_to_provision
upvoted 11 times



  **squishy_fishy** 1 month, 1 week ago
This is the best answer so far.
upvoted 1 times



  **SamirJ** 1 year, 5 months ago
GCDS does sync passwords. Please refer - <https://support.google.com/a/answer/6120130>. Since the question says client wants to move to GCP , C should be the answer.
upvoted 1 times

  **tartar** 1 year, 6 months ago
B is ok.
upvoted 4 times

  **tartar** 1 year, 6 months ago
miss typed.. C is ok
upvoted 10 times



  **Gobblegobble** 1 year, 8 months ago
B is supported read <https://cloud.google.com/architecture/identity/federating-gcp-with-active-directory-configuring-single-sign-on>
upvoted 4 times



  **tsys** 12 months ago
There is no mention SSO is needed.
upvoted 2 times



  **jpc0** Most Recent 2 weeks, 6 days ago
The correct answer is B.
Understanding single sign-on
By using Google Cloud Directory Sync, you've already automated the creation and maintenance of users and tied their lifecycle to the users in Active Directory.



Although Google Cloud Directory Sync provisions user account details, it doesn't synchronize passwords. Whenever a user needs to authenticate in Google Cloud, the authentication must be delegated back to Active Directory, which is done by using AD FS and the Security Assertion Markup Language (SAML) protocol. This setup ensures that only Active Directory has access to user credentials and is enforcing any existing policies or multi-factor authentication (MFA) mechanisms. Moreover, it establishes a single sign-on experience between your on-premises environment and Google.

For more details on single sign-on, see Single sign-on
<https://cloud.google.com/architecture/identity/federating-gcp-with-active-directory-configuring-single-sign-on>
upvoted 2 times

  **AWS56** 1 month ago
Selected Answer: B
I chose B.
upvoted 1 times

  **VT001** 1 month, 1 week ago
Selected Answer: B
I am aligned towards B, but below suggests that answer is C:
https://books.google.ca/books?id=eSTLDwAAQBAJ&pg=PT30&lpg=PT30&dq=%22Your+customer+is+moving+an+existing+corporate+application+to+Google+Cloud+Platform%22&source=bl&ots=fKqwoveJvD&sig=ACfU3U2dImR8iqtiYvSggorfARF-z-dQZA&hl=en&sa=X&redir_esc=y#v=onepage&q=%22Your%20customer%20is%20moving%20an%20existing%20corporate%20application%20to%20Google%20Cloud%20Platform%22&f=false
upvoted 1 times

  **sjmsummer** 1 month, 2 weeks ago
I chose A earlier, but by reading comments, B seems to be with implied security requirements better. So I will choose B.
upvoted 1 times

  **OrangeTiger** 2 months ago
Selected Answer: B
I chose B.
upvoted 1 times

  **OrangeTiger** 2 months ago

<https://support.google.com/cloudidentity/answer/6087519?hl=ja>

upvoted 1 times

  **OrangeTiger** 2 months ago

Selected Answer: C

A Password sync need AD sync
D No sense

Remaining options is B or C.

'There are strict security team requirements for storing passwords.' is written in the question.

Directory sync is saved password.

SAML dont need save password.

So i chose C.

But I'm not confident, because it's different from everyone's answer :(

upvoted 1 times

  **OrangeTiger** 2 months ago

I worong vote.I chose B.

upvoted 1 times

  **vincy2202** 2 months, 1 week ago

Selected Answer: C

This is a weird question, since neither B or C can function independently. IMHO, the solution should be a combination of both B & C. However since C is the first step towards setting up of the Authentication set up, I will choose C as an option.


upvoted 1 times

  **ABO_Doma** 2 months, 1 week ago

Selected Answer: B

When you provision users in Google using the Google Cloud Directory Sync tool, GCDS creates default passwords automatically, and this causes disruption. You need a GSuite admin to share the passwords with the users so that they can now login to the application on GCP using the new credentials.

upvoted 1 times

  **ABO_Doma** 2 months, 2 weeks ago

Selected Answer: B

They have strict security team to store the passwords so we dont need google we can delegate passwords to client and use SAML



upvoted 1 times

  **phantomsg** 2 months, 2 weeks ago

Selected Answer: B

Among the answers, the minimal disruption would be B - SAML SSO. If you copy passwords to GCP, password lifecycle management need to be addressed. Also, the password needs to constantly synced between GCP and OnPremise store.

upvoted 1 times

  **anjuagrawal** 2 months, 3 weeks ago

I too suggest B and got with comment from gcp_aws user

upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago

Go for B.

upvoted 1 times

  **duocnh** 3 months ago

Selected Answer: B

vote B

upvoted 1 times

  **dlpkmr98** 4 months ago

correct answer is B.. check this link - https://cloud.google.com/architecture/identity/overview-google-authentication#external_saml_identity_provider

upvoted 1 times

  **[Removed]** 5 months ago

So I must say, I lean toward B, at my company we even implemented B, but sadly, I found the official answer in a Google test book, and the official answer is in fact C. So when you see this on the test, answer C. Even though I've done SAML for this exact problem. This is where reality and the test diverge: <https://www.amazon.com/dp/1659559448>

<https://shorturl.at/fnzA9>

upvoted 3 times

Your company has successfully migrated to the cloud and wants to analyze their data stream to optimize operations. They do not have any existing code for this analysis, so they are exploring all their options. These options include a mix of batch and stream processing, as they are running some hourly jobs and live- processing some data as it comes in.

Which technology should they use for this?

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

Correct Answer: B



Cloud Dataflow is a fully-managed service for transforming and enriching data in stream (real time) and batch (historical) modes with equal reliability and expressiveness -- no more complex workarounds or compromises needed.


Reference:

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

Community vote distribution



B (100%)

-   **Eroc**



Highly Voted 

 2 years, 4 months ago



All four options can accomplish what the question asks, in regards to batching and streaming processes. "A" is for Apache Spark and Hadoop, a juggernaut in speed of data processing. "B" is Google's best attempt at TIBCO, Ab Initio, and other processing technology, built explicitly for visualizing batch operations and streams without through various labeled circuit boards. "C" and "D" are used within "A" and "B" and would require more work and higher risk. I'd guess Google wants you to select "B"

upvoted 22 times
-   **sandipk91** 6 months ago



it's dataflow

upvoted 1 times
-   **nitinz** 12 months ago



B, dataflow


upvoted 3 times
-   **bnlcnd** 1 year, 1 month ago

Google wants you to select "B" ---- +10000

upvoted 3 times
-   **tartar** 1 year, 6 months ago



B is ok


upvoted 6 times
-   **2g**

Highly Voted 

 2 years, 1 month ago

answer: B



upvoted 5 times
-   **AWS56**

Most Recent 



 1 month ago

Selected Answer: B



Google wants you to select "B" ---- +10000

upvoted 2 times
-   **anjuagrawal** 1 month, 3 weeks ago

The questions is asking the solution for analysing and not for processing. DataFlow is to process batch and stream data but analysing for batch and stream is done with BigQuery. I would go with D

upvoted 1 times
-   **vincy2202** 2 months, 1 week ago

B is the correct answer

upvoted 2 times
-   **cloud_enthusiast_in** 2 months, 1 week ago



Reading the key words it is undoubted choice to mark Ans as B. But here they ased about 'analyze' and not 'process'. From that point D is answer but not sure how a compute engine will work. Also, may be the question setter has not differentiated between analyze and compute. I would say, an improper and not a serious question

upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago

Go for B

upvoted 1 times

  **joe2211** 3 months, 1 week ago

Selected Answer: B

Dataflow for Batch and Streaming Data Processing

upvoted 1 times

  **amxexam** 6 months, 1 week ago

I will go against the flow....

The question clearly states they want to analyze their data stream to optimize operations that don't have any code.

Let's go with option elimination

A. Google Cloud Dataproc

>> Data proc is a service to run big data analytics like sparks or presto, but is not ready to use like big query.

B. Google Cloud Dataflow

>> With data flow you will be able to process streams of data. The requirement is to analyze not process.

C. Google Container Engine with Bigtable

>> Provides storage and process but clients will have to put their own solution.

D. Google Compute Engine with Google BigQuery

>> BigQuery will provide analytics options. Not sure what compute engine will help.



upvoted 3 times

  **Papafel** 8 months ago

B will be the correct answer: Dataflow is for processing both the Batch and Stream. Cloud Dataflow is a fully-managed service for transforming and enriching data in stream (real time) and batch (historical) modes with equal reliability and expressiveness -- no more complex workarounds or compromises needed.



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

upvoted 1 times

  **aviratna** 8 months, 1 week ago



B. Dataflow is right option as user doesnt have their own code. Other options are applicable if user has own code which they wants to use for analysis.

upvoted 2 times

  **victory108** 9 months, 2 weeks ago


B. Google Cloud Dataflow

upvoted 1 times

  **un** 9 months, 3 weeks ago

B is correct answer

upvoted 1 times

  **un** 9 months, 3 weeks ago

B is correct

upvoted 1 times

  **ronVenom** 10 months, 2 weeks ago

Go with the FLOW - DataFlow

upvoted 2 times

  **ronVenom** 10 months, 2 weeks ago

Go with the FLOW - DataFlow

upvoted 1 times

  **JohnWick2020** 10 months, 3 weeks ago

My Answer - B.

Keynotes from question:

1 - Want to analyze data stream to optimize operations.

2 - No existing code for analysis and want to explore (greenfield).

3 - Options - mix of batch and stream processing, hourly jobs, live processing.

Explanation:

A - Ok but DataProc is more hands-on/ devops-focused. Some config overhead setting up Apache/Haddop clusters.

B - Correct; DataFlow is more hand-off / serverless and supports a variety of processing patterns. Dev worry less of infra setups and can focus more on their day jobs.

C&D - incorrect; can rule out quickly these. Not viable options for batch or stream processing.

upvoted 3 times

Your customer is receiving reports that their recently updated Google App Engine application is taking approximately 30 seconds to load for some of their users.

This behavior was not reported before the update.

What strategy should you take?

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

Correct Answer: C



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



Reference:



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



Community vote distribution



C (100%)



  **Tos0** Highly Voted 2 years, 3 months ago
C is the answer
upvoted 21 times



  **MyPractice** Highly Voted 2 years, 2 months ago
Key word: This behavior was not reported before the update
A - Not Correct as it was working before with same ISP
B - New code update caused an issue- why to open support ticket
C - I agree with C
D - This requires downtime and live prod affected too
upvoted 15 times



  **MyPractice** 2 years, 2 months ago
"then use Stackdriver Trace and Logging to diagnose the problem in a development/test/staging environment" they are NOT asking us to setup Dev/Text/Stage.. meaning the environment already exist and we have to use it
upvoted 1 times



  **hafid** 1 year, 8 months ago
"then use Stackdriver Trace and Logging to diagnose the problem in a development/test/staging environment" this is not asking for set environment either, it just says to diagnose problem in other environment so C it is
upvoted 1 times

  **Pime13** Most Recent 1 month ago
Selected Answer: C
choose C
upvoted 2 times

  **vincy2202** 2 months, 1 week ago
C is the correct answer
upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago
Go for C
upvoted 1 times

  **sandipk91** 6 months ago
C is the only answer
upvoted 1 times

  **amxexam** 6 months, 1 week ago

C is the ans

For all those calling for D , the option dont tell they will install stackdriver, but will use it to analysie the logs. Then deploying back the faulty code without fixing does not make sences.

upvoted 1 times

  **DreamerK** 7 months, 1 week ago

Why C is correct is there should be an assumption made by the author that new release will be deployed in the dev/test/stage environment. Otherwise C doesn't make any sense here.

upvoted 1 times



  **TotoroChina** 8 months, 1 week ago

I go with D.

How can we recurrent the problem after rollback to a good former release? You should see nothing useful for the problem from Trace & Logging when you are running on a good release.

C should be correct only when you have trace & logging always on for the period this problems happened, which is not mentioned in the question and not practical as the cost may surge if you are running a busy service.

upvoted 1 times

  **aviratna** 8 months, 1 week ago

C: Correct answer App engine gives flexibility to roll back to previous version. Priority should be restore the services to working state. And trace the issue using Stackdriver where the logs are already captured from previous failed service.

upvoted 1 times

  **victory108** 9 months, 2 weeks ago

C. Roll back to an earlier known good release initially, then use Stackdriver Trace and Logging to diagnose the problem in a development/test/staging environment

upvoted 2 times

  **un** 9 months, 3 weeks ago

i will go with C

upvoted 1 times

  **cmfchong** 10 months, 3 weeks ago

I would choose D. Because Roll back to an earlier known good release initially, then install StackDriver for option C without install the updated app would not allow you to able to find the problems in the updated app. For option C it did not say it will then install the updated app.

upvoted 3 times

  **lynx256** 11 months, 1 week ago

C is ok

upvoted 2 times

  **Ausias18** 11 months, 1 week ago

answer is C

upvoted 2 times

  **rmout** 1 year ago

application is taking approximately 30 seconds to load for "some of their users" not All ! So in my opinion , we would want to get hold of the network and data flow log evidences before rollingback. Testing in lower environments might not always work unless you have like to like env , and might not be even able to replicate the issue. Guess "B" would be the right option

upvoted 1 times

  **Joyjit_Deb** 1 year ago

I would rather go with "B". Rolling back (as suggested in "C" & "D") without enough evidence or investigations could be not a good approach.

upvoted 2 times

A production database virtual machine on Google Compute Engine has an ext4-formatted persistent disk for data files. The database is about to run out of storage space.

How can you remediate the problem with the least amount of downtime?

- A. In the Cloud Platform Console, increase the size of the persistent disk and use the `resize2fs` command in Linux.
- B. Shut down the virtual machine, use the Cloud Platform Console to increase the persistent disk size, then restart the virtual machine
- C. In the Cloud Platform Console, increase the size of the persistent disk and verify the new space is ready to use with the `fdisk` command in Linux
- D. In the Cloud Platform Console, create a new persistent disk attached to the virtual machine, format and mount it, and configure the database service to move the files to the new disk
- E. In the Cloud Platform Console, create a snapshot of the persistent disk restore the snapshot to a new larger disk, unmount the old disk, mount the new disk and restart the database service

Correct Answer: A

On Linux instances, connect to your instance and manually resize your partitions and file systems to use the additional disk space that you added.

Extend the file system on the disk or the partition to use the added space. If you grew a partition on your disk, specify the partition. If your disk does not have a partition table, specify only the disk ID. `sudo resize2fs /dev/[DISK_ID][PARTITION_NUMBER]` where `[DISK_ID]` is the device name and `[PARTITION_NUMBER]` is the partition number for the device where you are resizing the file system.

Reference:

<https://cloud.google.com/compute/docs/disks/add-persistent-disk>

Community vote distribution



A (100%)

  **Tos0** Highly Voted 2 years, 3 months ago


A is the correct answer because the question says "with minimum downtime"
upvoted 21 times

  **passnow** Highly Voted 2 years, 2 months ago

least amount of downtime? is the sugar word. You miss that you miss all. Everything there is correct but I believe its only A that fits that requirement
upvoted 10 times

  **raj117** 10 months, 4 weeks ago

but in option A, nowhere it is mentioned to shut down the VM.
upvoted 1 times

  **monkeym** 7 months, 2 weeks ago

No need to reboot.
upvoted 1 times

  **belly265** Most Recent 1 week, 4 days ago



A is the correct answer because you can just resize it without any downtime
upvoted 2 times

  **PhuocT** 2 months ago


Selected Answer: A
Vote A
upvoted 1 times

  **vincy2202** 2 months, 1 week ago

A is the correct answer
upvoted 1 times



  **rm_2495** 7 months, 2 weeks ago

A is correct
upvoted 1 times

  **victory108** 9 months, 2 weeks ago

A. In the Cloud Platform Console, increase the size of the persistent disk and use the `resize2fs` command in Linux.

upvoted 1 times

  **un** 9 months, 3 weeks ago

A is correct

https://cloud.google.com/compute/docs/disks/working-with-persistent-disks#resize_pd

upvoted 8 times

  **Ausias18** 11 months, 1 week ago

Answer is A

upvoted 1 times

  **lynx256** 11 months, 1 week ago

A is ok.

upvoted 1 times

  **bnlcnd** 1 year, 1 month ago

A is correct.

https://cloud.google.com/compute/docs/disks/add-persistent-disk#resize_partitions



upvoted 1 times

  **Arimaverick** 1 year, 1 month ago

Yes A is correct as the google documentations says "You can resize disks at any time, whether or not the disk is attached to a running instance.

Resizing a disk doesn't delete or modify disk data, but as a best practice, snapshot your disk before you make any changes.....If you are using ext4, use the resize2fs command. If you grew a partition on your disk, specify the partition. "

upvoted 1 times

  **raj117** 10 months, 4 weeks ago

to increase disk from Google Console, do we need to shut down the VM?

upvoted 2 times

  **Jambalaja** 10 months, 3 weeks ago



No, if the disk is a persistant disk you dont need to shutdown the VM. You can change the size of a persistant disk dynamically. However, in this case, since the persistant disk is ext4 formatted you need to use the resize2fs command.

upvoted 2 times

  **dlzhang** 1 year, 1 month ago

A is the right one.

upvoted 1 times

  **nimso** 1 year, 4 months ago

Answer is A:

upvoted 1 times

  **asheesh0574** 1 year, 5 months ago



I would go with A

upvoted 1 times

  **AshokC** 1 year, 5 months ago

A -- <https://cloud.google.com/compute/docs/disks/add-persistent-disk>

upvoted 1 times

  **raj117** 10 months, 4 weeks ago

https://cloud.google.com/compute/docs/disks/working-with-persistent-disks#resize_pd This is the correct link, thank you for sharing where I found the above one.

upvoted 2 times

  **saaurabh1805** 1 year, 7 months ago

A only fit with requirement in question that is minimum downtime.

upvoted 2 times

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

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

Correct Answer: A

Reference:

<https://www.sans.org/reading-room/whitepapers/compliance/ways-reduce-pci-dss-audit-scope-tokenizing-cardholder-data-33194>

🗲️ 👤 **AD2AD4** Highly Voted 👍 1 year, 9 months ago

Final Decision to go with Option A. I have done PCI DSS Audit for my project and thats the best suited case. 100% sure to use tokenised data instead of actual card number

upvoted 27 times

🗲️ 👤 **Musk** 1 year, 8 months ago

But with A you cannot extract statistics. That is the second r4equirement.

upvoted 4 times

🗲️ 👤 **Arimaverick** 1 year, 1 month ago

Analyzing Transaction does not require Credit Card number I guess. Only amount of transaction or balance what is needed. We also perform something similar with transactional data with tokenized PII information. So CC can be tokenized. So answer should be A.

upvoted 4 times

🗲️ 👤 **Musk** 1 year, 7 months ago

Thinking about that better, I think you can because you are only tokenizing the sensitive data, not the transaction type.

upvoted 2 times

🗲️ 👤 **natpilot** Highly Voted 👍 2 years, 1 month ago

E is correct. the proper model to exporting the credit card processing data to forward from a squis proxy to stackdriver logging, and export from stackdriver logging to bigquery. view https://cloud.google.com/solutions/pci-dss-compliance-in-gcp#monitoring_and_logging_flow

upvoted 8 times

🗲️ 👤 **gatul28** 9 months, 1 week ago

it is compliance related first of all and CC data is not needed or ever recommended for performing analytics on same. Tokenizing is must, so A

upvoted 1 times

🗲️ 👤 **Pupina** 1 year, 6 months ago

I do not see in your link that export logs to bigquery is a mandatory minimun scope. I see that is an optional task. I think is A.

upvoted 2 times

🗲️ 👤 **sjmsummer** Most Recent 🕒 1 month, 2 weeks ago

I chose A. But why C is not good?

upvoted 1 times

🗲️ 👤 **vincy2202** 2 months, 1 week ago

A is the correct answer

https://cloud.google.com/architecture/tokenizing-sensitive-cardholder-data-for-pci-dss#a_service_for_handling_sensitive_information

upvoted 2 times

🗲️ 👤 **haroldbenites** 2 months, 4 weeks ago

Go for A

upvoted 2 times

🗲️ 👤 **TheCloudBoy77** 3 months, 2 weeks ago

A - PCI DSS compliance can be a pain, tokenisation is one way of dealing with it.

upvoted 1 times

🗲️ 👤 **Bhagesh** 5 months, 3 weeks ago

A

Tokenization: A process that replaces the primary account number (PAN) with a surrogate value called a token. The PAN is then stored in a secure lookup. De-tokenization is the reverse process of looking up a PAN by its token. A token can either be a hash or an assigned value.

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

upvoted 1 times



amxexam 6 months, 1 week ago

A as per GCP document <https://cloud.google.com/architecture/tokenizing-sensitive-cardholder-data-for-pci-dss>

upvoted 2 times



DreamerK 7 months, 1 week ago

In this question, the analysis is on the payment method. Thus sensitive information like credit card number, holder name, etc is not needed for the analysis, but also should not be visible to the analyzer. Therefore, it makes perfect sense to tokenize these sensitive information while not affecting the purpose to analyze the payment method. In this sense, D is not correct since Big Query ACL can only control access at the table level, not at column level.

upvoted 1 times



aviratna 8 months, 1 week ago

A is correct answer to address the PCI compliance audit requirement

upvoted 1 times



victory108 9 months, 2 weeks ago

A. Create a tokenizer service and store only tokenized data

upvoted 2 times



Ausias18 11 months, 1 week ago

Answer is A

upvoted 1 times



lynx256 11 months, 1 week ago

After reading all previous comments... Most of them opt for A or E.

IMO difference between A and E is that A "hides" (tokenizes) the PII data itself whereas E does not allow the auditors to VIEW the PII data (which is written as row data).

Nowhere in the question is about AUDITING. The question is about ANALYSIS. Tokenization (for example with Cloud DLP) do not disturb analysis (this is toward A).

On the other hand - choosing A we have to rewrite the data (if it isn't tokenized) or create a new tables with tokenized data (both of them need much more effort than E; moreover - the latter needs refresh all the time).

IMO, in real word, we should tokenize the data at the very beginning of our project.

But regarding the question, assuming we haven't tokenized PII data, we should chose E.

upvoted 2 times



cherry23 5 months, 4 weeks ago

correct tokenize means masking the data

upvoted 1 times



lynx256 11 months, 1 week ago

Sorry, I changed my mind. Now I think A is ok.

upvoted 1 times



lynx256 11 months, 1 week ago

* [...] PII data (which is written as rAw data) [...]

upvoted 1 times



AaronLee 1 year ago

A is fine but it doesn't support analysis.

E is best for me according to this text:

"This ready-to-use pipeline takes data from Cloud Storage, processes it and ingests it into BigQuery."

<https://cloud.google.com/blog/products/identity-security/take-charge-of-your-data-how-tokenization-makes-data-usable-without-sacrificing-privacy>

upvoted 2 times



bnlcnd 1 year, 1 month ago

A is correct. It is must-do. But it should not be the only answer.

B/C/D/E can all help. Especially B & C.

upvoted 2 times



KSVI 1 year, 1 month ago

In scope of GCP we should consider segment the env:

<https://cloud.google.com/solutions/pci-dss-and-gke-guide>

Systems that facilitate segmentation (for example, projects, folders, firewalls, virtual private clouds (VPCs), and subnets).

Application pods and clusters that store, process, or transmit cardholder data. Without adequate segmentation, your entire cloud footprint can get in scope for PCI DSS.

To be considered out of scope for PCI DSS, a system component must be properly isolated from the CDE such that even if the out-of-scope system component were compromised, it could not impact the security of the CDE.

and see Fig.1

So, It looks like B or C is good, but B is preferable, gives more advanced level of segmentation.

upvoted 1 times

  **ahmedemad3** 1 year, 1 month ago

Ans: A

check the link

<https://cloud.google.com/solutions/tokenizing-sensitive-cardholder-data-for-pci-dss>

upvoted 2 times

You have been asked to select the storage system for the click-data of your company’s large portfolio of websites. This data is streamed in from a custom website analytics package at a typical rate of 6,000 clicks per minute. With bursts of up to 8,500 clicks per second. It must have been stored for future analysis by your data science and user experience teams.

Which storage infrastructure should you choose?

- A. Google Cloud SQL
- B. Google Cloud Bigtable
- C. Google Cloud Storage
- D. Google Cloud Datastore

Correct Answer: B

Google Cloud Bigtable is a scalable, fully-managed NoSQL wide-column database that is suitable for both real-time access and analytics workloads.

Good for:

- ☞ Low-latency read/write access
- ☞ High-throughput analytics
- ☞ Native time series support

Common workloads:

- ☞ IoT, finance, adtech
- ☞ Personalization, recommendations
- ☞ Monitoring
- ☞ Geospatial datasets
- ☞ Graphs

Incorrect Answers:

C: Google Cloud Storage is a scalable, fully-managed, highly reliable, and cost-efficient object / blob store.

Is good for:

- ☞ Images, pictures, and videos
- ☞ Objects and blobs
- ☞ Unstructured data

D: Google Cloud Datastore is a scalable, fully-managed NoSQL document database for your web and mobile applications.

Is good for:

- ☞ Semi-structured application data
- ☞ Hierarchical data
- ☞ Durable key-value data
- ☞ Common workloads:
- ☞ User profiles
- ☞ Product catalogs
- ☞ Game state

Reference:

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

Community vote distribution

B (75%)

C (25%)

  **victory108** Highly Voted 8 months ago


B. Google Cloud Bigtable
upvoted 9 times

  **jeff001** Highly Voted 10 months, 3 weeks ago


B, Bigtable due to the IoT like requirements
upvoted 5 times

  **belly265** Most Recent 1 week, 4 days ago

Ans B -Google cloud big table can only handle this
upvoted 2 times


-  **llanerox** 1 month ago

For me is B.

upvoted 1 times
-  **Moss2011** 1 month, 3 weeks ago


Selected Answer: B

For the amount of clicks per second the only storage that supports that is BigTable

upvoted 3 times
-  **OrangeTiger** 2 months ago


Selected Answer: C

The more I look up, C is correct.
Store in Cloud Storage for future analysis.
Load it into BigQuery when analysis is needed.
That way I can reduce costs.
The question does not mention real-time analysis.


upvoted 1 times
-  **OrangeTiger** 2 months ago

First, I choose C Cloud storage.
I was confused by a word 'future analysis'.
Low data keep on CloudStorage until I need it.


Store large amounts of data for analysis, B is best options.
But can I stream data directly to BigTable?
Don't you need CloudDataflow or CloudFunction in between?

upvoted 1 times
-  **StelSen** 2 months, 1 week ago


Answer is B. This link provides nice explanation. <https://stackoverflow.com/questions/53489250/price-aside-why-ever-choose-google-cloud-bigtable-over-google-cloud-datastore>

upvoted 3 times
-  **haroldbenites** 2 months, 4 weeks ago


Go for C.
Analytics event - Cold Path:
<https://cloud.google.com/architecture/optimized-large-scale-analytics-ingestion>

upvoted 2 times
-  **vincy2202** 3 months ago


Answer is B

upvoted 2 times
-  **Q_Review** 4 months, 1 week ago


The question references "Analytics" a large quantity of data. It's not a trick question; Bigtable is the answer. B.

upvoted 2 times
-  **rsamant** 8 months, 3 weeks ago


it should be C for real time streaming also . IO can be throttled using pubsub or dataflow while writing data justifying bigtable cost for later analysis is not justified . look @ below diagram from GCS Page
<https://cloud.google.com/storage#section-6>

upvoted 3 times
-  **penelop** 4 months, 3 weeks ago


What are you talking about? Cloud storage is being used as a data lake there, and is being queried by BigQuery. Click-streams are not SQL, therefore this diagram is not applicable at all. You need a non-SQL solution. Hence B.

upvoted 3 times
-  **guid1984** 1 year ago


Answer is C, if you read below two articles then it's clear
<https://cloud.google.com/solutions/build-a-data-lake-on-gcp>
<https://cloud.google.com/solutions/architecture/optimized-large-scale-analytics-ingestion>

upvoted 3 times
-  **army234** 11 months ago

Nope, B is correct.



upvoted 4 times
-  **Jambalaja** 10 months, 4 weeks ago



B is right. C is wrong, because Cloud Storage has IO write limits of 1000 writes / second. See source:
<https://cloud.google.com/storage/docs/request-rate#auto-scaling>



upvoted 7 times
-  **doumx** 1 year, 2 months ago

B for sure cause : NoSQL and high volume transaction

upvoted 4 times

  **RomiAwasthy** 1 year, 5 months ago
D - Web traffic, same as game state
upvoted 1 times

  **Pipoca** 1 year, 6 months ago
Tricky question. Usually google recommends Bigtable for IoT. But none of the requirements rule out Datastore as far as I could find. For safety I would go with Bigtable, as bursts of 8500 writes per second have the potencial to disrupt operations in Datastore. If someone can find documentation on this it would be much appreciated.
upvoted 2 times

  **gfhbox0083** 1 year, 8 months ago
B, for sure.
BigTable for IOT
<https://cloud.google.com/solutions/iot-overview>
upvoted 2 times

You are creating a solution to remove backup files older than 90 days from your backup Cloud Storage bucket. You want to optimize ongoing Cloud Storage spend.
What should you do?

- A. Write a lifecycle management rule in XML and push it to the bucket with gsutil
- B. Write a lifecycle management rule in JSON and push it to the bucket with gsutil
- C. Schedule a cron script using gsutil ls -l gs://backups/** to find and remove items older than 90 days
- D. Schedule a cron script using gsutil ls -l gs://backups/** to find and remove items older than 90 days and schedule it with cron

Correct Answer: B

Community vote distribution

B (100%)

  **Eroc** Highly Voted 2 years, 4 months ago



All four are correct answers. Google has built in cron job scheduling with Cloud Schedule, so that would place "D" behind "C" in Google's perspective. Google also has its own lifecycle management command line prompt gcloud lifecycle so "A" or "B" could be used. JSON is slightly faster than XML because of the "{" verse "<c>" distinguisher, with a Trie tree used for alphanumeric parsing. So between "A" and "B", choose "B". Between "B" and "A", "B" is slightly more efficient from the GCP operator perspective. So choose "B".
upvoted 26 times

  **ghitesh** 2 years, 1 month ago

gsutil command takes only json as input for lifecycle management. In case of API, both XML and json can be used.
<https://cloud.google.com/storage/docs/gsutil/commands/lifecycle>
<https://cloud.google.com/storage/docs/xml-api/put-bucket-lifecycle>
https://cloud.google.com/storage/docs/json_api/v1/buckets/update
upvoted 17 times

  **nitinz** 12 months ago

B is correct. Policy = JSON format. No matter if its AWS or GCP.
upvoted 5 times

  **tartar** 1 year, 6 months ago

B is ok
upvoted 6 times

  **clouddude** Highly Voted 1 year, 9 months ago

I'll go with B.
A is not reasonable because life cycle policies are not written in XML.
B is reasonable and is cloud native.
C requires a cron script which needs something to run the script and is a non-cloud native approach.
D requires a cron script which needs something to run the script and is a non-cloud native approach.
upvoted 13 times

  **ghadxx** Most Recent 1 month ago

B is the most efficient option
upvoted 1 times

  **llanerox** 1 month ago

B is correct.
upvoted 1 times

  **vincy2202** 2 months, 1 week ago

Selected Answer: B
B is the correct answer
upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago

Go for B
upvoted 1 times

  **duocnh** 3 months ago

Selected Answer: B
vote B
upvoted 1 times

🗨️ 👤 **vincy2202** 3 months, 2 weeks ago

B is the right answer.

upvoted 1 times

🗨️ 👤 **aviratna** 8 months, 1 week ago

B is the right option.

A. XML is not fast

C & D: Overhead of managing separate cron job and there is already inbuilt feature for Bucket lifecycle management.

upvoted 3 times

🗨️ 👤 **victory108** 9 months, 2 weeks ago

B. Write a lifecycle management rule in JSON and push it to the bucket with gsutil

upvoted 1 times

🗨️ 👤 **un** 9 months, 3 weeks ago

B is correct

upvoted 1 times

🗨️ 👤 **lynx256** 11 months, 1 week ago

B is ok

upvoted 1 times

🗨️ 👤 **Ausias18** 11 months, 1 week ago

Answer is B

upvoted 1 times

🗨️ 👤 **dlzhang** 1 year, 1 month ago

B is the best answer.

upvoted 1 times

🗨️ 👤 **Bhupals** 1 year, 2 months ago

B is right Ans

The following lifecycle management configuration JSON document specifies that all objects in this bucket that are more than 90 days old are deleted automatically:

```
{
  "rule":
  [
    {
      "action": {"type": "Delete"},
      "condition": {"age": 90}
    }
  ]
}
```

upvoted 6 times

🗨️ 👤 **AshokC** 1 year, 5 months ago

B

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

The config-json-file specified on the command line should be a path to a local file containing the lifecycle configuration JSON document.

1. gsutil -- JSON only

2. API -- XML, JSON

upvoted 2 times

🗨️ 👤 **gkdinesh** 1 year, 5 months ago

B is correct

upvoted 1 times

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



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



Correct Answer: B



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



Reference:



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



  **AWS56** Highly Voted 2 years, 1 month ago
"B. Google Cloud Dataproc" is the answer
upvoted 17 times



  **VinayakBudapanahalli** Highly Voted 1 year, 1 month ago
Dataproc is a managed Spark and Hadoop service that lets you take advantage of open source data tools for batch processing, querying, streaming, and machine learning. Dataproc automation helps you create clusters quickly, manage them easily, and save money by turning clusters off when you don't need them. With less time and money spent on administration, you can focus on your jobs and your data.
<https://cloud.google.com/dataproc/docs/concepts/overview#:~:text=Dataproc%20is%20a%20managed%20Spark,%2C%20streaming%2C%20and%20machine%20learning.&text=With%20less%20time%20and%20money,your%20jobs%20and%20your%20data.>
upvoted 6 times



  **llanerox** Most Recent 1 month ago
B is ok.
upvoted 1 times



  **OrangeTiger** 2 months ago
B Cloud Data Proc is correct.
Cloud Data Proc can easily migrate from Hadoop, Spark.
upvoted 1 times



  **haroldbenites** 2 months, 4 weeks ago
Go for B.
upvoted 1 times



  **vincy2202** 3 months ago
Answer is B
upvoted 1 times

  **victory108** 9 months, 2 weeks ago
B. Google Cloud Dataproc
upvoted 1 times



  **un** 9 months, 3 weeks ago
B is correct
upvoted 1 times

  **lynx256** 11 months, 1 week ago
B is ok
upvoted 1 times

  **Ausias18** 11 months, 1 week ago
Answer is B
upvoted 1 times

  **dlzhang** 1 year, 1 month ago
B is the right answer

upvoted 1 times

  **nimso** 1 year, 4 months ago

B is good

upvoted 1 times

  **AshokC** 1 year, 5 months ago

B - Dataproc



Lift&Shift of Apache Spark and Hadoop jobs

upvoted 1 times

  **gkdinesh** 1 year, 5 months ago

B is correct

upvoted 1 times

  **mlantonis** 1 year, 8 months ago

It says Apache Spark and Hadoop, so Dataproc. B is fine

upvoted 1 times

  **Tushant** 1 year, 8 months ago

B is the right answer

upvoted 1 times

  **gfhbox0083** 1 year, 8 months ago

B, for sure.

Dataproc for Apache Spark and Hadoop

upvoted 1 times

The database administration team has asked you to help them improve the performance of their new database server running on Google Compute Engine. The database is for importing and normalizing their performance statistics and is built with MySQL running on Debian Linux. They have an n1-standard-8 virtual machine with 80 GB of SSD persistent disk.

What should they change to get better performance from this system?

- A. Increase the virtual machine's memory to 64 GB
- B. Create a new virtual machine running PostgreSQL
- C. Dynamically resize the SSD persistent disk to 500 GB
- D. Migrate their performance metrics warehouse to BigQuery
- E. Modify all of their batch jobs to use bulk inserts into the database

Correct Answer: C

Community vote distribution

C (75%) A (25%)

  **shandy** Highly Voted 2 years, 3 months ago

Answer is C because persistent disk performance is based on the total persistent disk capacity attached to an instance and the number of vCPUs that the instance has. Incrementing the persistent disk capacity will increment its throughput and IOPS, which in turn improve the performance of MySQL.

upvoted 37 times

  **Eroc** Highly Voted 2 years, 4 months ago

Assuming that the database is approaching its hardware limits... both options A and C would improve performance, A would increase number of CPUs and memory, but C would increase memory by more. If it a software problem, it is likly it is a hashing problem (the search and sort algorithms are not specific enough to search within the database). This problem would not be fixed just by migrating to PostgreSQL or BigQuery but modifying the inserts would help the situation because it would entail specifications of data lookups. However, it wouldn't help with search performance just inserts and it doesn't help in normalization. So B, D, and E are eliminated. Since statistics is based on sets, the larger the number of sets the better the predictions. This means that the largest amount of memory would not only increase computer performance but also knowledge enhancements. So C beats A.

upvoted 21 times

  **haroldbenites** 2 months, 4 weeks ago

When you increase the memory yo need to shutdown the machine, but when you increase the disk, it is not necessary. Answer is B.

upvoted 2 times

  **haroldbenites** 2 months, 4 weeks ago



I wanted to put letter C.

upvoted 2 times

  **nitinz** 12 months ago



C. universal truth - OLTP D/B performance is depended on IOPs. SSD is the best solution for higher IOPs. In GCP bigger the disk size higher the IOPs.

upvoted 6 times

  **trainor** 1 year, 2 months ago

Also, if you increased the memory size, it would not be a n1-standard-8 anymore. You should eventually change machine type, not simply increase memory.

upvoted 2 times

  **tartar** 1 year, 6 months ago

C is ok.

upvoted 7 times

  **VT001** Most Recent 2 weeks, 5 days ago

Selected Answer: C

I got this question on my exam.

upvoted 1 times

  **Sreedharveluru** 1 month, 1 week ago

Selected Answer: C

C is the answer

upvoted 2 times

  **KevPinto** 1 month, 1 week ago

Selected Answer: A

An n1-standard-8 comes with 30GB as Standard, So Increasing (More than doubling) the memory will boost the Read cache leading to more data being consumed per IO cycle.

upvoted 1 times

  **OrangeTiger** 2 months ago

I saw same question in GCP official moc exam.

C was correct here.

But seems either is ok.All choice are works for repair performance :(

I shoud read this thread...

upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago

Go for C.



When you increase the memory yo need to shutdown the machine, but when you increase the disk, it is not necessary. Answer is C

upvoted 1 times

  **vincy2202** 3 months ago

Answer is C

upvoted 2 times

  **aviratna** 8 months, 1 week ago

C: Correct. Increase in disk size increases the performance & IOPS

upvoted 1 times

  **victory108** 9 months, 2 weeks ago

C. Dynamically resize the SSD persistent disk to 500 GB

upvoted 1 times

  **un** 9 months, 3 weeks ago

I will go with C

upvoted 1 times

  **jeff001** 10 months, 4 weeks ago

C. IOPS will increase with larger capacity.

upvoted 1 times

  **lynx256** 11 months, 1 week ago

C is ok

upvoted 1 times

  **Ausias18** 11 months, 1 week ago

Answer is C

upvoted 2 times

  **Shruti1997** 1 year ago

A is incorrect because n1 standard 8 has 8 cpu cores and memory can be 0.95 - 6.5 GB per core. So If assign max 6.5 GB memory per core, total memory comes out to be 52 GB. Increase to 64 GB does not make sense since 8 cores will be a bottleneck. Hence Answer is C.

upvoted 4 times

  **bnlcnd** 1 year, 1 month ago

I have no idea why size matters in GCP until I see this guide:

https://cloud.google.com/compute/docs/disks/performance#performance_by_disk_size

believe it or not, C is correct.

Maybe this is how google make money. I don't remember AWS limit IOPS just by size. LOL.

upvoted 1 times

  **francisco_guerra** 1 year, 4 months ago

Persistent disk performance scales with the size of the disk and with the number of vCPUs on your VM instance.

Performance scales until it reaches either the limits of the disk or the limits of the VM instance to which the disk is attached. The VM instance limits are determined by the machine type and the number of vCPUs on the instance.

so the memory does not matter really so answer is C

upvoted 1 times

  **mwilbert** 1 year, 1 month ago

Not true that memory doesn't matter, but we have no basis to think that it matters in this case. The obvious problem is that the small disk limits the IOPS.

upvoted 2 times

You want to optimize the performance of an accurate, real-time, weather-charting application. The data comes from 50,000 sensors sending 10 readings a second, in the format of a timestamp and sensor reading.

Where should you store the data?

- A. Google BigQuery
- B. Google Cloud SQL
- C. Google Cloud Bigtable
- D. Google Cloud Storage

Correct Answer: C

Google Cloud Bigtable is a scalable, fully-managed NoSQL wide-column database that is suitable for both real-time access and analytics workloads.

Good for:

- ⇒ Low-latency read/write access
- ⇒ High-throughput analytics
- ⇒ Native time series support

Common workloads:

- ⇒ IoT, finance, adtech
- ⇒ Personalization, recommendations
- ⇒ Monitoring
- ⇒ Geospatial datasets
- ⇒ Graphs

Reference:

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

🗲️ 👤 **victory108** Highly Voted 👍 8 months ago
C. Google Cloud Bigtable
upvoted 7 times

🗲️ 👤 **belly265** Most Recent ⌚ 1 week, 4 days ago
Ans c - when ever thier is input from IOT devices across and time series data which is huge go for big table in gcp
upvoted 1 times

🗲️ 👤 **Narinder** 1 month, 1 week ago
Google Cloud Big Table is best for the use-case to store the time-series data, so C is correct
upvoted 1 times

🗲️ 👤 **OrangeTiger** 2 months ago
I choose C.
A Big Query Seems good.But keyword 'IOT' is here.
B. Google Cloud SQL does'nt work this case.
D. Google Cloud Storage does'nt suppourt realtime analytics.
upvoted 2 times

🗲️ 👤 **haroldbenites** 2 months, 4 weeks ago
Go for C.
upvoted 2 times

🗲️ 👤 **vincy2202** 3 months ago
Answer is C
upvoted 1 times

🗲️ 👤 **aviratna** 8 months, 1 week ago
C: Bigtable is suitable for IoT sensor data and it has low latency which will provide the performance for weather app
upvoted 2 times

🗲️ 👤 **Koushick** 10 months ago
Bigtable is ideal for IoT kind of data. Answer is C.
upvoted 3 times

🗲️ 👤 **JohnWick2020** 10 months, 1 week ago

Answer is C - Cloud Bigtable, which is the default option for IoT and streaming use cases.

upvoted 2 times

  **Umer24** 1 year, 1 month ago

New Question:4 (Part 2 of 2)

(C). 1. Create a Stackdriver alert when storage exceeds 75%, and increase the available storage on the instance to create more space. 2. Deploy Memcached to reduce CPU load. 3. Change the instance type to 32-core machine type to reduce replication lag.

(D). 1. Create a Stackdriver alert when storage exceeds 75%, and increase the available storage on the instance to create more space. 2. Deploy Memcached to reduce CPU load. 3. Create a Stackdriver alert for replication lag, and change the instance type to a 32-core machine type to reduce replication lag.

upvoted 2 times

  **Umer24** 1 year, 1 month ago

New Question:7

All Compute Engine instance in your VPC should be able to connect to an Active Directory server on specific ports. Any other traffic emerging from your instances is not allowed. You want to enforce this using VPC firewall rules. How should you configure the firewall rules?

A. Create an egress rule with priority 1000 to deny all traffic for all instances. Create another egress rule with priority 100 to allow the Active Directory traffic for all instances.

B. Create an egress rule with priority 100 to deny all traffic for all instance. Create another egress rule with priority 1000 to allow the Active Directory traffic for all instances.

C. Create an egress rule with priority 1000 to allow the Active Directory traffic. Rely on the implied deny egress rule with priority 100 to block all traffic for all instances.

D. Create an egress rule with priority 100 to allow the Active Directory traffic. Rely on the implied deny egress rule with priority 1000 to block all traffic for all instances.

upvoted 2 times

  **tzKhalil** 10 months, 3 weeks ago

A is the ans.

For C no implied deny egress rule in GCP, only implied allow egress and implied deny ingress

upvoted 2 times

  **Umer24** 1 year, 1 month ago

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

A. Configure a Cloud SQL instance with high availability enabled.

B. Configure a Cloud Spanner instance with a regional instance configuration.

C. Set up SQL Server on Compute Engine, using Always on Availability Groups using windows Failover Clustering. Place nodes in different subnets.



D. Set up SQL Server Always On Availability Groups using Windows Failover Clustering. Place nodes in different zones.

upvoted 2 times

  **tzKhalil** 10 months, 3 weeks ago

A is the ans

upvoted 2 times

  **Umer24** 1 year, 1 month ago

New Question:2 (Part 1 of 2)

You have a Python web application with many dependencies that requires 0.1 CPU cores and 128 MB of memory to operate in production. You want to monitor and maximize machine utilization. You also want to reliably deploy a new versions of the application. Which set of steps should you take?

(A). Perform the following: 1. Create a managed instance group with f1-micro type machines. 2. Use a startup script to clone the repository. Check out the production branch, install the dependencies, and start the Python app. 3. Restart the instances to automatically deploy new production releases.

(B). Perform the following: 1. Create a managed instance group with n 1-standard-1 type machines. 2. Build a Compute Engine image from the production branch that contains all the dependencies and automatically starts the Python app.

3. Rebuild the Compute Engine image, and update the instance template to deploy new production releases.

upvoted 3 times

  **tzKhalil** 10 months, 3 weeks ago

A is the ans

upvoted 2 times

  **Umer24** 1 year, 1 month ago

New Question:1

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

A. Set up a streaming Cloud Dataflow job, receiving data by the ingestion process. Clean the data in a Cloud Dataflow pipeline.

B. Create a Cloud Function that reads dta from BigQuery and clean it.

C. Create a SQL statement on the data in BigQuery, and save it as a view. Run a view daily, and save the result to a new table.

D. Use Cloud Dataprep and configure the BigQuery tables as the source. Schedule a daily job to clean the data.

upvoted 2 times

  **JohnWick2020** 10 months, 1 week ago

Answer for this question is D (Cloud Data Prep).

upvoted 1 times

  **tzKhalil** 10 months, 3 weeks ago

A is the ans

upvoted 1 times

  **gfhbox0083** 1 year, 8 months ago



C, for sure.
Real Time

upvoted 4 times

  **gfhbox0083** 1 year, 8 months ago

and IOT

upvoted 2 times

  **Ziegler** 1 year, 8 months ago

C is right

upvoted 4 times

  **nitinz** 12 months ago

Ans is C, IoT = Bigtable

upvoted 1 times

Your company’s user-feedback portal comprises a standard LAMP stack replicated across two zones. It is deployed in the us-central1 region and uses autoscaled managed instance groups on all layers, except the database. Currently, only a small group of select customers have access to the portal. The portal meets a 99,99% availability SLA under these conditions. However next quarter, your company will be making the portal available to all users, including unauthenticated users. You need to develop a resiliency testing strategy to ensure the system maintains the SLA once they introduce additional user load.

What should you do?

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

Correct Answer: B

Community vote distribution

B (100%)

- jcmoranp** Highly Voted

2 years, 4 months ago

resilience test is not about load, is about terminate resources and service not affected. Think it's B. The best for resilience in to introduce chaos in the infraestructure

upvoted 57 times
- rockstar9622**

2 years, 1 month ago

I agree with @jcmoranp, B) is correct for more info - https://cloud.google.com/solutions/scalable-and-resilient-apps#test_your_resilience

upvoted 14 times
- AWSPro24**

3 months, 2 weeks ago

Isn't A superior in one way. It will demonstrate that the app is regionally redundant by demonstrating it can survive the loss of an entire zone. B only demonstrates the app is zonally redundant and can lose a random instance here and there within individual zones which is not that resilient. Thoughts?

upvoted 2 times
- OSNG** Highly Voted

1 year, 3 months ago

Will go with A. Reason:
1. SLA in question is about the Availability (The portal meets a 99,99% availability SLA under these conditions.) therefore maintaining SLA means Availability.
2. Its a user-feedback portal and type of user input is going to be similar or same (A is capturing the user input and replaying it).

Why not B:
The infrastructure is using MIG (Instances created using templates) most likely to be used with Health Check and killing random VMs cannot test the availability (neither affect the availability as health check will immediately kill the effected Instances and create the other one.)

Why not D:
SLA is about Availability not reliability or scaling. (As all of it does work hand to hand but still major focus should be on availability.)

--- IF AGREE PLEASE UP VOTE TO MAKE IT CLEAR FOR THE OTHERS --- Thank you.

upvoted 35 times
- AWSPro24**

3 months, 2 weeks ago

A ensures the app can withstand the loss of a whole Zone which I think is important as well.

upvoted 1 times
- amxexam**

5 months, 3 weeks ago



We are talking about resilience testing where as SLA is an argument of the system.



upvoted 1 times
- amxexam**



5 months, 3 weeks ago



And resilience means the capacity to recover from failure.



upvoted 1 times



  **bolu** 1 year, 1 month ago
valuable input in terms of 'availability'. did you select this answer in exam too?
upvoted 1 times



  **belly265** Most Recent 1 week, 4 days ago
Ans b -best for resilience is to go for Chaos testing
upvoted 2 times



  **pakilodi** 2 months, 3 weeks ago
Selected Answer: B
Vote B. A and D cannot be the answer for one thing: Capture user input data. Doing this, it will break privacy regulament and so one you can be in legal situation. only for testing resiliency.
upvoted 2 times

  **duocnh** 3 months ago
Selected Answer: B
vote B
upvoted 1 times

  **vincy2202** 3 months, 1 week ago
B seems to be the correct answer.
To test "Resiliency", we need to introduce intermittent failures & "chaos" is the best way to do so.
https://cloud.google.com/architecture/scalable-and-resilient-apps#test_your_resilience
upvoted 1 times

  **MaxNRG** 4 months, 1 week ago
B – create synthetic random user input, replay synthetic load until autoscale logic is triggered on at least one layer, and introduce chaos in the system by terminating random resources on both zones.
upvoted 2 times

  **MaxNRG** 4 months, 1 week ago
Quite interesting Q, when A and B are the candidates.
“D” won’t work since it doesn’t test resiliency (outage of resources), it’s completely focused on scalability.
“B” most accuratly approaches real-world scenario. Random input for multiple users (registered and not) and random outage of a resource in both zones (when system scaled). Such chaos methodology is practiced on Cloud solutions. Check this page about Chaos Monkey resiliency test tool at Netflix. “B” basically fits all Q’s requirements.
Also read about Google’s Scalability and Resiliency Designs, this page doesn’t focus on testability but very closely describe system design of this Q.
“A” tests more hypothetic case, even more about Disaster Recovery, when whole zone gets down. Since, this test doesn’t change test data / scenario – it is too artificial for finding bottlenecks, performance bugs, etc.
upvoted 1 times

  **amxexam** 5 months, 3 weeks ago
Splitting answer into 2 as the website wont allow posting big answers.

The requirement is reliance testing (recovery from failure)while maintaining 99.9 availability (SLA)

Let's go with elimination.



A. Capture existing users input, and replay captured user load until autoscale is triggered on all layers. At the same time, terminate all resources in one of the zones

>> We are overkilling resilience testing by entering the boundary of DR hence will eliminate this option.

B. Create synthetic random user input, replay synthetic load until autoscale logic is triggered on at least one layer, and introduce “chaos” to the system by terminating random resources on both zones

>> This option takes care of the requirement of testing. Is a patter used by org like Netflix chaos monkey).

upvoted 4 times



  **amxexam** 5 months, 3 weeks ago
C. Expose the new system to a larger group of users, and increase group size each day until autoscale logic is triggered on all layers. At the same time, terminate random resources on both zones
>> Next quarter your user going to increase, but how are you going to get more users to test, this option is not feasible hence eliminating.

D. Capture existing users input, and replay captured user load until resource utilization crosses 80%. Also, derive estimated number of users based on existing user’s usage of the app, and deploy enough resources to handle 200% of expected load



>> The failure is not necessary from CPU utilization, even the hardware can fail under load. Blanket provisioning is not the way to go hence eliminating.

Hence B

upvoted 5 times

  **DreamerK** 7 months, 1 week ago
I would go for A since A achieves the greatest resiliency:
1. Autoscaling is tested at all layers. It will be a disaster if any of the layer couldn't be scaled out properly in real spiking workloads. In this case, B only tests at least one.
2. We should expect a failure at zonal level to ensure higher resiliency. B only shuts down random resource, which cannot test the resiliency when full zone goes down.

upvoted 2 times

  **aviratna** 8 months, 1 week ago



B: For test simulate the load and Chaos test is important part of testing which will handle failure scenario at different level

upvoted 1 times

  **victory108** 9 months, 2 weeks ago

B. Create synthetic random user input, replay synthetic load until autoscale logic is triggered on at least one layer, and introduce "chaos" to the system by terminating random resources on both zones

upvoted 1 times

  **un** 9 months, 3 weeks ago

I will go with B

upvoted 1 times

  **Ausias18** 11 months, 1 week ago

Answer is B

upvoted 2 times

  **lynx256** 11 months, 1 week ago

IMO both B and A should be done in the real world. None of them is sufficient alone.

But for the Exam - B is more comprehensiv than A.

So - I'll go with B.

upvoted 2 times

  **pawel_ski** 11 months, 2 weeks ago

A vs B

A. "until autoscale is triggered on all layers", "all resources in one of the zones"

B. "until autoscale logic is triggered on at least one layer", "introduce "chaos""

We "need to develop a resiliency testing strategy". So we are supposed to test the worst case which can may happen.

I choose A.

upvoted 1 times

  **Alekshar** 1 year ago

It cannot be answer D as the question states "available to all users". It pretty seems like opening the app to the public and means you have no clues on what will be the expectations for a 100% load. Hence you cannot test a 200% load.

B fits better as it ensures autoscalling is properly configured by triggering it and health checks are configured by terminating ressources and see them being recreated

upvoted 2 times

  **Rothmansua** 1 year, 1 month ago

The reasoning for D may be following.

The goal is to "maintain the SLA once they introduce additional user load".

NOT to prepare for random service failure. A, B, C all test by introducing failure NOT focusing on increasing load on a working system.

upvoted 1 times

One of the developers on your team deployed their application in Google Container Engine with the Dockerfile below. They report that their application deployments are taking too long.

```
FROM ubuntu:16.04

COPY . /src

RUN apt-get update && apt-get install -y python python-pip

RUN pip install -r requirements.txt
```

You want to optimize this Dockerfile for faster deployment times without adversely affecting the application's functionality.

Which two actions should you take? (Choose two.)

- A. Remove Python after running pip
- B. Remove dependencies from requirements.txt
- C. Use a slimmed-down base image like Alpine Linux
- D. Use larger machine types for your Google Container Engine node pools
- E. Copy the source after the package dependencies (Python and pip) are installed

Correct Answer: CE

The speed of deployment can be changed by limiting the size of the uploaded app, limiting the complexity of the build necessary in the Dockerfile, if present, and by ensuring a fast and reliable internet connection.

Note: Alpine Linux is built around musl libc and busybox. This makes it smaller and more resource efficient than traditional GNU/Linux distributions. A container requires no more than 8 MB and a minimal installation to disk requires around 130 MB of storage. Not only do you get a fully-fledged Linux environment but a large selection of packages from the repository.

Reference:

<https://groups.google.com/forum/#!topic/google-appengine/hZMEkmm0bDU> <https://www.alpinelinux.org/about/>

  **aviratna** Highly Voted 8 months, 1 week ago

C & E:

C: Smaller the base image with minimum dependency faster the container will start

E: Docker image build uses caching. Docker Instructions sequence matter because application's dependencies change less frequently than the Python code which will help to reuse the cached layer of dependency and only add new layer for code change for Python Source code.

upvoted 26 times

  **belly265** Most Recent 1 week, 4 days ago

A -invalid

B-dependencies are required

C-it will help as it is one of the best practices to make use of lighter image if possible

D-Not helpful

E-is the best practice to do the steps that changes more frequently at the end . so copy . should be performed at last as it will be changing more frequently and we can make use of docker caching

hence Answer E is most then C

upvoted 2 times

  **aeme** 1 month ago

What I don't understand is why alpine linux decreases deployment time? Because the base-image layer will be cached after first installation and won't change until a new os version is used. Therefore after first deployment it won't be faster. But giving more power to the machine that starts up the container would. So I clearly would argument for D & E

upvoted 1 times

  **OrangeTiger** 2 months ago

C and E appear to be in conflict.

If you install the dependencies in advance, will the size increase?

upvoted 1 times

  **abhinavbihade** 3 months ago

C and E

























upvoted 1 times

  **vincy2202** 3 months, 1 week ago

C & E are the correct answers.

Kindly refer - <https://www.docker.com/blog/intro-guide-to-dockerfile-best-practices/>

upvoted 2 times

-   **IKGx1iGetOWGSjAQDD2x3** 5 months, 2 weeks ago
pip installs on alpine will take forever as you'll end up having to compile a lot of stuff; best get rid of that `copy .` operation though... E makes sense if you're building locally in an environment with caching, but in a CI/CD system there will be no impact. Very strange question...
upvoted 1 times
-   **pabloinigo** 5 months, 3 weeks ago
But E could slow down the build, not the deployment, moving COPY at the end is not going to change the size, and DEPLOYMENT is going to the the same. BUILD, yes will be improved, but no DEPLOYMENT
upvoted 1 times
-   **aeme** 1 month ago
Moving the copy cmd to the end drastically changes the size. Because all the layers (commands) AFTER the copy command will create a new layer for every build. This is problematic because caching won't work and so all the data added from apt, python install and pip have to be downloaded for every deployment.
upvoted 1 times
-   **JustJack21** 5 months, 4 weeks ago
Still no idea why E is a good option. <https://cloud.google.com/architecture/best-practices-for-building-containers>
upvoted 1 times
-   **yzy** 7 months, 3 weeks ago
Don't understand why the copy after the install will make the deployment faster, someone can explain to me plz ?
upvoted 2 times
-   **jackdbd** 7 months ago
Read aviratna's answer: you are more likely to change your python source code than your python dependencies.
If in your Dockerfile you place COPY . /src before RUN pip install -r requirements.txt, and if your source code changes, Docker will generate a different layer of the Docker image. This way the subsequent steps in the Dockerfile (like RUN pip install -r requirements.txt) will have to be repeated and the previously cached Docker image layer won't be used.
upvoted 4 times
-   **bala786** 7 months, 4 weeks ago
Agree with C&E
upvoted 2 times
-   **victory108** 8 months ago
C. Use a slimmed-down base image like Alpine Linux
E. Copy the source after the package dependencies (Python and pip) is installed
upvoted 2 times
-   **Papafel** 8 months, 1 week ago
Can anyone help to explain why the correct answer is C & E?
C. Use a slimmed-down base image like Alpine Linux
E. Copy the source after he package dependencies (Python and pip) are installed
upvoted 2 times
-   **kopper2019** 8 months ago
they just looked common sense for me
upvoted 3 times
-   **rishab86** 9 months ago
c and e looks correct to me.
upvoted 4 times
-   **Pokchok** 8 months, 3 weeks ago
What does e really help with?
upvoted 2 times

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

What should you do?

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

Correct Answer: D

Community vote distribution



ghitesh 2 years, 1 month ago

Question Statement: You want to adjust your test and deployment procedures to avoid this problem in the future

So based on this, I think the option "C" is correct, since it is the only one talking about doing changes in the test environment.

upvoted 38 times

VedaSW 1 year, 5 months ago

C. Increase the load on your test and staging environments.

As you have pointed out in "Question Statement", I do not see C covering "deployment procedures". Test and Staging environment is more on testing, but not about deployment procedure to production.

So, the only option that cover test and deployment is D. (Yes, kind of unacceptable to have the users to do "testing", but we make it "ok" by calling it "canary deployment")

upvoted 7 times

RegisFTM 2 months ago

"Your solution is producing performance bugs in production..." - I don't see how "D" would help to detect performance bugs.

- "C" looks more adequate.

upvoted 2 times

Urban_Life 2 months, 3 weeks ago

The answer is D

upvoted 6 times

Eroc 2 years, 4 months ago

A wouldn't prevent the bugs, it would just avoid them. B would help with root-cause analysis because it'd be a smaller change to review. C would test the performance of the system at its peak processing rates, so this assumes the bugs in production only occur because of usage. D would allow you to test the new code against smaller user sets to see if it occurs then, and if it still does you know it is not because of more user responses. So it's a tossup between C and D, D would be the cheaper/quicker answer so I'd choose D first then C if it's because of usage.

upvoted 20 times

tartar 1 year, 6 months ago

D is ok.

upvoted 16 times

certificatores 1 year, 3 months ago

if you want to pass the test, trust tartar's answers.

to support his claim, check this

https://cloud.google.com/solutions/application-deployment-and-testing-strategies#canary_test_pattern

Canary test pattern

In canary testing, you partially roll out a change and then evaluate its performance against a baseline deployment, as the following diagram shows.

upvoted 9 times

gautam23 1 year, 1 month ago



U should copy and paste TarTar... what a lame logic. Noone is perfect. Please understand. C looks like a better option to me as performance is the issue and customer is unable to find the same in Dev and Test scenarios. So scaling up might help. U may disagree and thats fine

upvoted 7 times

trainor 1 year, 2 months ago

Deploying changes to a small subset of users wouldn't provide enough load to highlight performance bugs. Also, we'd notice the bug once in production (even though for a small number of users), not satisfying the requirement "to avoid this problem in the future". We'd be faster to fix them with a rollback, though.

upvoted 2 times

  **trainor** 1 year, 2 months ago

So I think C is better.

upvoted 3 times

  **nitinz** 12 months ago

D, canary rollout

upvoted 7 times

  **Sreekey** 1 year, 6 months ago

The question is about the performance of the existing Code that they did not detect in Test environments . This is not about new API release . In order to test the performance they should increase the load in test environment and hence answer C.

upvoted 13 times

  **mary72** Most Recent 21 hours, 34 minutes ago

The answer is D

upvoted 1 times

  **ahsangh** 1 week, 1 day ago

Selected Answer: D

canary

upvoted 1 times


  **Davidik79** 2 weeks, 1 day ago

Selected Answer: D

The answer must be "D". I assume that any architect roughly knows the number of requests per minute of their applications, the peak time, etc... Load tests would be done accordingly.

Therefore, if you did not notice this in the test/staging envs, it means that something in production effects the performance issues, and the Canary deployment approach helps you to observe the application in the prod env before to hit the wider audience

upvoted 1 times

  **VT001** 2 weeks, 5 days ago

Selected Answer: C

I got similar question on my exam.



upvoted 2 times

  **GARY1119** 1 month, 1 week ago

Selected Answer: C



It is about load in production.

upvoted 1 times

  **RJDBA** 1 month, 1 week ago

performance related issues or not always related to load, an improper where clause on a column with no index can have a huge performance problem. so testing it on few users makes sense. i agree it is tricky question but "Performance" is what throwing off and making to lean towards load testing. so i believe D is the correct answer

upvoted 1 times

  **VT001** 1 month, 1 week ago

Selected Answer: C

C is the only option talking about performance.

upvoted 1 times

  **KevPinto** 1 month, 1 week ago

Selected Answer: C

The Challenge here is to address Performance and doing it by addressing test and deployment procedures - This clearly indicates that loads in test need to be increased to simulate Live traffic

upvoted 1 times

  **sjmsummer** 1 month, 2 weeks ago

Selected Answer: C


load is related to performance. Select C.

upvoted 1 times

  **kkhurana** 1 month, 2 weeks ago

D is about both test and deployment strategy . Canary does support QA in production and deploy conservatively. I think right answer is D

upvoted 1 times

  **Moss2011** 1 month, 3 weeks ago

Selected Answer: C

The sentence mention "how to adjust TEST and STAGGING" not the best practice to deploy
upvoted 1 times

  **Charanjit** 2 months ago



Answer should be D as it is talking about Canary test pattern. Have a look the diagram in below link and read about it more in this link:
https://cloud.google.com/architecture/application-deployment-and-testing-strategies#canary_test_pattern
upvoted 1 times

  **vincy2202** 2 months, 1 week ago

Selected Answer: C

Correction. C is the correct answer.


If the performance issue is the key reason, then how come with small set of users in production (canary deployment) be able to simulate this ?
upvoted 1 times

  **MF2C** 2 months, 1 week ago

Selected Answer: D

canary is way of testing and deployment

upvoted 2 times

  **StelSen** 2 months, 1 week ago

My answer would be C. Because with the smaller user load in production might not produce the performance bug. Also playing around in production for performance bug is wrong choice. However I can still increase more load in test/staging env and play with test/staging env.
upvoted 1 times

A small number of API requests to your microservices-based application take a very long time. You know that each request to the API can traverse many services.

You want to know which service takes the longest in those cases.

What should you do?

- A. Set timeouts on your application so that you can fail requests faster
- B. Send custom metrics for each of your requests to Stackdriver Monitoring
- C. Use Stackdriver Monitoring to look for insights that show when your API latencies are high
- D. Instrument your application with Stackdriver Trace in order to break down the request latencies at each microservice

Correct Answer: D

Reference:

https://cloud.google.com/trace/docs/quickstart#find_a_trace

  **euclid** Highly Voted 2 years, 2 months ago



D is correct !

upvoted 18 times

  **nitinz** 12 months ago

D, trace is just for latency testing.

upvoted 3 times

  **tartar** 1 year, 6 months ago

D is ok

upvoted 9 times

  **haroldbenites** Most Recent 2 months, 4 weeks ago

Go for D

upvoted 3 times

  **vincy2202** 3 months, 1 week ago

D is the right answer.

upvoted 2 times

  **victory108** 9 months, 2 weeks ago

D. Instrument your application with Stackdriver Trace in order to break down the request latencies at each microservice

upvoted 2 times

  **un** 9 months, 3 weeks ago

D is correct

upvoted 1 times

  **Ausias18** 11 months ago



Answer is D

upvoted 1 times

  **lynx256** 11 months, 1 week ago

D is ok

upvoted 1 times

  **bnlcnd** 1 year, 1 month ago



Stackdriver Trace is like DynaTrace PurePath. That's the tool we should use for tracing the API latencies on each hop.

upvoted 2 times

  **HBM** 1 year, 1 month ago

Correct is D.

upvoted 1 times

  **AshokC** 1 year, 5 months ago

D - Stackdriver Trace

upvoted 1 times

  **mlantonis** 1 year, 8 months ago



Stackdriver Trace is what we need to understand the latency of our app. So D is the correct.

upvoted 2 times

  **Tushant** 1 year, 8 months ago

D is the correct answer.

upvoted 2 times

  **Nirms** 1 year, 9 months ago

D is the correct answer

upvoted 2 times

  **Ziegler** 1 year, 9 months ago



Di is the correct answer

upvoted 1 times

  **AD2AD4** 1 year, 9 months ago

Final Decision to go with Option D

upvoted 2 times

  **cwbat** 1 year, 9 months ago

they are talking about latency BETWEEN services, so i think answer is C:

<https://cloud.google.com/blog/products/gcp/drilling-down-into-stackdriver-service-monitoring>

upvoted 2 times

  **wazza88** 1 year, 9 months ago

D should be correct, the headline in GC trace documentation says it all: "Cloud Trace is a distributed tracing system for Google Cloud that collects latency data from applications and displays it in near real-time in the Google Cloud Console."

upvoted 3 times

During a high traffic portion of the day, one of your relational databases crashes, but the replica is never promoted to a master. You want to avoid this in the future.

What should you do?

- A. Use a different database
- B. Choose larger instances for your database
- C. Create snapshots of your database more regularly
- D. Implement routinely scheduled failovers of your databases



Correct Answer: B

Community vote distribution

D (86%) 14%

  **Narigdo** Highly Voted 2 years, 3 months ago



Answer is D
upvoted 67 times

  **Jos** 2 years, 2 months ago

Yep, +1 for D
upvoted 17 times

  **Eroc** Highly Voted 2 years, 4 months ago

@chiar, I agree the question is not clear. In GCP larger instances have larger number of CPUs, Memory and come with their own private network. So increases the instance size would help prevent the need for failover during high traffic times. However, routinely scheduled failovers would allow the team to test the failover when it is not required. This would make sure it is working when it is required.
upvoted 25 times

  **Shariq** 2 years, 3 months ago

exactly how do you know the optimal size. it will be a guess. answer should be D
upvoted 5 times

  **belly265** Most Recent 1 week, 4 days ago

Answer is C , basically the question is asking you how can the crash be prevented due to the load the system is crashing hence improving it will avoid , also the replica is same as the original server so no point
upvoted 1 times

  **belly265** 1 week, 4 days ago

Sorry mistyped Answer is B
upvoted 1 times



  **Juju_juju** 1 month, 1 week ago

Selected Answer: B

Would answer B : I would not promote a replica to master just for ponctual high traffic (<https://cloud.google.com/sql/docs/mysql/replication/manage-replicas>) and if traffic is too high for master, I guess it would be too for replica
upvoted 1 times

  **aubreyhan** 1 month, 1 week ago

If active db crash because high traffic transaction, the standby db will crash too. so the capacity of db should be increase, B is correct answer.
upvoted 1 times

  **VT001** 1 month, 1 week ago



I was aligned towards D, but the answer is B.
<https://stackoverflow.com/questions/70460530/google-professional-cloud-exam-question-high-traffic-relational-databases-cra>
upvoted 1 times



  **mbenhassine1986** 1 month, 1 week ago



Answer is B
Please check this : <https://stackoverflow.com/questions/70460530/google-professional-cloud-exam-question-high-traffic-relational-databases-cra>
upvoted 2 times



  **Narinder** 1 month, 1 week ago



Answer is D. The problem statement is that replica server not got promoted as master. There is nowhere mentioned the reason for primary DB going down because of resource contention (performance issue). So focussing on the problem statement D is the correct answer
upvoted 1 times



  **sjmsummer** 1 month, 2 weeks ago
Only D is mostly likely answer.
upvoted 1 times



  **anjuagrawal** 1 month, 3 weeks ago
It should be D. We do not know how big the database should be so decision on larger database may not be solvable.
upvoted 2 times



  **lxgywil** 1 month, 3 weeks ago
If we focus on promoting the replica to a master, I'd choose D. Note, we want to avoid [the replica not being promoted] in the future, not addressing those crashes.
upvoted 2 times



  **Yeero** 1 month, 3 weeks ago
Selected Answer: D
Depends what THIS is related to, avoid crash or make master promotion feature to work?
upvoted 1 times

  **OrangeTiger** 2 months ago
Selected Answer: D
I vote D.
upvoted 1 times

  **ckho** 2 months ago
Selected Answer: D
Answer should be D
upvoted 1 times

  **ABO_Doma** 2 months, 1 week ago
Selected Answer: D
We don't know if the cause of the primary going down. We also don't know the reason why the replica was not promoted to master. Migrating the database to a larger instance might not help.
upvoted 1 times

  **Brzanka** 2 months, 3 weeks ago
Selected Answer: D
Answer is D
upvoted 1 times

  **menon_sarath** 2 months, 3 weeks ago
I think the answer is option D. There is still a doubt on the question as to what is "THIS" refers to.

The question states you want to avoid "THIS FROM HAPPENING". If the question did not have the line "But the replica is never promoted to master" , then the correct option would have been B. Since it also state that a contingency of a fail over is in place, then it means that the needed precautions were already taken but it still did not work due to some reason.

In this context, IMHO, I feel Option D is more appropriate.
upvoted 2 times

Your organization requires that metrics from all applications be retained for 5 years for future analysis in possible legal proceedings. Which approach should you use?

- A. Grant the security team access to the logs in each Project
- B. Configure Stackdriver Monitoring for all Projects, and export to BigQuery
- C. Configure Stackdriver Monitoring for all Projects with the default retention policies
- D. Configure Stackdriver Monitoring for all Projects, and export to Google Cloud Storage

Correct Answer: B

Stackdriver Logging provides you with the ability to filter, search, and view logs from your cloud and open source application services. Allows you to define metrics based on log contents that are incorporated into dashboards and alerts. Enables you to export logs to BigQuery, Google Cloud Storage, and Pub/Sub.

Reference:

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

Community vote distribution

B (56%)

D (44%)

- JoeShmoe**

Highly Voted

2 years, 3 months ago

D is correct and best practice for long term log storage

upvoted 82 times
- AndreUanKenobi**

11 months, 2 weeks ago

+1. For archival purposes, Customer should use Cloud Storage. BigQuery is a datawarehouse, and could eventually import data from Cloud Storage if necessary.

upvoted 6 times
- anjuagrawal**

1 month, 3 weeks ago

+1 Due to long term storage, cloud storage is better answer than BigQuery

upvoted 2 times
- MeasService**

Highly Voted

2 years, 2 months ago

A and C can be quickly ruled out because none of them is solution for the requirements "retained for 5 years"

Between B and D, the different is where to store, BigQuery or Cloud Storage. Since the main concern is extended storing period, D (Correct Answer) is better choice, and the "retained for 5 years for future analysis" further qualifies it, for example, using Coldline storage class.

With regards of BigQuery, while it is also a low-cost storage, but the main purpose is for analysis. Also, logs stored in Cloud Storage is easy to transport to BigQuery or do query directly against the files saved in Cloud Storage if and whenever needed.

upvoted 40 times
- trainor**

1 year, 2 months ago

The question is about metrics, not logs. I'd go for B.

See <https://cloud.google.com/solutions/stackdriver-monitoring-metric-export>

upvoted 8 times
- bnlcnd**

1 year, 1 month ago

This is a good example. thanks.

But, we can easily change that implementation to dump the metrics to buckets to save lots of money. And, when talking about legal purpose, 1 hour interval may not be enough. You may have to keep more frequent metrics. So, only cold line or archive work for that purpose.

upvoted 1 times
- Vika**

1 year ago

second that! like the way u explained..

upvoted 1 times
- Cloudy_Apple_Juice**

1 year, 4 months ago

If you have 2 viable solutions (B&D), then always chose the one that is cost optimised - I chose D

upvoted 2 times
- Shyeom**



2 years, 1 month ago



point : organization requires that metrics from all applications be retained for 5 years



upvoted 2 times
- Shyeom**

2 years, 1 month ago

I mean answer : D
upvoted 2 times

  **ankatsu2010** Most Recent 2 weeks, 3 days ago
'B' sounds feasible to me, because this data retention is for analysis purpose and not archive or backup. (Storage pricing is about the same.)
upvoted 2 times



  **pradoUA** 1 month ago
Selected Answer: D
In my opinion the answer is D.
"for 5 years for future analysis IN POSSIBLE LAGAL PROCEDURES" - definitely Cloud Storage (Coldline), as this may never happen, so why use a more expensive solution?
upvoted 1 times



  **Pime13** 1 month ago
Selected Answer: B
vote b: https://cloud.google.com/bigquery/docs/best-practices-storage#take_advantage_of_long-term_storage
<https://cloud.google.com/storage/pricing#storage-pricing>
<https://cloud.google.com/bigquery/pricing#storage>
"Storage pricing is the cost to store data that you load into BigQuery. You pay for active storage and long-term storage.



Active storage includes any table or table partition that has been modified in the last 90 days.



Long-term storage includes any table or table partition that has not been modified for 90 consecutive days. The price of storage for that table automatically drops by approximately 50%. There is no difference in performance, durability, or availability between active and long-term storage.



The first 10 GB of storage per month is free"
upvoted 1 times



  **GARY1119** 1 month, 1 week ago
B is correct: https://cloud.google.com/bigquery/docs/best-practices-storage#take_advantage_of_long-term_storage
upvoted 2 times

  **VT001** 1 month, 1 week ago
Selected Answer: B
Answer is B as question is about metrics and not about logs.
upvoted 1 times



  **Narinder** 1 month, 1 week ago
The only requirement is to keep the data for long term (5years). Following one of the Google architecture best practices of keeping the infra cost low (Cost-Optimization), it is best suited to keep the log data in cloud storage with the object life-cycle management policy implemented.
upvoted 1 times



  **Meyucho** 1 month, 3 weeks ago
Selected Answer: B
If you are exporting to CloudStorage for future analysis, when the time to make that analysis come you will need to import that info into BQ... so I think that B is correct.
upvoted 1 times



  **PhuocT** 2 months ago
Selected Answer: D
Vote D
upvoted 2 times

  **OctoMax** 2 months, 1 week ago
Selected Answer: D
retained for __5 years__ for future analysis in __possible__ legal proceedings

coldline storage too
upvoted 1 times

  **phantomsg** 2 months, 2 weeks ago
Selected Answer: D
Long term retention with possible analysis in the future. Move to Cloud Storage and Cold line option. Reduces costs. The may or may not be retrieved. Storing in BigQuery will be expensive.
upvoted 1 times

  **vincy2202** 2 months, 2 weeks ago
Selected Answer: B
B is the correct answer.
https://cloud.google.com/architecture/stackdriver-monitoring-metric-export#exporting_metrics_use_cases
upvoted 2 times

  **pakilodi** 2 months, 3 weeks ago

Selected Answer: D

D. Logs must be stored for five years(possibly with coldline lifecycle)
upvoted 1 times

  **ggzzzzzzz** 2 months, 4 weeks ago

Selected Answer: D

Cloud Storage for "retained for 5 years"
upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago

Go for D
upvoted 1 times

  **vchrist** 3 months ago

Selected Answer: D

sure D
upvoted 1 times

Your company has decided to build a backup replica of their on-premises user authentication PostgreSQL database on Google Cloud Platform. The database is 4 TB, and large updates are frequent. Replication requires private address space communication. Which networking approach should you use?

- A. Google Cloud Dedicated Interconnect
- B. Google Cloud VPN connected to the data center network
- C. A NAT and TLS translation gateway installed on-premises
- D. A Google Compute Engine instance with a VPN server installed connected to the data center network

Correct Answer: A

Google Cloud Dedicated Interconnect provides direct physical connections and RFC 1918 communication between your on-premises network and Google's network. Dedicated Interconnect enables you to transfer large amounts of data between networks, which can be more cost effective than purchasing additional bandwidth over the public Internet or using VPN tunnels.

Benefits:

- ⇒ Traffic between your on-premises network and your VPC network doesn't traverse the public Internet. Traffic traverses a dedicated connection with fewer hops, meaning there are less points of failure where traffic might get dropped or disrupted.
- ⇒ Your VPC network's internal (RFC 1918) IP addresses are directly accessible from your on-premises network. You don't need to use a NAT device or VPN tunnel to reach internal IP addresses. Currently, you can only reach internal IP addresses over a dedicated connection. To reach Google external IP addresses, you must use a separate connection.
- ⇒ You can scale your connection to Google based on your needs. Connection capacity is delivered over one or more 10 Gbps Ethernet connections, with a maximum of eight connections (80 Gbps total per interconnect).
- ⇒ The cost of egress traffic from your VPC network to your on-premises network is reduced. A dedicated connection is generally the least expensive method if you have a high-volume of traffic to and from Google's network.

Reference:



<https://cloud.google.com/interconnect/docs/details/dedicated>

  **AWS56** Highly Voted 2 years, 1 month ago

A is the one
upvoted 21 times

  **nitinz** 12 months ago

A, direct connect is private. VPN not enough for 4 TB with huge frequent changes.
upvoted 1 times

  **tartar** 1 year, 6 months ago


A is ok
upvoted 6 times

  **hibi6x** Most Recent 2 months, 2 weeks ago

Challenge me but this is answer B. I have 4TB DB, frequent update would be what ? 50% daily change means 2TB daily means ~25Mbps. With VPN I can easily achieved that. It is typical ingress to cloud freeIt would be madness to pay 5k montly only for Directo Connect...
upvoted 2 times

  **haroldbenites** 2 months, 4 weeks ago

Go for A
upvoted 1 times

  **vincy2202** 3 months, 1 week ago

A is the correct answer.
upvoted 1 times

  **dlpkmr98** 4 months ago

always go with best practices --Google Cloud Dedicated Interconnect
upvoted 1 times

  **amxexam** 6 months, 1 week ago

Let's go with option elimination
A. Google Cloud Dedicated Interconnect
>> Secured, fast connection, hence the choice. This will allow private connection from GCP to the data centre with a fast connection. Cost is not mentioned in the requirement to eliminate this option.

B. Google Cloud VPN connected to the data centre network

>> We have to think about data flowing on the internet and the requirement talks about private connect. Also not sure how well you connect VPN with Data Center until you use the hybrid option. <https://cloud.google.com/network-connectivity/docs/vpn/concepts/overview> hence eliminate

C. A NAT and TLS translation gateway installed on-premises



>>This is a VM option to reach outside won't for this requirement hence eliminate

D. A Google Compute Engine instance with a VPN server installed connected to the data centre network

>>This is a slow option hence eliminate

Hence A



upvoted 3 times

  **aviratna** 8 months, 1 week ago

A is correct.

- Its a DB replication of 4 TB which will be continuous so Dedicated Interconnect is cost effective when data volume and traffic is high.
- Any other option will be costly because of ingress & egress high volume traffic
- Dedicated Interconnect it can also communicate based on private IP range
- replicating sensitive data like users data over public internet using Cloud VPN is not good option from security perspective.
- Dedicated Interconnect traffic will not go over internet

upvoted 1 times

  **gatul28** 9 months, 1 week ago

A is expected to be chosen here but this s authentication data and with option A there is no traffic encryption happening. VPN supports encryption, but has low throughput.

upvoted 2 times

  **victory108** 9 months, 2 weeks ago

A. Google Cloud Dedicated Interconnect

upvoted 1 times

  **un** 9 months, 3 weeks ago

A is correct

upvoted 1 times

  **Ausias18** 11 months, 1 week ago

Answer is A

upvoted 1 times

  **bnlcnd** 1 year, 1 month ago

<https://cloud.google.com/network-connectivity/docs/how-to/choose-product>

A is the answer. Because the document clearly says that the Cloud VPN is not for high performance blablabla.

In real life, I may just go with Cloud VPN.

upvoted 3 times

  **mwilbert** 1 year, 1 month ago



They clearly want you to answer A. I'm vaguely curious who would have a 4TB "user authentication database" (that's 500KB of authentication data for every person on Earth).with frequent large updates.

upvoted 3 times

  **certmonkey** 1 year, 3 months ago


user authentication data needs to be encrypted. Interconnect will not encrypt, VPN will. The on prem database in the serving master and the one in cloud is just a back up so speed and availability has low importance. I will go with B.

upvoted 1 times

  **AshokC** 1 year, 5 months ago



A - Dedicated Interconnect

upvoted 1 times

  **parag27** 1 year, 6 months ago

The question does not ask for a cost effective solution . It says"large updates are frequent". Looks like they want us to answer A(Dedicated interconnect).

upvoted 1 times

  **ezat** 1 year, 6 months ago

B for sure cuz A is very high price and they shouldn't pay that just for DB replica

upvoted 1 times

Auditors visit your teams every 12 months and ask to review all the Google Cloud Identity and Access Management (Cloud IAM) policy changes in the previous 12 months. You want to streamline and expedite the analysis and audit process.

What should you do?

- A. Create custom Google Stackdriver alerts and send them to the auditor
- B. Enable Logging export to Google BigQuery and use ACLs and views to scope the data shared with the auditor
- C. Use cloud functions to transfer log entries to Google Cloud SQL and use ACLs and views to limit an auditor's view
- D. Enable Google Cloud Storage (GCS) log export to audit logs into a GCS bucket and delegate access to the bucket

Correct Answer: D

Community vote distribution

B (100%)

- ghitesh**

Highly Voted

2 years, 1 month ago

B. https://cloud.google.com/iam/docs/roles-audit-logging#scenario_external_auditors
upvoted 45 times
- aselunar**

1 year, 9 months ago

In that scenario the audits were quarterly. For annual audits, Google recommends Cloud Storage.
upvoted 4 times
- Rajuuu**

1 year, 8 months ago

B IS correct
upvoted 2 times
- TheCloudBoy77**

3 months, 1 week ago

B makes more sense after reading it. thx
upvoted 2 times
- MikeB19**

6 months, 1 week ago

The article references either gcs or bq. I think this q is referring to gcs
upvoted 1 times
- anton_royce**

1 year, 11 months ago

I agree. Answer B
upvoted 4 times
- jcmoranp**

Highly Voted

2 years, 4 months ago

Think B is better. Export to Bigquery and restrict access to queries with ACLs to auditors
upvoted 30 times
- nitinz**

12 months ago

D, rest all options are no good.
upvoted 2 times
- trainor**

1 year, 2 months ago

I think D is better. B implies too much data manipulation to make it suitable for an audit.
upvoted 2 times
- tartar**

1 year, 6 months ago

D is ok.
upvoted 7 times
- tartar**

1 year, 6 months ago

Sorry, changed my view. B is the recommended practice
upvoted 10 times
- alii**

1 year, 1 month ago

don't change your view, D was right :)
upvoted 3 times
- lynx256**

11 months, 1 week ago

If D, when auditors visit you, one way or another you have to load the logs to BQ because analysys of what was changed in IAM policy could be hard to do form raw logs (objects in GCS bucket). So option D is probably a bit cheaper than B but more effort is needed (which also generate costs).

upvoted 4 times

  **passnow** 2 years, 2 months ago

I thought same as well. I would go with B

upvoted 4 times

  **anjuagrawal** Most Recent 2 weeks, 6 days ago

Selected Answer: B



Should be B. D can be true but the question nowhere specifies cloud storage only. The question says IAM logs for any changes and not just for cloud storage. Suppose any IAM changes done on VM, will option D cover those changes? No.

upvoted 1 times

  **burner_1984** 1 month ago

B since the question says "you want to streamline and expedite the analysis and audit process."

upvoted 1 times

  **ehgm** 1 month, 1 week ago

Selected Answer: B

If we look at the cost and the access is not frequent, D is best (cloud store)



But the question says: streamline and expedite the *analysis *and *audit process*. So BigQuery is best, we can use view, restrict access to some columns and use a tool like Datastudio to generate dashboards.

upvoted 2 times

  **sjmsummer** 1 month, 2 weeks ago

I select D.



upvoted 1 times

  **Sekierer** 1 month, 3 weeks ago

Selected Answer: B

B seems best

upvoted 1 times

  **ABO_Doma** 2 months, 1 week ago

Selected Answer: B

Both Cloud Storage and Big Query are supported as sink destinations. Since our requirement is "to streamline and expedite the analysis and audit process" we should prefer using BigQuery over Cloud Storage because retrieving and analyzing data in BigQuery is very convenient and fast compare to Cloud Storage.

You can also restrict access by using BigQuery ACLs and views. BigQuery Table ACL lets you set table-level permissions. Table-level permissions determine the users, groups, and service accounts that can access a table or view. You can give the user access to specific tables or views without giving the user access to the complete dataset. For example, grant the role BigQuery Data Viewer (roles/bigquery.dataViewer) to let a user query the table or view without dataset access.

Ref: <https://cloud.google.com/bigquery/docs/table-access-controls-intro>

upvoted 1 times

  **phantomsg** 2 months, 2 weeks ago

Selected Answer: B

https://cloud.google.com/iam/docs/roles-audit-logging#scenario_external_auditors


upvoted 1 times

  **americoleonardo** 2 months, 3 weeks ago

Selected Answer: B

https://cloud.google.com/iam/docs/roles-audit-logging#scenario_external_auditors

upvoted 1 times

  **ggzzzzzzz** 2 months, 4 weeks ago

Selected Answer: B

"streamline and expedite" the analysis and audit process, Bigquery is the right answer

upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago

Ten visit of auditors are each 12 months . It's not necessary store the data on bigquery for that time . Better is store over cloud storage and when is necessary doing analysis , then load into some database like , cloud sql or bigquery or another and do the analysis .

Go for D.

upvoted 1 times

  **duocnh** 3 months ago

Selected Answer: B

vote B

upvoted 1 times

  **cdcollector** 3 months ago

https://cloud.google.com/iam/docs/roles-audit-logging#scenario_external_auditors
upvoted 1 times

  **Chintzz** 3 months ago

Selected Answer: B

B. https://cloud.google.com/iam/docs/roles-audit-logging#scenario_external_auditors
upvoted 1 times

  **nareshthumma** 3 months, 2 weeks ago

Selected Answer: B

b is true
upvoted 1 times

  **The_Dave_Mty** 3 months, 3 weeks ago

Although B seems to be the right answer, D is simpler.

B implies creating queries in BigQuery and setting the permissions to the auditors group where D is just a sink that you can create to save logs into GCS and for get about it now every year just share the bucket with the auditors

Sink Supported destinations

You can use the Log Router to route certain logs to supported destinations in any Cloud project. Logging supports the following sink destinations:

- Cloud Storage: JSON files stored in Cloud Storage buckets; provides inexpensive, long-term storage.
 - BigQuery: Tables created in BigQuery datasets; provides big data analysis capabilities.
 - Pub/Sub: JSON-formatted messages delivered to Pub/Sub topics; supports third-party integrations, such as Splunk, with Logging.
 - Cloud Logging: Log entries held in log buckets; provides storage in Cloud Logging with customizable retention periods.
- upvoted 1 times

You are designing a large distributed application with 30 microservices. Each of your distributed microservices needs to connect to a database back-end. You want to store the credentials securely.

Where should you store the credentials?

- A. In the source code
- B. In an environment variable
- C. In a secret management system
- D. In a config file that has restricted access through ACLs

Correct Answer: C

Reference:

<https://cloud.google.com/kms/docs/secret-management>

Community vote distribution



C (100%)

  **Eroc** Highly Voted 2 years, 4 months ago

Google Secret Management was designed explicitly for this purpose.
upvoted 26 times

  **nitinz** 12 months ago

C, microservices = GKE = Kubernetes = secrets.
upvoted 5 times

  **tartar** 1 year, 6 months ago

C is ok
upvoted 7 times

  **shandy** Highly Voted 2 years, 3 months ago

C is the answer, since key management systems generate, use, rotate, encrypt, and destroy cryptographic keys and manage permissions to those keys.

A is incorrect because storing credentials in source code and source control is discoverable, in plain text, by anyone with access to the source code. This also introduces the requirement to update code and do a deployment each time the credentials are rotated. B is not correct because consistently populating environment variables would require the credentials to be available, in plain text, when the session is started. D is incorrect because instead of managing access to the config file and updating manually as keys are rotated, it would be better to leverage a key management system. Additionally, there is increased risk if the config file contains the credentials in plain text.
upvoted 8 times

  **rogerlovato** Most Recent 1 month, 2 weeks ago

Selected Answer: C
C is correct
upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago



Go for C
upvoted 1 times

  **vincy2202** 3 months ago

C is the right answer
upvoted 1 times



  **unnikrisb** 4 months, 3 weeks ago

Google Practice exam question with option C : In a key management system
C is correct because key management systems generate, use, rotate, encrypt, and destroy cryptographic keys and manage permissions to those keys.
<https://cloud.google.com/kms/>
For this question, refer to the Mountkirk Games case study.
upvoted 1 times

  **unnikrisb** 4 months, 3 weeks ago

Google Practice exam question with option C : In a key management system
Here also C is correct because key management systems generate, use, rotate, encrypt, and destroy cryptographic keys and manage permissions to those keys.
<https://cloud.google.com/kms/>
For this question, refer to the Mountkirk Games case study.


upvoted 1 times

  **unnikrisb** 4 months, 3 weeks ago

Again part of practice tests (option was key management instead of secret management system)
C is correct because key management systems generate, use, rotate, encrypt, and destroy cryptographic keys and manage permissions to those keys.
<https://cloud.google.com/kms/>
For this question, refer to the Mountkirk Games case study.
upvoted 1 times

  **victory108** 9 months, 2 weeks ago

C. In a secret management system
upvoted 2 times

  **Ausias18** 11 months, 1 week ago

Answer is C
upvoted 1 times

  **lynx256** 11 months, 1 week ago

C is ok
upvoted 1 times

  **JackIsMyName** 11 months, 3 weeks ago

I think the wording is confusing for this question. The right answer is suggesting using an obscure handling process and not Google Secret Manager. Which are two different things.
upvoted 2 times

  **DickDastardly** 11 months, 2 weeks ago


Agreed, the lack of capitalization implies some bespoke "secret" method hidden from the masses
upvoted 1 times

  **practitioner** 1 year, 3 months ago

C - this in the list of sample question from google
upvoted 1 times

  **kimberjdaw** 1 year, 5 months ago

I'm glad to see everyone selecting C. Anyone who says B has no idea how easy it is for developers to hide code to read the environment variables and secretly send them somewhere. This happens all the time and it's why C exists!
upvoted 1 times

  **AshokC** 1 year, 5 months ago

C - Secret Management for key management
upvoted 1 times

  **Gobblegobble** 1 year, 8 months ago

No brainer C is right answer
upvoted 1 times

  **mlantonis** 1 year, 8 months ago

C is correct
upvoted 1 times

A lead engineer wrote a custom tool that deploys virtual machines in the legacy data center. He wants to migrate the custom tool to the new cloud environment.

You want to advocate for the adoption of Google Cloud Deployment Manager.

What are two business risks of migrating to Cloud Deployment Manager? (Choose two.)

- A. Cloud Deployment Manager uses Python
- B. Cloud Deployment Manager APIs could be deprecated in the future
- C. Cloud Deployment Manager is unfamiliar to the company’s engineers
- D. Cloud Deployment Manager requires a Google APIs service account to run
- E. Cloud Deployment Manager can be used to permanently delete cloud resources
- F. Cloud Deployment Manager only supports automation of Google Cloud resources

Correct Answer: *BF*

Community vote distribution

EF (56%)

CF (33%)

11%

- victory108**

Highly Voted

8 months ago

E. Cloud Deployment Manager can be used to permanently delete cloud resources

F. Cloud Deployment Manager only supports automation of Google Cloud resources

upvoted 34 times
- poseidon24**

7 months, 1 week ago

Yup, E + F. In GCP documentation it states as a warning note that deletion made through Deployment Manager scripts cannot be undone, if devs are not well trained a human errors can impact Business

upvoted 2 times
- AK2020**

Highly Voted

8 months, 3 weeks ago

C and F- make sense to me

upvoted 16 times
- ssepiro**

3 months, 1 week ago

I think this is right. the key of the question is "business risks".

upvoted 1 times
- ehgm**

Most Recent

1 month, 1 week ago

Selected Answer: CF

A. Nothing to see

B. Any functionality of any tool can be deprecated (Terraform, Chef ...)

C. It's true

D. Any tool needs some kind of credential to run

E. Any tool or script have the same problem

F. It's true

upvoted 2 times
- RCasagrande**

1 month, 2 weeks ago

Selected Answer: EF

agree with EF

upvoted 1 times
- tjfiarshp**

1 month, 3 weeks ago

Selected Answer: EF

E. Cloud Deployment Manager can be used to permanently delete cloud resources

F. Cloud Deployment Manager only supports automation of Google Cloud resources

upvoted 1 times
- pddddd**

1 month, 3 weeks ago

custom tool can also delete resources permanently.

API may be depreciated in on prem environment with the update of the on prem virtualisation platform for example

Lack of up to date skills and use of product specific tool are def business risks.

upvoted 1 times
- lxgywil**

1 month, 3 weeks ago

B & D.

B - The way I see it, resource deprecation may require the company to allocate some time, people, and funds to make relevant changes to that tool.



<https://cloud.google.com/deployment-manager/docs/deprecations>

F - Everyone seems to agree on this one.

<https://cloud.google.com/deployment-manager/docs/configuration/supported-resource-types>

Option E looks more like a feature to me than a business risk. Also, you can use the "ABANDON" delete policy, which keeps a resource and only removes a reference to it - https://cloud.google.com/deployment-manager/docs/deployments/updating-deployments#policies_for_removing_resources

upvoted 1 times

  **lxgywil** 1 month, 3 weeks ago

B & F*

upvoted 1 times

  **ABO_Doma** 2 months, 2 weeks ago

Selected Answer: DF

To create other Google Cloud resources, Deployment Manager uses the credentials of the Google APIs Service Agent to authenticate to other APIs. The Google APIs Service Agent is designed specifically to run internal Google processes on your behalf.

upvoted 1 times

  **phantomsg** 2 months, 2 weeks ago

Selected Answer: CF

Engineers are familiar with current tool and the current tool can be customized to create environments in any cloud provider. When they migrate to GCP, they have a learning curve as well as the tool is limited to GCP alone.

upvoted 1 times

  **gcp_learner** 2 months, 3 weeks ago

I vote for E & F. B isn't a good choice because Google's API changes don't necessarily constitute a risk - they are either transparently rolled out or developers are well informed upfront and make changes to code accordingly or in some cases deprecated features are supported via backward compatibility. I don't think other options are worth a look

upvoted 1 times

  **ggzzzzzzz** 2 months, 4 weeks ago

Selected Answer: EF

"Business" risks, E and F

upvoted 3 times

  **haroldbenites** 2 months, 4 weeks ago

Go for C,F

Business risk. Not technical risk .


upvoted 3 times

  **ThomasChoy** 3 months, 2 weeks ago

D and F

Let me explain the reason: the question is asking about "business risks" therefore we should clearly distinguish between business domain and technical domain from EA perspective. Those technical risks has to be bared by technical managers otherwise unresolved risks will be regarded as "tech debt". A, C, E are potential tech debt to a company. B is related to roadmap and evergreening and it is also under technical domain. Only D and F are issues that cannot be handled by technical staffs and they have to work with business users. Therefore, to adopt Google Cloud Deployment Manager, we have to discuss with on-perm users: 1) they have to use Google APIs service account but cannot use their old accounts, 2) they can only supports automation of Google Cloud resources but not on-perm resources.

upvoted 1 times

  **BSING246** 4 months ago

E and F are right answer.

C is not correct selection.

upvoted 2 times

  **BB_VK** 4 months ago

Any reference which says tha CDM may be deprecated.

upvoted 1 times

  **MaxNRG** 4 months, 1 week ago

E – CDM can be used to permanently delete cloud resources (suggested by our experts at SoftServe, though

F – Cloud DM only supports automation of Google Cloud Resources.

Other items are inevitable (ACD), not really risks – but rather things you will need to deal anyway (learn Python, CDM, setup Service Account).

That's part of normal dev process.

A – CDM uses Python (this is known, just migrate to it)

C – Cloud Deployment Manager (DM) is unfamiliar to company's engineer (this is known – just train this engineer, that's normal for SW engineer to live-n-learn new tools)

D – CDM APIs need Service Account to run (that's a feature, not a risk at all. Check that here)

Check more about CDM here: <https://cloud.google.com/deployment-manager/docs/fundamentals>

upvoted 1 times

Urban_Life

4 months, 3 weeks ago

@Tartar - Any opinion?

upvoted 2 times

A development manager is building a new application. He asks you to review his requirements and identify what cloud technologies he can use to meet them. The application must:

1. Be based on open-source technology for cloud portability
2. Dynamically scale compute capacity based on demand
3. Support continuous software delivery
4. Run multiple segregated copies of the same application stack
5. Deploy application bundles using dynamic templates
6. Route network traffic to specific services based on URL

Which combination of technologies will meet all of his requirements?

- A. Google Kubernetes Engine, Jenkins, and Helm
- B. Google Kubernetes Engine and Cloud Load Balancing
- C. Google Kubernetes Engine and Cloud Deployment Manager
- D. Google Kubernetes Engine, Jenkins, and Cloud Load Balancing

Correct Answer: D

Jenkins is an open-source automation server that lets you flexibly orchestrate your build, test, and deployment pipelines. Kubernetes Engine is a hosted version of

Kubernetes, a powerful cluster manager and orchestration system for containers.

When you need to set up a continuous delivery (CD) pipeline, deploying Jenkins on Kubernetes Engine provides important benefits over a standard VM-based deployment

Incorrect Answers:

A: Helm is a tool for managing Kubernetes charts. Charts are packages of pre-configured Kubernetes resources.

Use Helm to:

Find and use popular software packaged as Kubernetes charts

-
- ⇒ Share your own applications as Kubernetes charts
- ⇒ Create reproducible builds of your Kubernetes applications
- ⇒ Intelligently manage your Kubernetes manifest files
- ⇒ Manage releases of Helm packages

Reference:

<https://cloud.google.com/solutions/jenkins-on-kubernetes-engine>

Community vote distribution

A (100%)

🗨️ 👤 **rsamant** Highly Voted 8 months, 3 weeks ago

it should be A .. helm is needed for "Deploy application bundles using dynamic templates"

Load Balancing should be part of GKE Already
upvoted 26 times

🗨️ 👤 **raf2121** 6 months ago

Kubernetes Engine offers integrated support for two types of Cloud Load Balancing (Ingress and External Network Load Balancing) , hence Option A

Reference : <https://cloud.google.com/kubernetes-engine/docs/tutorials/http-balancer>
upvoted 2 times

🗨️ 👤 **poseidon24** 7 months, 1 week ago

Not for "based on URL", that is the difference.
upvoted 5 times

🗨️ 👤 **ashish_t** 4 months, 3 weeks ago

https://cloud.google.com/kubernetes-engine/docs/tutorials/http-balancer#optional_serving_multiple_applications_on_a_load_balancer

As per the above document and given example of "fanout-ingress.yaml" in above document and also in GKE sample repository below <https://github.com/GoogleCloudPlatform/kubernetes-engine-samples/tree/master/load-balancing>

it's clear that GKE LB can handle "6. Route network traffic to specific services based on URL"
So NO need for Cloud Load balancing.

Helm satisfy "5. Deploy application bundles using dynamic templates" and no other option satisfies this point #5.

So correct answer should be:
A

upvoted 2 times

  **victory108** Highly Voted 8 months ago

D. Google Kubernetes Engine, Jenkins, and Cloud Load Balancing

upvoted 21 times

  **ManuSharma** Most Recent 3 weeks ago

It should be A

upvoted 1 times

  **sjmsummer** 1 month, 2 weeks ago

Looks to me the answer should be A+D combined. Otherwise req. 2 or 5 will not be met., unless they think K8S is a native L/B by nature, then A is the answer.

upvoted 1 times

  **codyschneider** 1 month, 2 weeks ago

I'm genuinely confused. What is consider correct in this whole thing. I'm consistently seeing a divide between most voted and whats deemed correct. Someone help me, this seems very bad in terms for learning.

upvoted 4 times

  **Meyucho** 1 month, 3 weeks ago

Selected Answer: A

Load Balancing is not an open source software.. so any answer with that will be incorrect. Same for CDM. So the only pre Open Source answer is A

upvoted 2 times

  **TitaniumBurger** 1 week, 2 days ago

i think there isn't always only a single way to solve a problem. In terms of learning, it's beneficial to see so many different perspectives.

upvoted 1 times

  **vincy2202** 2 months, 1 week ago

Selected Answer: A

A is the correct answer.

The key here is - The application must be based on "open-source technology for cloud portability"

- 1.Helm is the solution for dynamic templates and
 2. Kubernetes provides inherent support for HTTPS External Load Balancer.
- These 2 points help to nail the answer.

upvoted 1 times

  **ggzzzzzzz** 2 months, 4 weeks ago

Selected Answer: A

helm is needed for "Deploy application bundles using dynamic templates"

upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago

Go for D

upvoted 3 times

  **Aiffone** 3 months ago

Does not Kubernetes already handle loadbalancing on its own?


upvoted 1 times

  **duocnh** 3 months ago

Selected Answer: A

vote A

upvoted 1 times

  **Danny2021** 3 months, 2 weeks ago

1. Be based on open-source technology for cloud portability, so D is ruled out.

upvoted 1 times

  **exam_war** 3 months, 4 weeks ago

Vote for D

upvoted 2 times

  **PrateekGoel** 4 months, 1 week ago

A. Helm - Its supports 1(Opensource) and 5(Dynamic Templates)
GKE already supports URL Map based Load Balancing .

<https://cloud.google.com/kubernetes-engine/docs/tutorials/http-balancer>

The load balancer's URL map's host rules and path matchers reference one or more backend services, where each backend service corresponds to a GKE Service of type NodePort, as referenced in the Ingress

upvoted 3 times

  **amxexam** 6 months, 1 week ago

1. Be based on open-source technology for cloud portability
>>K8s
2. Dynamically scale compute capacity based on demand
>>K8s
3. Support continuous software delivery
>>Jenkin
4. Run multiple segregated copies of the same application stack
>>K8s
5. Deploy application bundles using dynamic templates
>>Helm
https://v2.helm.sh/docs/chart_template_guide/
6. Route network traffic to specific services based on URL
>>K8s

Hence A

upvoted 6 times

  **amxexam** 6 months, 1 week ago

Edit (Correcting my old response)

5. Deploy application bundles using dynamic templates
>>yml in K8s
Helme provides dynamic chart templates.
6. Route network traffic to specific services based on URL
>>Cloud Load Balancer

Hence D

upvoted 8 times

  **rikoko** 6 months, 2 weeks ago

I'll go with A. Cloud Load Balancer is not open-source based, no ? Ingress of Kubernetes does the job of "route traffic to specific service based on URL", I suppose. Internally in GKE, when there is an Ingress, it creates a HTTPS Cloud Load Balancer.

upvoted 1 times

  **VishalB** 7 months, 1 week ago

Correct Answer should be D

Cloud Load Balancer is used to route traffic to specific service based on URL

upvoted 5 times

You have created several pre-emptible Linux virtual machine instances using Google Compute Engine. You want to properly shut down your application before the virtual machines are preempted.

What should you do?

- A. Create a shutdown script named k99.shutdown in the /etc/rc.6.d/ directory
- B. Create a shutdown script registered as a xinetd service in Linux and configure a Stackdriver endpoint check to call the service
- C. Create a shutdown script and use it as the value for a new metadata entry with the key shutdown-script in the Cloud Platform Console when you create the new virtual machine instance
- D. Create a shutdown script, registered as a xinetd service in Linux, and use the gcloud compute instances add-metadata command to specify the service URL as the value for a new metadata entry with the key shutdown-script-url

Correct Answer: C

A startup script, or a shutdown script, is specified through the metadata server, using startup script metadata keys.

Reference:

<https://cloud.google.com/compute/docs/startupscript>

Community vote distribution

C (100%)

  **Eroc**  2 years, 4 months ago

<https://cloud.google.com/compute/docs/shutdownscript> ... So C
upvoted 29 times

  **nitinz** 12 months ago

C, statup/shutdown script = metadata
upvoted 3 times

  **VishalB** 7 months ago

Since the instance is already created Option C gets eliminated. "gcloud compute instances addmetadata" command can be used to add or update the metadata of a virtual machine instance"
upvoted 2 times



  **Gini**  1 year, 9 months ago

I have doubts with the answer C because the question states that "You have created the instances" so C works too but the solution cannot apply to the already created instances. D seems correct to me...

Reference:

https://cloud.google.com/compute/docs/shutdownscript#apply_a_shutdown_script_to_running_instances

upvoted 10 times

  **pepYash** 1 year, 3 months ago


Yes. The correct answer should be D.

To add a shutdown script to a running instance, follow the instructions in the Applying a startup script to running instances documentation but replace the metadata keys with one of the following keys:

shutdown-script: Supply the shutdown script contents directly with this key. Using the gcloud command-line tool, you can provide the path to a shutdown script file, using the --metadata-from-file flag and the shutdown-script metadata key.

shutdown-script-url: Supply a Cloud Storage URL to the shutdown script file with this key.

upvoted 1 times

  **pepYash** 1 year, 3 months ago

changed my mind. preemptible vms can be stopped and started anytime. with that flexibility, C is ok.

upvoted 3 times

  **VT001**  2 weeks, 5 days ago

Selected Answer: C

I got similar question on my exam.

upvoted 1 times

  **nymets** 1 month, 2 weeks ago

Selected Answer: C

"C" is the correct answer here.

And, here is why "D" CANNOT be the answer:

Option-D states that: "Create a shutdown script, registered as a xinetd service in Linux, and use the gcloud compute instances add-metadata command to specify the service URL as the value for a new metadata entry with the key shutdown-script-url"

The sentence - "...registered as a xinetd service in Linux" indicates that the shutdown-script needs to be registered as service INSIDE the VM. And, the sentence "...specify the SERVICE URL as the value" indicates that we need to specify the service path of the shutdown-script (which is inside the VM) as the target URL for key shutdown-script-url. The key shutdown-script-url, however, will only accept a Cloud Storage URL.

I hope this helps.

upvoted 1 times

  **vincy2202** 2 months, 1 week ago

C is the correct answer

upvoted 1 times

  **haroldbenites** 2 months, 4 weeks ago

Go for D.

The instances has already been created.

upvoted 1 times



  **exam_war** 3 months, 4 weeks ago

shutdown service in linux should go on /etc/rc.3.d, so A is not right.

D. it calls for xinetd service in Linux, xinetd is for services such as ftp/sftp/tcp... D is not right, same as B.

so the only working answer is C

upvoted 1 times

  **FERIN_02** 4 months ago

Key value should be shutdown-script-url (url was missing in option C). Hence appropriate answer shall be Option D. But the terms "registered as a xinetd service in Linux" unclear to me.

upvoted 1 times

  **MaxNRG** 4 months, 1 week ago

C,

A startup script, or a shutdown script, is specified through the metadata server, using startup script metadata keys.

<https://cloud.google.com/compute/docs/startupscript>

upvoted 1 times

  **PrateekGoel** 4 months, 1 week ago

D -> Its the only option applicable for running instances. C would have been the answer if we were creating new instances.

https://cloud.google.com/compute/docs/shutdownscript#apply_a_shutdown_script_to_running_instances

upvoted 1 times

  **Urban_Life** 4 months, 3 weeks ago

@tartar- any opinion?

upvoted 1 times

  **civilizador** 5 months, 3 weeks ago

Surprised that everyone is choosing C, when question clearly asking about already running vms. So C is no go from the start. Answer is D and it is Described in google docs:

Apply a shutdown script to running instances

To add a shutdown script to a running instance, follow the instructions in the Applying a startup script to running instances documentation but replace the metadata keys with one of the following keys:

shutdown-script: Supply the shutdown script contents directly with this key. Using the gcloud command-line tool, you can provide the path to a shutdown script file, using the --metadata-from-file flag and the shutdown-script metadata key.

shutdown-script-url: Supply a Cloud Storage URL to the shutdown script file with this key.

Link:

<https://cloud.google.com/compute/docs/shutdownscript>

upvoted 1 times

  **amxexam** 6 months, 1 week ago

Let's go with option elimination

A. Create a shutdown script named k99.shutdown in the /etc/rc.6.d/ directory

>> Not aware of any script or way of execution by this way, hence eliminate.

B. Create a shutdown script registered as a xinetd service in Linux and configure a Stackdriver endpoint check to call the service

>> By using xinetd service you are opening a vulnerability in your application that can be exploited. Bad practice , hence eliminate.

C. Create a shutdown script and use it as the value for a new metadata entry with the key shutdown-script in the Cloud Platform Console when you create the new virtual machine instance

>> Recommended pratice.https://cloud.google.com/compute/docs/shutdownscript#provide_shutdown_script_contents_directly

D. Create a shutdown script, registered as a xinetd service in Linux, and use the gcloud compute instances add-metadata command to specify the service URL as the value for a new metadata entry with the key shutdown-script-url

>> Can be done but not a recommended way

Hence C


upvoted 1 times

  **aviratna** 8 months, 1 week ago

C is correct


D is not correct because to use shutdown-script-url script needs to be stored in Cloud Storage and then provide URL

upvoted 4 times

  **victory108** 9 months, 2 weeks ago

C. Create a shutdown script and use it as the value for a new metadata entry with the key shutdown-script in the Cloud Platform Console when you create the new virtual machine instance

upvoted 2 times

  **un** 9 months, 3 weeks ago

C is correct

https://cloud.google.com/compute/docs/shutdownscript#apply_a_shutdown_script_to_running_instances

upvoted 1 times

  **Ausias18** 11 months, 1 week ago

Answer is C

upvoted 1 times

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

How should you configure the network?

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

Correct Answer: D

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

Reference:

<https://cloud.google.com/docs/compare/openstack/>

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

  **shandy**  2 years, 3 months ago



D. refer to target filtering. <https://cloud.google.com/solutions/best-practices-vpc-design>
upvoted 30 times

  **nitinz** 12 months ago

D, firewalls can be done on ip or network tags or service accounts in GCE.
upvoted 3 times

  **pepYash** 1 year, 3 months ago

Thank you for the link.
Precisely:
https://cloud.google.com/solutions/best-practices-vpc-design#target_filtering
upvoted 4 times

  **tartar** 1 year, 6 months ago

D is ok
upvoted 8 times

  **amxexam**  6 months, 1 week ago

Let's go with option elimination

A. Add each tier to a different subnetwork

>> Adding tiers to different subnets does not prevent or block them from accessing each other. Until specific firewall rules on VM or subnet allow access traffic on a specific port in the rule.

B. Set up software-based firewalls on individual VMs

>> Not a recommended practice will have to enable firewall anyway.

C. Add tags to each tier and set up routes to allow the desired traffic flow

>> Can be done but.

D. Add tags to each tier and set up firewall rules to allow the desired traffic flow

>> Recommended way

Hence D

upvoted 5 times

  **vincy2202**  2 months, 1 week ago

D is the correct answer

upvoted 2 times

  **haroldbenites** 2 months, 4 weeks ago

Go for D

upvoted 2 times

  **unnikrisb** 4 months, 3 weeks ago

From Google practice exam question :

D is correct because as instances scale, they will all have the same tag to identify the tier. These tags can then be leveraged in firewall rules to

allow and restrict traffic as required, because tags can be used for both the target and source.

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

<https://cloud.google.com/vpc/docs/routes>

<https://cloud.google.com/vpc/docs/add-remove-network-tags>

upvoted 2 times

🗨️ 👤 **VishalB** 8 months, 1 week ago

Correct Answer: D

The web tier can communicate with end users and the app tier, and the app tier can communicate with the database tier, but no other communication between tiers is allowed. The instances running the web tier have a network tag of web, the instances running the app tier have a network tag of app, and the instances running the database tier have a network tag of db.

https://cloud.google.com/architecture/best-practices-vpc-design#target_filtering

upvoted 1 times

🗨️ 👤 **victory108** 9 months, 2 weeks ago

D. Add tags to each tier and set up firewall rules to allow the desired traffic flow

upvoted 3 times

🗨️ 👤 **un** 9 months, 3 weeks ago

D is correct

upvoted 1 times

🗨️ 👤 **Ausias18** 11 months, 1 week ago

answer is D

upvoted 1 times

🗨️ 👤 **lynx256** 11 months, 1 week ago

D is ok

upvoted 1 times

🗨️ 👤 **Bharathy** 1 year, 4 months ago

D is correct. Setting up firewall rules (Ingress/Egress) and tags will help

upvoted 1 times

🗨️ 👤 **[Removed]** 1 year, 4 months ago

it's D , see google exam practice

upvoted 1 times

🗨️ 👤 **AshokC** 1 year, 5 months ago

D (key -> deployed in the same network)

upvoted 1 times

🗨️ 👤 **gkdinesh** 1 year, 5 months ago

Option D is right choice...

upvoted 1 times

🗨️ 👤 **passtest100** 1 year, 5 months ago

C is better. first, tags on instance can be used to create routes applied for that instance. <https://cloud.google.com/vpc/docs/add-remove-network-tags>

second, route is better than firewall rule in this scenario. route guarantees the traffic from web to API only, while the firewall rule blocks traffic from web to DB.

upvoted 1 times

🗨️ 👤 **wiqi** 1 year, 6 months ago

A. is incorrect. because the question is stating that '3-tier web application deployed in the same network'

B. No need for this.

C. No need for routing as its same network.

D. is the way to secure it within the same network and to enforce desired flow.

I'll go with D

upvoted 2 times

🗨️ 👤 **amxexam** 6 months, 1 week ago

1 st point is wrong understanding of your

upvoted 1 times

🗨️ 👤 **nezih** 1 year, 8 months ago

I think this is "choose 2 options" kind of question. Non of them make sense by oneself. A won't work without creating firewall rules. D won't work because servers can communicate each other in default in same network. But A and D together correct.

upvoted 1 times

Your development team has installed a new Linux kernel module on the batch servers in Google Compute Engine (GCE) virtual machines (VMs) to speed up the nightly batch process. Two days after the installation, 50% of the batch servers failed the nightly batch run. You want to collect details on the failure to pass back to the development team.

Which three actions should you take? (Choose three.)

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



Correct Answer: ACE



Community vote distribution



ACE (100%)



  **rishab86** Highly Voted 9 months ago

ACE
A. Use Stackdriver Logging to search for the module log entries = Check logs
C. Use gcloud or Cloud Console to connect to the serial console and observe the logs = Check grub messages, remember new kernel module was installed.
E. Adjust the Google Stackdriver timeline to match the failure time, and observe the batch server metrics = Zoom into the time window when problem happened.
upvoted 24 times

  **Pokchok** 8 months, 3 weeks ago
But the assumption you made is that stack driver was already installed on the vms. What if it was not there? Would there be any scope to install later and retrieve the logs?
upvoted 2 times

  **haroldbenites** Highly Voted 2 months, 4 weeks ago
Go for A,B,E.
C is when the VM is running , but in this case the sentence says “recollect”. It means that “error ever” already happened.
upvoted 5 times



  **pdddd** 1 month, 3 weeks ago
and how will activity log help?
upvoted 1 times



  **ehgm** Most Recent 2 months ago
This question is very poorly asked.



There is no place saying if the live migration is enabled. If a VM is not set to live migrate, the VM is terminated during host system events.

There is no place saying if you run into problems accessing your instance through SSH or need to troubleshoot an instance that is not fully booted, so you can enable interactive access to the serial console.

C: <https://cloud.google.com/compute/docs/troubleshooting/troubleshooting-using-serial-console>
D: <https://cloud.google.com/compute/docs/instances/live-migration>
upvoted 1 times

  **vincy2202** 2 months, 3 weeks ago
Selected Answer: ACE
ACE are the correct choices
upvoted 1 times

  **duocnh** 3 months ago
Selected Answer: ACE
vote ACE
upvoted 2 times

  **MaxNRG** 4 months, 1 week ago

I would say that Q26 = ABE

A - since it investigates logs of Linux kernel module installed recently. For that Log Agent should be installed on VMs and Linux syslog is streamed by default to Stackdriver Logging via agent. So, this answer is relevant to Q's context, it checks if new Linux kernel runs OK.

B - investigates "app-level" issues on GCE, logs API called from this VM, system events, etc.

C - review of Serial Log is useful only for HW/OS crashes, and only during short period of time (since only last 1MB of logs are stored there, if more logs needed then they are streamed to Stackdriver logging). So, this option doesn't fit 2 days period and also serves different failure types.

D - live migration event is irrelevant to this Q (transferring hot/running context of one VM to another transparently, so original VM can be maintained – BIOS/HW updates). Even if that happens, then GCE activity logs in B should cover this.

E - monitoring of metrics at the time of failure makes sense for troubleshooting.

F - smth long and ridiculous.

upvoted 4 times

  **[Removed]** 4 months, 3 weeks ago

If I'm reading "F" correctly, it is to export a VM and move it back to a "local" server which I'm reading as "on-prem", your laptop, or your local datacenter.(aka NOT GCP) So if I'm reading that correctly, that is a very ineffective idea. Keep it in GCP and use the powerful GCP tools. If somebody feels that I'm reading that wrong, I would love to see from a different POV. If you are reading that the same as me, then rule out F.

upvoted 1 times

  **ashish_t** 4 months, 3 weeks ago

F is practically impossible.

upvoted 1 times

  **[Removed]** 4 months, 3 weeks ago

We can also rule out D, Live Migration Event. Unless it is called out, regular VMs can be live migrated without an notice of the guest os. So this should not be your focus. Rule out D.

<https://cloudplatform.googleblog.com/2015/03/Google-Compute-Engine-uses-Live-Migration-technology-to-service-infrastructure-without-application-downtime.html>

upvoted 1 times

  **[Removed]** 4 months, 3 weeks ago

So in an effort to rule things out, B is not applicable. The question says Activity Log, but this is now called Audit Log and is a record of who touched the server and made changes. So if you think a human/service came in after the fact and modified the system, then this would be useful, but that is not the case here. So rule it out.

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

"Who did what, where, and when?"

upvoted 2 times

  **maxlearn** 4 months, 3 weeks ago

Is there any reason why can't 'D' be an answer?

upvoted 1 times

  **kalamarka** 4 months, 3 weeks ago

"You want to collect details on the failure" says the question. And D is not related with the failure reason but the after failure action.

upvoted 2 times


  **victory108** 8 months ago

A. Use Stackdriver Logging to search for the module log entries

C. Use gcloud or Cloud Console to connect to the serial console and observe the logs

E. Adjust the Google Stackdriver timeline to match the failure time and observe the batch server metrics

upvoted 2 times


  **Yogikant** 8 months, 2 weeks ago

Serial port output is accessible through the Cloud Console, the gcloud tool, and the Compute Engine API, but only while the VM instance is running. <https://cloud.google.com/compute/docs/instances/viewing-serial-port-output>

Requirement is to collect information about failed batch servers which have already happened. Hence C is not suitable. Live migration doesn't disrupt running VM.

A, B, E.

upvoted 1 times

  **aviratna** 8 months, 1 week ago

I think ACE is correct.

Only the batch job is failed VM is still running so it will still have serial port output

upvoted 3 times

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

Which two steps should you take? (Choose two.)

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

Correct Answer: AE

🗲️ 👤 **rishab86** Highly Voted 👍 9 months ago

Answer is A as they want to load logs for analytics and E for storing data in buckets for long term.
upvoted 18 times

🗲️ 👤 **vincy2202** Most Recent 🕒 2 months, 1 week ago

AE are the correct answers
upvoted 2 times

🗲️ 👤 **andeu** 2 months, 2 weeks ago

Answers: A is correct because BigQuery is the fully managed cloud data warehouse for analytics and supports the analytics requirement.
E is correct because Cloud Storage provides the Coldline storage class to support long-term storage with infrequent access, which would support the long-term disaster recovery backup requirement.
<https://cloud.google.com/bigquery/>
<https://cloud.google.com/stackdriver/>
<https://cloud.google.com/storage/docs/storage-classes#coldline>
<https://cloud.google.com/sql/>
<https://cloud.google.com/bigtable/>
upvoted 3 times

🗲️ 👤 **haroldbenites** 2 months, 4 weeks ago

Go for A,E
upvoted 2 times

🗲️ 👤 **Bakili** 3 months ago

A and E
upvoted 1 times

🗲️ 👤 **nocrush** 4 months, 2 weeks ago

A E is the right answer
upvoted 1 times

🗲️ 👤 **sandipk91** 6 months ago

A & E is correct
upvoted 2 times

🗲️ 👤 **bala786** 7 months, 4 weeks ago

Yes Option A and E - correct
upvoted 3 times

🗲️ 👤 **victory108** 8 months ago

A. Load logs into Google BigQuery
E. Upload log files into Google Cloud Storage
upvoted 4 times

🗲️ 👤 **Areev** 8 months, 2 weeks ago

A and E seems to be right.
upvoted 1 times

You created a pipeline that can deploy your source code changes to your infrastructure in instance groups for self-healing. One of the changes negatively affects your key performance indicator. You are not sure how to fix it, and investigation could take up to a week. What should you do?

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

Correct Answer: B

Community vote distribution

D (67%)



B (33%)

  **ewredtrfygi** Highly Voted 1 year, 6 months ago


Too many responses saying B is the answer - I wonder if GCP pays people to provide the wrong answers on this website. It's clearly D, MIG templates support versioning, they were created to solve this exact problem. You simply select the previous template version, set that as the new deployment, and it will roll back the KPI depriving deployment and roll out the previous working deployment. The only part of D I don't like is the "terminate all instances" since you should engage in a rolling deployment, but if it's not a live website I suppose that would be fine.
<https://cloud.google.com/compute/docs/instance-groups/rolling-out-updates-to-managed-instance-groups>
upvoted 34 times

  **Meyucho** 1 month, 1 week ago

If you change manually the template.. why are using pipelines? B is the best answer because is automated!!! Why Google will be interested to vote the wrong answers??? They want more professionals with GCP certifications!!!!
upvoted 2 times

  **ZAvenger** 5 months, 3 weeks ago

First of all you need to revert the source of this issue - bad code. You can revert bad template, but when anyone pushes code change to the repo -> you will have the build with broken code again that will be deployed to your servers.
When you revert your bad code you are free to investigate in another branch during a week without being afraid that any other code commit will deploy bad code again.
upvoted 7 times

  **Bill831231** 4 months, 2 weeks ago

seems with approach, there will be a mismatch in pipeline
upvoted 3 times

  **mexblood1** 1 year, 4 months ago

If you can deploy your source code changes to the infrastructure in instance group for self-healing, it means you're not using Manage Instance Groups. Otherwise you would be creating a new template with the code changes. Further more, you would not delete instances on a MIG, you would be rolling out the previous template again in a controlled manner using maxsurge, maxunavailable, etc. For those reasons I'll choose B.
upvoted 18 times

  **amxexam** Highly Voted 6 months ago


Let's go with option elimination

- A. Log in to a server, and iterate on the fix locally
>> Long step, hence eliminate
- B. Revert the source code change and rerun the deployment pipeline
>> This revert will be logged in the source repo. Will go with this way although D also is correct.
- C. login to the servers with the bad code change, and swap in the previous code
>> C is manually doing what can be automatically done by B and C, hence eliminate.
- D. Change the instance group template to the previous one and delete all instances
>> This is similar to B but why manually do something which is automated. Hence eliminate. But is also correct. But B is better from code lifecycle perspective.

Hence B
upvoted 19 times


  **ankatsu2010** Most Recent 2 weeks, 3 days ago

'B' is correct. Instance template is only for the underlying infrastructure used for CI/CD pipeline. The problem is source code deployment through this pipeline.
upvoted 1 times

-  **Koshur**

2 weeks, 6 days ago


Instance templated are used to configure templates only and had nothing to do with code. i would go with option b

upvoted 1 times
-  **47m80sx5**

3 weeks, 4 days ago

Selected Answer: D


That's the only answer.

upvoted 1 times
-  **1bat1**

3 weeks, 5 days ago


Selected Answer: D

Answer is D

upvoted 1 times
-  **topic_certif**

1 month ago


In real world if the production is broken i do not have time to find a developper , wait him to rollback the code and wait the build of the pipeline (hoping the rollback was well done) ==> if I can use quickly the feature on a Google service to revert to old version i DO IT.
Furthermore, if the new version is about 100 files i prefer the DEV TEAM fix this in hot fix and merge this on the prod branch instead of revert.
As we use the rollback on Google MIG , my DEV TEAM will have all the time to find the issue (no need to stress my dev team to do a rollback).

upvoted 1 times
-  **KevPinto**

1 month, 1 week ago

Selected Answer: D


An excerpt from the Docs There is no explicit command for rolling back an update to a previous version, but if you decide to roll back an update (either a fully committed update or a canary update), you can do so by making a new update request and passing in the instance template that you want to roll back to.

upvoted 2 times
-  **Meyucho**

1 month, 1 week ago

Selected Answer: B


First of all: we are using pipelines... so if we have to revert some change we will use pipelines also. D could be a solution but it's not automated.
For me es B the correct answer!

upvoted 2 times
-  **kkhurana**

1 month, 2 weeks ago

Not sure why people are opting for D. Here q/s is to revert the application Code not OS Image and dependencies. And seems application code can be deployed via CI/CD pipeline.
Instance template only carrier OS images/depedencies and Startup scripts.


My answer is certainly --> B

upvoted 1 times
-  **vincy2202**

2 months, 1 week ago


Selected Answer: B

B is the correct answer

upvoted 1 times
-  **ABO_Doma**

2 months, 1 week ago


ans is D. B) This option certainly works, but would Google want you to use this or its one of its features? Google would undoubtedly want you to use its features. It's a tough one but imagine posing this question to a Google support representative. I imagine their recommendation would be to use their rollback feature over redeploying the old code.

upvoted 2 times
-  **ABO_Doma**

2 months, 2 weeks ago

Selected Answer: D


Is the right answer

upvoted 2 times
-  **ggzzzzzzz**

2 months, 4 weeks ago


Selected Answer: D

rollback to the previous template is the fastest way to solve the problem

upvoted 2 times
-  **haroldbenites**

2 months, 4 weeks ago

Go for D.
The templates works with Manage Instance Group but it is not the case. (Self-healing)

upvoted 1 times
-  **duocnh**

3 months ago

Selected Answer: B

vote B

upvoted 1 times

  **MaxNRG** 4 months ago

B – Revert the source code change and rerun the deployment pipeline.

D – could also seems possible but change of instance template doesn't have anything in common with source code change. Instance template change is required for example when changing start up script or OS version.

upvoted 3 times

Your organization wants to control IAM policies for different departments independently, but centrally.
Which approach should you take?

- A. Multiple Organizations with multiple Folders
- B. Multiple Organizations, one for each department
- C. A single Organization with Folders for each department
- D. A single Organization with multiple projects, each with a central owner

Correct Answer: C

Folders are nodes in the Cloud Platform Resource Hierarchy. A folder can contain projects, other folders, or a combination of both. You can use folders to group projects under an organization in a hierarchy. For example, your organization might contain multiple departments, each with its own set of GCP 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.

Reference:

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

🗲️ 👤 **AWS56** Highly Voted 👍 2 years, 3 months ago

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

I will stick with C

upvoted 23 times

🗲️ 👤 **haroldbenites** Most Recent ⌚ 2 months, 4 weeks ago

Go for C

upvoted 2 times

🗲️ 👤 **vincy2202** 3 months ago

C is the right answer

upvoted 1 times

🗲️ 👤 **nansi** 5 months, 1 week ago

C shall be the correct answer

upvoted 1 times

🗲️ 👤 **rikoko** 6 months, 2 weeks ago

C. Seems to be best practice (cf AWS56). And I believe that D should be excluded because it says "Project owner" - it is not best practice since it's a basic role + it's not even stated as a requisite

upvoted 1 times

🗲️ 👤 **victory108** 9 months, 2 weeks ago

C. A single Organization with Folders for each department

upvoted 3 times

🗲️ 👤 **un** 9 months, 3 weeks ago

C is correct

upvoted 1 times

🗲️ 👤 **Ausias18** 11 months, 1 week ago

Answer is C

upvoted 1 times

🗲️ 👤 **lynx256** 11 months, 1 week ago

C is ok

upvoted 2 times

🗲️ 👤 **JCGO** 1 year, 3 months ago

C for sure. IAM can be applied to folder level. <https://cloud.google.com/resource-manager/docs/creating-managing-folders>

upvoted 4 times

🗲️ 👤 **AshokC** 1 year, 5 months ago



C is more meaningful



upvoted 2 times



🗲️ 👤 **Gobblegobble** 1 year, 8 months ago



D is right answer



upvoted 1 times



  **dayody** 1 year, 6 months ago
the answer is C
upvoted 1 times

  **mlantonis** 1 year, 8 months ago
C is fine
upvoted 3 times

  **Tushant** 1 year, 8 months ago
C is the correct answer
upvoted 3 times

  **gfhbox0083** 1 year, 8 months ago
C, for sure
upvoted 3 times

  **Nirms** 1 year, 9 months ago
C is the correct answer
upvoted 3 times

  **Ziegler** 1 year, 9 months ago
C is correct
upvoted 3 times

You deploy your custom Java application to Google App Engine. It fails to deploy and gives you the following stack trace. What should you do?

```
java.lang.SecurityException: SHA1 digest error for
com/Altostrat/CloakedServlet.class
    at com.google.appengine.runtime.Request.process
-d36f818a24b8cf1d (Request.java)
    at
sun.security.util.ManifestEntryVerifier.verify
(ManifestEntryVerifier.java:210)
    at java.util.jar.JarVerifier.processEntry
(JarVerifier.java:218)
    at java.util.jar.JarVerifier.update
(JarVerifier.java:205)
    at
java.util.jar.JarVerifiersVerifierStream.read
(JarVerifier.java:428)
    at sun.misc.Resource.getBytes
(Resource.java:124)
    at java.net.URL.ClassLoader.defineClass
(URLClassLoader.java:273)
    at sun.reflect.GeneratedMethodAccessor5.invoke
(Unknown Source)
    at
sun.reflect.DelegatingMethodAccessorImpl.invoke
(DelegatingMethodAccessorImpl.java:43)
    at java.lang.reflect.Method.invoke
(Method.java:616)
    at java.lang.ClassLoader.loadClass
(ClassLoader.java:266)
```

- A. Upload missing JAR files and redeploy your application.
- B. Digitally sign all of your JAR files and redeploy your application
- C. Recompile the CLoakedServlet class using and MD5 hash instead of SHA1

Correct Answer: B

Community vote distribution

B (100%)

 **Eroc** Highly Voted 2 years, 4 months ago

Signing the JAR files grants it permissions. (<https://docs.oracle.com/javase/tutorial/deployment/jar/signindex.html>)
upvoted 16 times

 **nitinz** 12 months ago

B, SHA1 Digest error in the first line in the error code. With Java errors, always focus on the first line in the error code, rest of the lines are garbage ****mostly****.
upvoted 6 times

 **tartar** 1 year, 6 months ago

B is ok
upvoted 8 times


 **Urban_Life** 4 months, 3 weeks ago

Where do you go? when we need you for other questions. Plz ans other q's if you have time
upvoted 1 times

 **vincy2202** Most Recent 2 months, 1 week ago

B is the correct answer

upvoted 1 times

  **duocnh** 3 months ago

Selected Answer: B

vote B



upvoted 1 times

  **TheCloudBoy77** 3 months, 1 week ago

Selected Answer: B


B is correct answer

upvoted 1 times

  **bala786** 7 months, 3 weeks ago

Option B. Digitally sign all of your JAR files and redeploy your application

upvoted 1 times

  **MamthaSJ** 7 months, 3 weeks ago

Answer is B

upvoted 1 times

  **victory108** 9 months, 2 weeks ago

B. Digitally sign all of your JAR files and redeploy your application

upvoted 3 times

  **un** 9 months, 3 weeks ago

B is correct

upvoted 1 times

  **Ausias18** 11 months, 1 week ago

Answer is B

upvoted 2 times

  **IamFleur** 1 year ago

B for sure

upvoted 1 times

  **dlzhang** 1 year, 1 month ago

Obviously, it is a security issue and neither A or C is trying to fix the problem.

upvoted 1 times

  **AshokC** 1 year, 5 months ago

Answer: B

upvoted 1 times

  **wiqi** 1 year, 6 months ago

There is a very old thread of similar issue....

<https://bugs.launchpad.net/play/+bug/594316>

Looks to me signing issue. So would go with B

upvoted 1 times

  **OnomeOkuma** 1 year, 8 months ago

The stacktrace shows a JarVerifier class present.


So Answer is B

upvoted 2 times

  **mlantonis** 1 year, 8 months ago

B is correct

upvoted 2 times

  **Tushant** 1 year, 8 months ago

B is the correct answer

upvoted 2 times

  **gfhbox0083** 1 year, 8 months ago

B, for sure

upvoted 2 times

You are designing a mobile chat application. You want to ensure people cannot spoof chat messages, by providing a message were sent by a specific user.

What should you do?

- A. Tag messages client side with the originating user identifier and the destination user.
- B. Encrypt the message client side using block-based encryption with a shared key.
- C. Use public key infrastructure (PKI) to encrypt the message client side using the originating user's private key.
- D. Use a trusted certificate authority to enable SSL connectivity between the client application and the server.

Correct Answer: C



Community vote distribution

C (70%)

D (30%)

  **KouShikyou** Highly Voted 2 years, 4 months ago

I am not sure about this one. D works if SSL client authentication is enabled.
C works as well if client encrypts message with private key and server decrypt with public key.
I prefer C.
upvoted 20 times

  **asfar** 2 years, 1 month ago

I agree with C on this one.
upvoted 2 times

  **JoeShmoe** 2 years, 3 months ago

Agree with C
upvoted 3 times

  **Tobbe** Highly Voted 1 year ago

Encrypting each block and tagging each message at the client side is an overhead on the application. Best method which has been adopted since years is contacting SSL provider and use public certificate to encrypt the traffic between client and server.

D is correct
upvoted 8 times

  **Meyucho** 1 month, 1 week ago

If you use server public key you aren't meeting the goal. Don't miss the "for specific user" in the statement
upvoted 1 times

  **Alekshar** 1 year ago

If you use the server's public certificate to encrypt your data you only ensure the right server is the only one to read you.

But anyone can use the same encryption key as you did and pretend to be you. Hence it does not solve our authentication problematic
upvoted 3 times

  **PeppaPig** 7 months ago

SSL doesn't use server's public key to encrypt data. This is definitely wrong. Please read SSL specs. SSL uses a separate session key for message encryption. This session key is temporary and will be rotated for every single session.
upvoted 1 times

  **lynx256** 11 months ago

I cannot agree with you. Before one be able to pretend to be someone else, he should know his (someone's) password on the Chat Server...
upvoted 1 times

  **Tobbe** 1 year ago

thanks for your insight! C is correct.
upvoted 2 times

  **VT001** Most Recent 2 weeks, 5 days ago

Selected Answer: C

I got similar question on my exam.
upvoted 1 times

  **Meyucho** 1 month, 1 week ago

The question statement says "for specific user" so the only solution that is different for every user is using his private key to encrypt... So C is the correct answer.

upvoted 1 times

  **OrangeTiger** 2 months ago

Selected Answer: C

I vote C.

This is a problem with non-repudiation, which is one of the ways to use certificates.

A,B These are incomplete.



D A server certificate can only provide server authenticity

upvoted 2 times

  **vincy2202** 2 months, 1 week ago

C is the correct answer



upvoted 2 times

  **andeu** 2 months, 2 weeks ago

Selected Answer: C

Answer C is correct


upvoted 2 times

  **andeu** 2 months, 2 weeks ago

Selected Answer: D

Correct Answer: D

upvoted 2 times

  **mgm7** 2 months, 3 weeks ago

Selected Answer: D

Who ever answers C, think about this: The private key should always be protected and never leave the owner.

upvoted 1 times

  **mgm7** 2 months, 3 weeks ago

Ooops, I read it wrong, the private key is on the client side. I wish there was a way to cancel ones comment.

upvoted 2 times

  **haroldbenites** 2 months, 3 weeks ago

Go for C (PKI).

In a book of google, with the same question , don't appear the option D (SSL).

upvoted 1 times

  **duocnh** 3 months ago

Selected Answer: C

vote C

upvoted 1 times

  **TheCloudBoy77** 3 months, 1 week ago

Selected Answer: C

Correct answer is C

upvoted 1 times

  **Danny2021** 3 months, 2 weeks ago

<https://security.stackexchange.com/questions/81760/what-happens-when-encrypting-with-private-key> . Why is this question related to GCP? It has nothing to do with GCP.



upvoted 1 times

  **MaxNRG** 4 months, 1 week ago

C is correct because PKI requires that both the server and the client have signed certificates, validating both the client and the server.

D is not correct because SSL only requires the server to have a signed certificate and does not require validating the client.



upvoted 1 times

  **unnikrisb** 4 months, 3 weeks ago

It's part of Google Practice Exam

Answer is C : because PKI requires that both the server and the client have signed certificates, validating both the client and the server.

upvoted 4 times

  **pr2web** 5 months, 3 weeks ago

Answer is D. SSL Handshakes includes these general steps:

- The server sends its public key.
- The client encrypts setup info with that public key, and sends it back to the server.
- The server decrypts the client's submission and uses it to derive a shared secret.
- Further steps use that shared secret to set up the actual encryption to be used.

So the answer to this question is, since an imposter can't perform step 3 (since it doesn't have the private key) it can never move on to step 4. It doesn't have the shared secret, so it can't complete the handshake. SSL is the way to go.

upvoted 1 times

  **amxexam** 6 months ago

Going against the tide

We are overthinking a simple problem, whose solution is widely available.

Let's go with option elimination

A. Tag messages are client-side with the originating user identifier and the destination user.

>> If a user can spoof the user he is able to read the messages not intended for him (middle man) then he can spoof the tag as well. Hence let's eliminate the option.

B. Encrypt the message client-side using block-based encryption with a shared key.

>> As per this site <<URL>> is the correct use for the above scenario. But still won't as there are better alternatives available, hence eliminating.

C. Use public key infrastructure (PKI) to encrypt the message client-side using the originating user's private key.


>> Better than B as B is an old approach. This is nothing but option D being manually implemented.

D. Use a trusted certificate authority to enable SSL connectivity between the client application and the server.

>> This is a standard approach or widely used solution for the above case. Simply and really available solution.

Hence D

upvoted 3 times

  **amxexam** 5 months, 3 weeks ago

<<URL>> <https://www.cryptomathic.com/news-events/blog/symmetric-key-encryption-why-where-and-how-its-used-in-banking>

upvoted 1 times

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

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

Correct Answer: B

Community vote distribution

B (100%)

- chiar**

Highly Voted

2 years, 3 months ago

I think B is correct. I think it is more reliable.

upvoted 23 times
- mawsman**

Highly Voted

2 years ago

It's latency issues. That won't be solved by adding another VPN tunnel. If it was just a throughput issue then VPN would do, however to improve latency you need to go layer 2. Answer is B

upvoted 16 times
- haroldbenites**

Most Recent

2 months, 4 weeks ago

Go for B

upvoted 4 times
- TheCloudBoy77**

3 months, 1 week ago

Selected Answer: B

Correct answer is B as its a latency issue.

upvoted 3 times
- vincy2202**

3 months, 2 weeks ago

B is the correct answer.

upvoted 1 times
- MaxNRG**

4 months, 1 week ago

B – Configure Google Cloud Dedicated Interconnect
Company can buy 10G interconnect link (\$1700 monthly) with 99.9% SLA. It's comparatively small budget for reliable migration of DB. Only requirement for company is a proximity to colocation facility (peering edge network).
A – UDP is non-reliable, doesn't guarantee delivery
C – daily replication doesn't solve problem at all (could be temp workaround), also no improvement in bandwidth, so replication may fail also.
D – adding VPN tunnels (1.5Gbps x N) could improve the situation (but not VPN connections, which are somehow "load balanced")
E – using Cloud Pub/Sub is awkward solution. Would require extra protocol overhead for this Proxy service.

upvoted 3 times
- MamthaSJ**

7 months, 3 weeks ago

Answer is B

upvoted 1 times
- kopper2019**

8 months, 1 week ago

hey guys check Q3 for new Qs, 49 New Qs

upvoted 2 times
- aviratna**

8 months, 1 week ago



B is correct option.
Additional VPN will only provide HA it will not solve latency issue



upvoted 1 times
- victory108**

9 months, 2 weeks ago

B. Configure a Google Cloud Dedicated Interconnect.



upvoted 2 times



  **RKS_2021** 7 months, 3 weeks ago
<https://cloud.google.com/solutions/building-high-throughput-vpns>
upvoted 1 times



  **RKS_2021** 7 months, 3 weeks ago
Building High-throughput VPNs
This tutorial shows how to create secure, high-throughput VPNs and test their speed.



Secure communication between Google Cloud and other clouds or on-premises systems is a common, critical need. Fortunately, Google Cloud makes it easy for you to create secure Internet Protocol security (IPsec) virtual private networks (VPNs) to achieve this goal. If a single tunnel does not provide necessary throughput, Google Cloud can smoothly distribute traffic across multiple tunnels to provide additional bandwidth.



upvoted 1 times



  **un** 9 months, 3 weeks ago
B is correct
upvoted 1 times

  **Koushick** 10 months ago
Answer is B.
upvoted 1 times

  **Ausias18** 11 months, 1 week ago
Answer is B
upvoted 1 times

  **ashish9_a** 11 months, 2 weeks ago
Latency is the keyword here
upvoted 1 times



  **bnlcnd** 1 year, 1 month ago
Cloud VPN is not for performance or high load traffic. Have to use inter-connect for DB replication kind of work.
upvoted 1 times

  **cate0012** 1 year, 2 months ago
B is right.

Adding additional tunnels only help if you have the bandwidth to support it. The latency is likely a result of an unreliable connection, which additional tunnels will not help with.

From the description, the primary fault lies in the fact that their connection is too slow and unreliable. A Dedicated Interconnect will give them the speed and reliability they need to complete the transfer.

upvoted 3 times

  **Xolex** 1 year, 3 months ago
I think B also, the other options make it be more complicated
upvoted 1 times

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

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



Correct Answer: C



Reference:



https://cloud.google.com/solutions/pci-dss-compliance-in-gcp#using_data_loss_prevention_api_to_sanitize_data



Community vote distribution



C (100%)



  **AWS56** Highly Voted 2 years, 1 month ago
C is the answer
upvoted 20 times



  **nitinz** 12 months ago
C, data sanitization = DLP
upvoted 5 times



  **tartar** 1 year, 6 months ago
C is ok
upvoted 8 times



  **vincy2202** Most Recent 2 months, 1 week ago
Selected Answer: C
C is the correct answer
upvoted 2 times



  **haroldbenites** 2 months, 3 weeks ago
Go for C
upvoted 2 times



  **haroldbenites** 2 months, 3 weeks ago
<https://cloud.google.com/dlp>
upvoted 1 times



  **MamthaSJ** 7 months, 3 weeks ago
Answer is C
upvoted 1 times





















  **victory108** 9 months, 2 weeks ago
C. De-identify the data with the Cloud Data Loss Prevention API
upvoted 3 times

  **un** 9 months, 3 weeks ago
C is correct
upvoted 1 times

  **sidhappy** 10 months, 2 weeks ago
Effectively reduce data risk with de-identification methods like masking and tokenization
<https://cloud.google.com/dlp>
upvoted 1 times

  **Ausias18** 11 months, 1 week ago
Answer is C
upvoted 1 times

  **lynx256** 11 months, 1 week ago
C is ok
upvoted 1 times

-   **bnlcnd** 1 year, 1 month ago
<https://cloud.google.com/dlp>
Effectively reduce data risk with de-identification methods like masking and tokenization.
C is right.
upvoted 1 times
-   **VedaSW** 1 year, 5 months ago
I LOL on answer A.... *clap* *clap* *clap*.... hash all data...
upvoted 1 times
-   **psuthar0101** 1 year, 4 months ago
correct answer is C - <https://cloud.google.com/solutions/de-identification-re-identification-pii-using-cloud-dlp>
upvoted 2 times
-   **AshokC** 1 year, 5 months ago
C - Cloud Data Loss Prevention (DLP)
upvoted 2 times
-   **psuthar0101** 1 year, 4 months ago
This is correct - <https://cloud.google.com/solutions/de-identification-re-identification-pii-using-cloud-dlp>
upvoted 1 times
-   **dayody** 1 year, 6 months ago
Yes I agree the correct answer is C
upvoted 1 times
-   **rtex** 1 year, 6 months ago
Answer c: <https://cloud.google.com/dlp>
upvoted 3 times
-   **daurib** 1 year, 7 months ago
Selected C in the Exam
upvoted 3 times
-   **mlantonis** 1 year, 8 months ago
DLP for sure, so C as the correct answer.
upvoted 3 times
-   **Tushant** 1 year, 8 months ago
C is the correct answer
upvoted 3 times

You are using Cloud Shell and need to install a custom utility for use in a few weeks. Where can you store the file so it is in the default execution path and persists across sessions?

- A. ~/bin
- B. Cloud Storage
- C. /google/scripts
- D. /usr/local/bin

Correct Answer: A

Community vote distribution

A (100%)

ffk

Highly Voted

2 years, 4 months ago

A is correct
<https://cloud.google.com/shell/docs/how-cloud-shell-works>
Cloud Shell provisions 5 GB of free persistent disk storage mounted as your \$HOME directory on the virtual machine instance. This storage is on a per-user basis and is available across projects. Unlike the instance itself, this storage does not time out on inactivity. All files you store in your home directory, including installed software, scripts and user configuration files like .bashrc and .vimrc, persist between sessions. Your \$HOME directory is private to you and cannot be accessed by other users.
upvoted 47 times

Jambalaja

10 months, 3 weeks ago

Maybe also to mention is that ~/bin is located in the \$HOME directory
upvoted 1 times

zanfo

5 months, 2 weeks ago

cd ~/ is equal at cd \$HOME
~/bin is equal a cd \$HOME/bin
the persistent disk in cloud shell is for \$HOME
upvoted 3 times

akoti

1 year, 3 months ago

\$HOME is not ~/bin. So 'C' is the answer.
upvoted 1 times

zanfo

5 months, 2 weeks ago

cd ~/ is equal at cd \$HOME
~/bin is equal a cd \$HOME/bin
the persistent disk in cloud shell is for \$HOME
upvoted 2 times

Shabje

1 year, 9 months ago

Won't the persistent disk be auto-delete enabled by default, whereby the work maybe lost. Would that not be sufficient reason to consider Cloud storage instead. Thanks
upvoted 1 times

zanfo

5 months, 2 weeks ago

Cloud Shell provisions 5 GB of free persistent disk storage mounted as your \$HOME
upvoted 1 times

kaush

1 year, 8 months ago

The virtual machine instance that backs your Cloud Shell session is not permanently allocated to a Cloud Shell session and terminates if the session is inactive for an hour. After the instance is terminated, any modifications that you made to it outside your \$HOME are lost.
upvoted 2 times

Eroc

Highly Voted

2 years, 4 months ago

Well, I just double checked and if they were referring to the PATH variable then /usr/local/bin is also a correct answer.....
upvoted 14 times

vpatiltech

Most Recent



2 weeks, 2 days ago



Selected Answer: A



Cloud Shell provisions 5 GB of persistent disk storage mounted as your \$HOME directory on the Cloud Shell instance. All files you store in your home directory, including scripts and user configuration files like .bashrc and .vimrc, persist between sessions.



Reference- https://cloud.google.com/shell/?utm_source=google&utm_medium=cpc&utm_campaign=japac-IN-all-en-dr-bkwsrmkt-all-all-trial-e-dr-1009882&utm_content=text-ad-none-none-DEV_c-CRE_442449534611-ADGP_Hybrid%20%7C%20BKWS%20-



%20EXA%20%7C%20Txt%20~%20Management%20Tools%20~%20Cloud%20Shell_cloud%20shell-general%20-%20Products-KWID_43700054972141701-kwd-837034669893&userloc_9302140-network_g&utm_term=KW_gcp%20cloud%20shell&gclsrc=ds&gclsrc=ds
upvoted 1 times



  **OrangeTiger** 2 months ago
I think D is correct.ummm
upvoted 1 times



  **vincy2202** 2 months, 1 week ago
A is the correct answer
upvoted 1 times



  **exam_war** 3 months, 4 weeks ago
A is for sure. ~ stands for user's home
upvoted 1 times



  **MamthaSJ** 7 months, 3 weeks ago
Answer is A
upvoted 1 times



  **kopper2019** 8 months, 1 week ago
hey guys check Q3 for new Qs, 49 New Qs
upvoted 1 times



  **aviratna** 8 months, 1 week ago
A is correct. Cloud Shell provides 5 GB persistent disk and data in Home directory will persist
upvoted 1 times



  **victory108** 9 months, 2 weeks ago
A. ~/bin
upvoted 1 times



  **un** 9 months, 3 weeks ago
A is correct
upvoted 1 times



  **Ausias18** 11 months, 1 week ago
Answer is A
upvoted 1 times



  **realqrt** 11 months, 1 week ago
C is correct, /google/scripts persists between Cloud Shell sessions.
upvoted 2 times

  **xavi1** 6 months, 2 weeks ago
agree with C
upvoted 1 times

  **xavi1** 6 months, 2 weeks ago
I correct myself, A. refer to <https://medium.com/google-cloud/google-cloud-shell-the-free-playground-b5ab4793224>
upvoted 1 times



  **Darzan** 1 year ago
Only your home directory is persisted across sessions as per google docs. Any directory starting with Tilda is within your home directory. So the answer is A.
upvoted 3 times

  **Shruti1997** 1 year ago
~/ means home directory, So ~/bin is in home which persists. A is correct.
upvoted 4 times

  **bogd** 1 year ago
This is one confusing question... The question requires the file to be persistent - and only \$HOME (aka ~) is persistent. This would suggest answer A.

However, it also requires the file to be in the default execution environment (and I read this as "file must be in the default \$PATH) - and ~/bin is not in \$PATH by default..

I would still go for A, but only for lack of a better option.
upvoted 5 times

  **bnlcnd** 1 year, 1 month ago
A is right:
You can install additional software packages on the virtual machine instance but the installation will not persist after the instance terminates unless you install the software in your \$HOME directory

~/bin == /home/<your_user_name>/bin
upvoted 4 times

You want to create a private connection between your instances on Compute Engine and your on-premises data center. You require a connection of at least 20

Gbps. You want to follow Google-recommended practices. How should you set up the connection?

- A. Create a VPC and connect it to your on-premises data center using Dedicated Interconnect.
- B. Create a VPC and connect it to your on-premises data center using a single Cloud VPN.
- C. Create a Cloud Content Delivery Network (Cloud CDN) and connect it to your on-premises data center using Dedicated Interconnect.
- D. Create a Cloud Content Delivery Network (Cloud CDN) and connect it to your on-premises datacenter using a single Cloud VPN.

Correct Answer: A

Community vote distribution

A (100%)

- AWS56

Highly Voted

2 years, 1 month ago

Cloud VPN supports unto 3 Gbps where as Interconnect can support unto 100 gbps... I'll go with A

upvoted 34 times
- nitinz

12 months ago

A, 20Gbps dedicated interconnect is the way.

upvoted 2 times
- fraloca

1 year, 1 month ago

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

upvoted 3 times
- tartar

1 year, 6 months ago

A is ok

upvoted 7 times
- vincy2202

Most Recent

2 months, 1 week ago

A is the correct answer

upvoted 2 times
- haroldbenites

2 months, 3 weeks ago

Go for A

upvoted 2 times
- joe2211

3 months ago

Selected Answer: A

vote A

upvoted 2 times
- duocnh

3 months ago

Selected Answer: A

vote A

upvoted 3 times
- unnikrisb

4 months, 3 weeks ago

A is good option (easily eliminate C & D) and B with connection speed.
10Gbps per link for Dedicated Interconnect and Direct Peering
1.5-3Gbps per tunnel for Cloud VPN
50Mbps to 10Gbps per connection - Partner Interconnect
noSLA - Carrier Peering

upvoted 1 times
- amxexam

6 months ago

Let's go with option elimination
A. Create a VPC and connect it to your on-premises data centre using Dedicated Interconnect.
>> Is the only remaining best option after elimination. As per the document, its partner interconnects with VPN. Interconnect is between GCP and on-prem. URL1

B. Create a VPC and connect it to your on-premises data centre using a single Cloud VPN.
>> max 3 gigabits per second (Gbps) eliminate the option.

C. Create a Cloud Content Delivery Network (Cloud CDN) and connect it to your on-premises data centre using Dedicated Interconnect.

>> CDN is for egress traffic or static content hosting hence eliminate the option URL2

D. Create a Cloud Content Delivery Network (Cloud CDN) and connect it to your on-premises datacenter using a single Cloud VPN.
>> CDN is for egress traffic or static content hosting hence eliminate the option URL2

Hence A

URL1 <https://cloud.google.com/network-connectivity/docs/interconnect/concepts/overview>



URL2 <https://cloud.google.com/network-connectivity/docs/cdn-interconnect>

upvoted 2 times

  **MamthaSJ** 7 months, 3 weeks ago


Answer is A

upvoted 1 times

  **aviratna** 8 months, 1 week ago

A is correct. Dedicated Interconnect supports upto 80 GBPS

upvoted 1 times

  **victory108** 9 months, 2 weeks ago

A. Create a VPC and connect it to your on-premises data center using Dedicated Interconnect.

upvoted 2 times

  **un** 9 months, 3 weeks ago


A is correct

upvoted 1 times

  **Ausias18** 11 months, 1 week ago

Answer is A

upvoted 1 times

  **lynx256** 11 months, 1 week ago



A is ok

upvoted 1 times

  **lynx256** 11 months, 1 week ago



I'll go with A

upvoted 1 times

  **sdsdfasdf4** 1 year, 2 months ago

The answer is A. We could consider the option "B" but it says "single", so we cannot use several cloud VPN tunnels to achieve the mentioned bandwidth.

upvoted 1 times

  **subhala** 1 year, 5 months ago

cloud VPN supports 1.5 to 3 Gbps per tunnel. dedicated interconnect has two options. a) 10 Gbps per link and upto 8 of them (so $10 * 8 = 80$ Gbps) b) 100 Gbps per link and upto 2 of them (so $100 * 2 = 200$ Gbps).

so would go with A.

upvoted 3 times

  **dk110019** 1 year, 5 months ago

this is in exam

upvoted 4 times

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


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

Correct Answer: B

  **crypt0** Highly Voted 2 years, 4 months ago



I would choose "B"

upvoted 36 times

  **nitinz** 12 months ago

B reason minimize GCP service costs

upvoted 3 times

  **tartar** 1 year, 6 months ago

B is ok

upvoted 10 times

  **kalschi** Highly Voted 2 years, 3 months ago

according Google's best practice it should be B

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

upvoted 9 times

  **gcmrjbr** Most Recent 1 week ago

free tier (monthly discounts) does not make sense combined with committed use discounts - anual base, dont't you think so?

upvoted 2 times

  **ehgm** 2 months ago

Sustained are automatic discounts for running specific GCE a significant portion of the billing month:

<https://cloud.google.com/compute/docs/sustained-use-discounts>

Committed is for workloads with predictable resource needs between 1 year or 3 year, discount is up to 57% for most resources:


<https://cloud.google.com/compute/docs/instances/signing-up-committed-use-discounts>

upvoted 4 times

  **squishy_fishy** 1 month ago

Best answer!

upvoted 1 times

  **vincy2202** 2 months, 1 week ago

B is the correct answer

upvoted 1 times

  **Israel** 5 months, 3 weeks ago

Answer is B

upvoted 1 times

  **VishalB** 7 months ago

Answer B

Sustained use discounts are applied on incremental use after you reach certain usage thresholds. This means that you pay only for the number of minutes that you use an instance, and Compute Engine automatically gives you the best price. There's no reason to run an instance for longer than you need it.

- <https://cloud.google.com/compute/docs/sustained-use-discounts>

Committed use discounts are ideal for workloads with predictable resource needs. When you purchase a committed use contract, you purchase compute resource (vCPUs, memory, GPUs, and local SSDs) at a discounted price in return for committing to paying for those resources for 1 year or 3 years. The discount is up to 57% for most resources like machine types or GPUs. The discount is up to 70% for memory-optimized machine types. For committed use prices for different machine types, see VM instances pricing.

- <https://cloud.google.com/compute/docs/instances/signing-up-committed-use-discounts>

upvoted 4 times

  **MamthaSJ** 7 months, 3 weeks ago



Answer is B

upvoted 1 times

  **aviratna** 8 months, 1 week ago

B is correct as demand is not known

upvoted 1 times

  **gatul28** 9 months, 1 week ago



"don't yet know what consumer demand for your product will be" so can't be C and D. Between A and B, B makes complete sense as those performing the job would directly make a positive or negative impact. B

upvoted 1 times

  **victory108** 9 months, 2 weeks ago

B. Utilize free tier and sustained use discounts. Provide training to the team about service cost management.

upvoted 2 times

  **un** 9 months, 3 weeks ago

B is correct

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

upvoted 1 times

  **Ausias18** 11 months, 1 week ago

Answer is B

upvoted 1 times

  **lynx256** 11 months, 1 week ago

B is ok

upvoted 1 times

  **AD3** 11 months, 2 weeks ago

'A' seems more logical. As the person can monitor the expenses and also train others for cost minimize. Most of the money is wasted in the beginning of the usage of new technology. Analogy is a new car. How you can minimize on the efficiency of the car usage only if you have an experience person driver sitting next and teaching their kids how to improve the efficiency of a newly bought car. The trainees are first focus more on the new features and not the cost efficiency.

upvoted 1 times

  **JackIsMyName** 11 months, 3 weeks ago

Has to be C, no? :)

upvoted 1 times

  **ga** 1 year ago

B is the correct answer

upvoted 1 times

- You are building a continuous deployment pipeline for a project stored in a Git source repository and want to ensure that code changes can be verified before deploying to production. What should you do?
- A. Use Spinnaker to deploy builds to production using the red/black deployment strategy so that changes can easily be rolled back.
 - B. Use Spinnaker to deploy builds to production and run tests on production deployments.
 - C. Use Jenkins to build the staging branches and the master branch. Build and deploy changes to production for 10% of users before doing a complete rollout.
 - D. Use Jenkins to monitor tags in the repository. Deploy staging tags to a staging environment for testing. After testing, tag the repository for production and deploy that to the production environment.

Correct Answer: C

Reference:

<https://github.com/GoogleCloudPlatform/continuous-deployment-on-kubernetes/blob/master/README.md>

Community vote distribution

D (100%)

- Googler2

Highly Voted

1 year, 10 months ago

I believe the best answer is D, because the tagging is a best practice that is recommended on Jenkins/Spinnaker to deploy the right code and prevent accidentally (or intentionally) push of wrong code to production environments. See <https://stackify.com/continuous-delivery-git-jenkins/>

upvoted 45 times
- Ziegler

1 year, 9 months ago

Agreed with D as the right answer. The url provided explains it better

upvoted 9 times
- Anish17

Highly Voted

1 year, 6 months ago

I got this question in real exam. This question states "before deploying to production" environment. So i picked D . I passed the exam.

upvoted 36 times
- GunaGCP123

4 months, 1 week ago

congrats for passing the exam. practising all 255 questions is sufficient for passing the exam? how much percentage of questions you got from here roughly?

upvoted 1 times
- Rzla

6 months, 1 week ago

Agree, its the only answer that meets the requirement of "before deploying to production"

upvoted 2 times
- winset

1 year ago

not only 1 Q passed! C is beeter

upvoted 1 times
- bnlcnd

1 year, 1 month ago

that resolved the puzzle :)

upvoted 2 times
- VT001

Most Recent

1 month, 1 week ago

Selected Answer: D

Correct answer is D. Question talks about 'before deploying to production'. C talks about after deploying to production.

upvoted 1 times

hantanbl

1 month, 2 weeks ago

C is the closest answer
If question is asking 'what's Jenkin best practise' then D is the answer

upvoted 1 times

lxgywil

1 month, 3 weeks ago

I choose D as we want to ensure that code changes can be verified BEFORE deploying to production. Option C suggests that we build and deploy changes to production for 10% of users.



upvoted 1 times



OrangeTiger



2 months ago

Selected Answer: D

Vote D.
C is canary deploy.
But the sentence in question has no word to mean "tested by a small number of users"
upvoted 2 times



  **OrangeTiger** 2 months ago
The revelal solution on this site is wrong, isn't it? I'm getting anxious.
upvoted 1 times

  **vincy2202** 2 months, 1 week ago
D is the correct answer
upvoted 1 times

  **ABO_Doma** 2 months, 2 weeks ago



Selected Answer: D



clearly
upvoted 1 times

  **phantomsg** 2 months, 2 weeks ago

Selected Answer: D



Question asks to verify before Production. So tagging and deploying appropriately is the right approach.
upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago
Go for D.
“BEFORE DEPLOYING TO PRODUCTION”
upvoted 1 times

  **pakilodi** 2 months, 3 weeks ago



Selected Answer: D

C & D are valid answers here. I choose D because they want to test before deploy to production. If the question was : "test to a subset users in production (Canary) before full deployment", it would have been C
upvoted 2 times

  **joe2211** 3 months ago



Selected Answer: D



vote D
upvoted 1 times

  **jimcsng** 3 months, 2 weeks ago



Selected Answer: D



D is correct while C is not. The question is about ensuring the traceability of the code changes, not necessarily ensure a successful release.
upvoted 1 times



  **BSING246** 4 months ago
D is right. Ask is before deploying...
C is wrong choice.
upvoted 1 times

  **MaxNRG** 4 months, 1 week ago
D – Use Jenkins to monitor tags in repository. Deploy staging tags to staging env for testing. After testing tag repository for production and deploy it to production env.
C – omits testing before canary release (10% of users), also references staging and master branches, instead of just master to build from.

Jenkins is automation server to build test and deploy. While both tools (Spinnaker, Jenkins) are used for SW updates, there are key differences. Spinnaker is not a build tool, but a deployment tool, with focus on the cloud.
Because Spinnaker was not intended to be a build tool, there are things that Jenkins will do better: managing SCM, running tests and building packages.
upvoted 1 times

  **3RED** 4 months, 3 weeks ago
C- As there is a staging branch in the workflow , testing/QA is being done in the staging . After that it follows canary deployment in prod.
upvoted 1 times

  **3RED** 4 months, 3 weeks ago
Moreover D is wrong as it takes a full deployment instead of a canary
upvoted 2 times

  **SuperCloud** 5 months ago
D ensures the code is ready for production, via tagging.
upvoted 1 times

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

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

Correct Answer: C

Community vote distribution

C (67%) A (33%)

- KouShikyou**

Highly Voted

2 years, 4 months ago

C should be correct answer.

upvoted 35 times
- Jayant**

Highly Voted

2 years, 3 months ago

question is asking to grant access not to resolve issues "You need to make sure that he can access the VMs. What should you do?" ----- why it should not be "A"

upvoted 15 times
- Alekshar**

1 year ago

Google's best security pratice is the principle of least privilege, only grant to someone what he needs to do its job nothing more.

upvoted 4 times
- rbrto**

1 year, 8 months ago

project viewer in the whole project ? that role make no sense

upvoted 4 times
- juancambb**

Most Recent

3 weeks, 6 days ago

Selected Answer: C

is C the correct

upvoted 1 times
- Narinder**

1 month, 1 week ago

C, is the correct answer. As per the requirement linux expert would need access to VM to troubleshoot the issue. With health check enabled, old VM will be terminated as soon as health-check fails for the VM and new VM will be auto-created. So, this situation will prevent linux expert to troubleshoot the issue. Had it been the case that stack-drover logging is enabled and the expert just want to view the logs from the Cloud-logs than role to project-viewer could help. But it is specifically mentioned that expert will login into VM to troubleshoot the issue and not looking at the cloud Logs. So, Option-C is the correct answer.

upvoted 4 times
- twistyfries**

5 days, 11 hours ago

great answer

upvoted 1 times
- Q_Review**

1 month, 1 week ago

Selected Answer: C

Need to grant access, not resolve the issue.

upvoted 1 times
- pddddd**

1 month, 3 weeks ago

stop health check - this will prevent autohealing behaviour, i.e. instance restart

SSH key added project-wide - enable the linux admin to log on to the box and troubleshoot the application.

upvoted 1 times
- PhuocT**

2 months ago

Selected Answer: C

C is the correct answer. with A: project Viewer, how Linux expert could access to VM and check the issue?

upvoted 2 times
- ochanz**



2 months, 2 weeks ago

Selected Answer: A

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

- A. Grant your colleague the IAM role of project Viewer # this will give the colleague enough access to view and troubleshoot.
- B. Perform a rolling restart on the instance group X
- C. Disable the health check for the instance group. Add his SSH key to the project-wide SSH Keys X this will give the Linux expert more access compared to option A
- D. Disable autoscaling for the instance group. Add his SSH key to the project-wide SSH Keys X autoscaling has been disabled.

upvoted 2 times

  **lxgywil** 1 month, 3 weeks ago



The thing is, A will give your colleague MORE than enough access, which is against the principle of least privilege. Keep in mind that this will be project-wide, thus option C is more viable in this situation.

upvoted 2 times

  **haroldbenites** 2 months, 3 weeks ago

Go for C.



upvoted 1 times

  **MaxNRG** 4 months, 1 week ago

C – disable health checks, add his SSH keys to project-wide SSH keys. Though A was also a candidate, though it violates principle of least privilege (no need for Linux expert review GCP project) and also he likely doesn't have GCP account. Also, Linux VMs with external IPs can be accessed via 3rd party tools like Putty, etc. In theory healthchecks can be configured to reset every 5 sec (1 sec probe interval and 5 sec fail probes). That's stupid configuration but seems like a root cause of reset.

C – disables healthchecks, so Linux VMs can start, then Linux expert can log in. Though, not clear why we need his help if VMs start normally? A – is correct if it's not a healthcheck issue (some system error in VM causes reset), so no SSH access is possible.

upvoted 1 times

  **AnilKr** 5 months, 2 weeks ago

Question is asking to make sure that linux expert can access only, how come option C is correct here?

upvoted 1 times

  **amxexam** 6 months ago

For others answering please concentrate on the requirement. The ask is to allow access to the Linux expert and not to go and solve the problem

Hence A.

upvoted 1 times

  **Rzla** 5 months, 1 week ago



Great, you gave the expert read access to the project.... then what? A doesn't give you the permissions or access required to troubleshoot an issue with GCE instance. Its C, stop the instances bouncing and allow interactive access to troubleshoot.

upvoted 4 times

  **MamthaSJ** 7 months, 3 weeks ago

Answer is C

upvoted 1 times

  **aviratna** 8 months, 1 week ago

C is correct

upvoted 2 times

  **victory108** 9 months, 2 weeks ago

C. Disable the health check for the instance group. Add his SSH key to the project-wide SSH keys

upvoted 2 times

  **un** 9 months, 3 weeks ago

C is correct

upvoted 1 times

  **un** 9 months, 3 weeks ago

C is correct

upvoted 1 times

Your company is migrating its on-premises data center into the cloud. As part of the migration, you want to integrate Google Kubernetes Engine (GKE) for workload orchestration. Parts of your architecture must also be PCI DSS-compliant. Which of the following is most accurate?

- A. App Engine is the only compute platform on GCP that is certified for PCI DSS hosting.
- B. GKE cannot be used under PCI DSS because it is considered shared hosting.
- C. GKE and GCP provide the tools you need to build a PCI DSS-compliant environment.
- D. All Google Cloud services are usable because Google Cloud Platform is certified PCI-compliant.

Correct Answer: C

Community vote distribution

C (100%)

- rishab86**

Highly Voted

8 months, 4 weeks ago

Link : <https://cloud.google.com/security/compliance/pci-dss>
Clearly mention GKE as PCI DSS-Compliant but not all GCP service are PCI DSS-Compliant so answer is definitely C.
upvoted 22 times
- haroldbenites**

2 months, 3 weeks ago

But, The paragraph 3 says that all products of google are certified by PCI.
upvoted 1 times
- MaxNRG**

4 months, 1 week ago

C – Kubernetes Engine provides tools you need to build to PCI-DSS compliant environment.
upvoted 1 times
- VT001**

Most Recent

2 weeks, 5 days ago

Selected Answer: C
I got similar question on my exam.
upvoted 1 times
- vincy2202**

2 months, 1 week ago

Selected Answer: C
C is the correct answer
upvoted 1 times
- haroldbenites**

2 months, 3 weeks ago

Go for C.
upvoted 1 times
- SHOURYA_SOOD**

3 months, 1 week ago

Selected Answer: C
C- All of them: GKE, GCE, and GAE ate PCI-DSS-Compliant but A & B says it's only GAE and GCE respectively so cancel them out.
D says all of GCP is PCI DSS-Compliant but it's not true.
So, C seems to be the right answer.
upvoted 1 times
- imranmani**

4 months, 3 weeks ago

C is the right answer
upvoted 1 times
- MamthaSJ**

7 months, 3 weeks ago

Answer is C
upvoted 3 times
- victory108**

7 months, 4 weeks ago

C. GKE and GCP provide the tools you need to build a PCI DSS-compliant environment.
upvoted 1 times
- aviratna**

8 months, 1 week ago

C: GKE & Compute Engine is PCI DSS compliant while Cloud Function, App Engine are not PC compliant
upvoted 3 times

Your company has multiple on-premises systems that serve as sources for reporting. The data has not been maintained well and has become degraded over time.

You want to use Google-recommended practices to detect anomalies in your company data. What should you do?

- A. Upload your files into Cloud Storage. Use Cloud Datalab to explore and clean your data.
- B. Upload your files into Cloud Storage. Use Cloud Dataprep to explore and clean your data.
- C. Connect Cloud Datalab to your on-premises systems. Use Cloud Datalab to explore and clean your data.
- D. Connect Cloud Dataprep to your on-premises systems. Use Cloud Dataprep to explore and clean your data.

Correct Answer: B



Community vote distribution



B (100%)



  **JohnWick2020** Highly Voted 10 months, 3 weeks ago
Answer is B:



Keynotes from question:
1- On-premise data sources
2- Unfit data; not well maintained and degraded
3- Google-recommended best practice to "detect anomalies" <<-Very important.



Explanation:
A & C - incorrect; Datalab does not provide anomaly detection OOTB. It is used more for data science scenarios like interactive data analysis and build ML models.
B - CORRECT; DataPrep OOTB provides for fast exploration and anomaly detection and lists cloud storage as an ingestion medium. Refer to ELT pipeline architecture here = <https://cloud.google.com/dataprep>
D - incorrect; At this time DataPrep cannot connect to SaaS or on-premise source. Not to be confused for DataFlow which can!
upvoted 13 times



  **Eroc** Highly Voted 2 years, 4 months ago
Both B and D work, because the question says "Google's Best Practices" uploading the files first would keep the original copies Google encrypted and stored.
upvoted 12 times



  **nitinz** 12 months ago
B, dataprep = visually explore, clean, and prepare data for analysis
upvoted 6 times



  **tartar** 1 year, 6 months ago
B is ok
upvoted 9 times


  **skywalker** 1 year, 9 months ago
Both of them works....
upvoted 1 times

  **Musk** 1 year, 7 months ago
You can't connect DataPrep to your on-prem systems. You simply upload a file, but that is not connecting it to your systems. Because of that, I'd discard D and stay with B.
upvoted 7 times

  **GMats** Most Recent 1 month, 3 weeks ago
B...It supports only CloudStorage and Bigquery..."So you can start transforming datasets, you hereby instruct Google to allow Trifacta, who provides the service Dataprep in collaboration with Google, to view and modify project data in Cloud Storage and BigQuery, run Dataflow jobs, and use all project service accounts."
upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago
Go for B.
upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago
The question says “best practice”. In GCP , a best practice for many use cases is load to cloud storage and then processing data.
upvoted 1 times

  **joe2211** 3 months ago

Selected Answer: B

vote B

upvoted 1 times

🗳️ 👤 **vincy2202** 3 months, 2 weeks ago

B is the right answer

upvoted 1 times

🗳️ 👤 **exam_war** 3 months, 4 weeks ago

B is correct.

datalab: not used for clean,for virtualize and analysis purpose, so A is not correct

upvoted 1 times

🗳️ 👤 **FERIN_02** 4 months ago

Input sources for GCP Dataprep are

- 1) Local computer
- 2) Cloud storage
- 3) BigQuery

Hence option B

upvoted 1 times

🗳️ 👤 **BSING246** 4 months ago

B is correct.

upvoted 1 times

🗳️ 👤 **MaxNRG** 4 months, 1 week ago

B – Upload your files to Cloud Storage. Use Cloud Dataprep to analyze and clean up your data.

This is direct function of Cloud Dataprep – fast exploration and anomaly detection.

D – doesn't work since Dataprep cannot connect to on-prem systems. You need specify one of next sources for Dataprep: BigQuery, Cloud Storage, upload file directly.

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

upvoted 1 times

🗳️ 👤 **MamthaSJ** 7 months, 3 weeks ago

Answer is B

upvoted 1 times

🗳️ 👤 **victory108** 9 months, 2 weeks ago

B. Upload your files into Cloud Storage. Use Cloud Dataprep to explore and clean your data.

upvoted 2 times

🗳️ 👤 **un** 9 months, 3 weeks ago

B is correct

upvoted 1 times

🗳️ 👤 **Ausias18** 11 months, 1 week ago

Answer is B

upvoted 1 times

🗳️ 👤 **lynx256** 11 months, 1 week ago

IMO - D.

In question we read "Your company has multiple on-premises systems that serve as sources for reporting.". So - I guess - we have connection to them from CGP. So Cloud Dataprep by TRIFACTA® INC can be connected to these on-prem data services. If so, there is no sense B. Moreover - in B we have to repeat our this procedure (upload + clean) whereas in D we work on the source directly.

Of course, we cannot use Dataprep to REWRITE cleaned data in place (Dataprep is not for this purpose). We can use Dataprep to REPORT cleaned data to a new sink.

upvoted 2 times

🗳️ 👤 **lynx256** 11 months, 1 week ago

Ref: <https://docs.trifacta.com/display/DP/Connection+Types>

As you can see, for some DB (especially RDBMS) we have to buy Dataprep "Premium" edition.

But there doesn't matter if source is in GCP or on prem.

upvoted 1 times

🗳️ 👤 **pawel_ski** 11 months, 2 weeks ago

„Your company has multiple on-premises systems that serve as sources for reporting.”

In option B we must export the data from many sources to many files on GCS and then start the Dataprep process.

In option D we connect Dataprep to multiple sources and start the process.

I choose D.

upvoted 1 times

🗳️ 👤 **Vika** 1 year ago

I think B is the correct answer as Cloud Data Prep can connect to GCS. Reason for not going with D is Relational database connection is limited feature with Cloud Data Prep Premium

<https://docs.trifacta.com/display/DP/Connection+Types>

upvoted 2 times

  **lynx256** 11 months, 1 week ago

I think Premium is edition of Dataprep. CMIIW but in the question there is no information, what edition of Dataprep we want to use.

upvoted 1 times

Google Cloud Platform resources are managed hierarchically using organization, folders, and projects. When Cloud Identity and Access Management (IAM) policies exist at these different levels, what is the effective policy at a particular node of the hierarchy?

- A. The effective policy is determined only by the policy set at the node
- B. The effective policy is the policy set at the node and restricted by the policies of its ancestors
- C. The effective policy is the union of the policy set at the node and policies inherited from its ancestors
- D. The effective policy is the intersection of the policy set at the node and policies inherited from its ancestors

Correct Answer: C

Reference:

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

  **passnow** Highly Voted 2 years, 2 months ago

The effective policy for a resource is the union of the policy set at that resource and the policy inherited from its parent. <https://cloud.google.com/iam/docs/resource-hierarchy-access-control>

upvoted 23 times

  **ghadxx** Most Recent 1 month ago

You can set IAM policies at the level of the node, in addition to policies inherited from its parent. Hence, it is a union.

upvoted 2 times

  **Atnafu** 2 months ago

C

Google Cloud resources are organized hierarchically, where the organization node is the root node in the hierarchy, the projects are the children of the organization, and the other resources are descendants of projects. You can set Identity and Access Management (IAM) policies at different levels of the resource hierarchy. Resources inherit the policies of the parent resource. The effective policy for a resource is the union of the policy set at that resource and the policy inherited from its parent.

upvoted 2 times

  **vincy2202** 2 months, 1 week ago

C is the correct answer

upvoted 2 times

  **haroldbenites** 2 months, 3 weeks ago

Go for C.

upvoted 1 times

  **MamthaSJ** 7 months, 3 weeks ago

Answer is C

upvoted 3 times

  **victory108** 9 months, 2 weeks ago

C. The effective policy is the union of the policy set at the node and policies inherited from its ancestors

upvoted 2 times

  **DuncanK53** 9 months, 2 weeks ago

Def answer C. Key word is 'union'.

upvoted 1 times

  **Ausias18** 11 months, 1 week ago

Answer is C

upvoted 3 times

  **lynx256** 11 months, 1 week ago



C is ok

upvoted 1 times

  **Darzan** 1 year ago



C is the answer. Effective policy is the union of policy set at the resource and the policy inherited from the parents (Organization, folder, and project)



upvoted 2 times



  **bnlcnd** 1 year, 1 month ago



You can set an IAM policy at the organization level, the folder level, the project level, or (in some cases) the resource level. Resources inherit the policies of the parent node. If you set a policy at the Organization level, it is inherited by all its child folders and projects, and if you set a policy at the project level, it is inherited by all its child resources.



upvoted 1 times

  **AshokC** 1 year, 5 months ago
C - <https://cloud.google.com/iam/docs/resource-hierarchy-access-control>
upvoted 1 times

  **h18** 1 year, 5 months ago
c is the answer
upvoted 1 times

  **RM07** 1 year, 7 months ago
Ans: C is the correct ans no doubt in that.
upvoted 1 times

  **mlantonis** 1 year, 8 months ago
C the union.
upvoted 1 times

  **Tushant** 1 year, 8 months ago
C is the correct answer
upvoted 1 times

You are migrating your on-premises solution to Google Cloud in several phases. You will use Cloud VPN to maintain a connection between your on-premises systems and Google Cloud until the migration is completed. You want to make sure all your on-premise systems remain reachable during this period. How should you organize your networking in Google Cloud?

- A. Use the same IP range on Google Cloud as you use on-premises
- B. Use the same IP range on Google Cloud as you use on-premises for your primary IP range and use a secondary range that does not overlap with the range you use on-premises
- C. Use an IP range on Google Cloud that does not overlap with the range you use on-premises
- D. Use an IP range on Google Cloud that does not overlap with the range you use on-premises for your primary IP range and use a secondary range with the same IP range as you use on-premises

Correct Answer: D

Community vote distribution

C (100%)

🗲️ 👤 **newbie2020** Highly Voted 👍 2 years, 1 month ago

Ans is C,
<https://cloud.google.com/vpc/docs/using-vpc>

"Primary and secondary ranges can't conflict with on-premises IP ranges if you have connected your VPC network to another network with Cloud VPN, Dedicated Interconnect, or Partner Interconnect."

upvoted 99 times

🗲️ 👤 **Sundeeepk** 1 year, 8 months ago

from the above link - it clearly states - "Primary and secondary ranges for subnets cannot overlap with any allocated range, any primary or secondary range of another subnet in the same network, or any IP ranges of subnets in peered networks." once we create a VPN, they all are part of the same network . Hence option C is correct

upvoted 7 times

🗲️ 👤 **AD2AD4** 1 year, 9 months ago

Perfect.. Exact find in link.

upvoted 2 times

🗲️ 👤 **Smart** 2 years ago

Agreed!

upvoted 2 times

🗲️ 👤 **KouShikyou** Highly Voted 👍 2 years, 4 months ago

I think C is correct.

upvoted 19 times

🗲️ 👤 **nitinz** 12 months ago

C, no brainer. You have on-prem <--> VPN <---> GCP only way this data flow to work in non-over lapping subnets. You can stretch subnets at layer 7 but you wont be able to route it via VPN.

upvoted 3 times

🗲️ 👤 **kumarp6** 1 year, 4 months ago

Yes C it is

upvoted 2 times

🗲️ 👤 **JoeShmoe** 2 years, 3 months ago

Agree with C. Secondary IP range still can't overlap

upvoted 10 times

🗲️ 👤 **AWS56** 2 years, 1 month ago

".... and Google Cloud until the migration is completed." Taking this as the key, the intention is to remove the connection b/w on-prem and GCP once the migration is done. and then the secondary IPs will act as primary. So I will choose D

upvoted 2 times


🗲️ 👤 **zanfo** 5 months, 2 weeks ago

how to manage the routing table in VPC if is present a subnet with the same network of vpn remote net? the correct answer is C

upvoted 1 times

🗲️ 👤 **tartar** 1 year, 6 months ago

C is ok
upvoted 10 times

  **MaxNRG** 4 months, 1 week ago

B – Use the same IP range on Google Cloud as you use on premises for your primary IP range and use a secondary range that does not overlap with the range you use on premises.
See how primary and secondary IP ranges are used: <https://cloud.google.com/vpc/docs/alias-ip>
The migration process of services looks as following:
On-prem VM (primary IP) runs some services (secondary IPs), then we create new VM in GCP (on primary IP range), then one-by-one migrate services from on-prem VM. These services are running on secondary IP range. So, we test migrated services, while keeping on-prem services still up (that's a point of secondary ranges to not overlap). Once migration is complete we switch traffic to VM/services on Cloud and shutdown on-prem VM.
upvoted 3 times


  **VT001** Most Recent 2 weeks, 5 days ago

Selected Answer: C

I got similar question on my exam.
upvoted 2 times

  **Sreedharveluru** 1 month, 1 week ago

ANS - C
Primary and secondary ranges for subnets cannot overlap with any allocated range, any primary or secondary range of another subnet in the same network, or any IPv4 ranges of subnets in peered networks.
upvoted 1 times

  **OrangeTiger** 1 month, 4 weeks ago


Is D correct?!

Really?

I agree with C is correct.
upvoted 1 times

  **vincy2202** 2 months, 1 week ago

C is the correct answer
upvoted 1 times

  **ABO_Doma** 2 months, 2 weeks ago

Selected Answer: C

Within a VPC network, all primary and secondary IPv4 ranges must be unique, but they do not need to be contiguous.
upvoted 2 times

  **shindeswap** 2 months, 3 weeks ago

Selected Answer: C

C is correct
upvoted 1 times



  **haroldbenites** 2 months, 3 weeks ago

Go for C.
upvoted 1 times

  **pakilodi** 2 months, 3 weeks ago

Selected Answer: C

C should be the answer here
upvoted 1 times

  **joe2211** 3 months ago

Selected Answer: C



vote C
upvoted 1 times

  **TheCloudBoy77** 3 months, 1 week ago

Selected Answer: C

Correct answer is C - Primary and secondary ranges can't conflict with on-premises IP ranges if you have connected your VPC network to another network with Cloud VPN, Dedicated Interconnect, or Partner Interconnect.

<https://cloud.google.com/vpc/docs/using-vpc>
upvoted 1 times

  **BSING246** 4 months ago

C is correct. No overlapping of IP addresses.
upvoted 1 times

  **MaxNRG** 4 months, 1 week ago

B – Use the same IP range on Google Cloud as you use on premises for your primary IP range and use a secondary range that does not overlap with the range you use on premises.

See how primary and secondary IP ranges are used: <https://cloud.google.com/vpc/docs/alias-ip>

The migration process of services looks as following:

On-prem VM (primary IP) runs some services (secondary IPs), then we create new VM in GCP (on primary IP range), then one-by-one migrate services from on-prem VM. These services are running on secondary IP range. So, we test migrated services, while keeping on-prem services still up (that's a point of secondary ranges to not overlap). Once migration is complete we switch traffic to VM/services on Cloud and shutdown on-prem VM.

upvoted 1 times

  **MaxNRG** 4 months, 1 week ago

The key points here:



- migrating in several phases
- use Cloud VPN until the migration is completed
- all your on-premise systems remain reachable during this period

upvoted 1 times

  **SuperCloud** 5 months ago

C is correct - <https://cloud.google.com/vpc/docs/using-vpc>

upvoted 1 times

  **Besss** 5 months, 2 weeks ago

Answer is C

upvoted 1 times

  **MamthaSJ** 7 months, 3 weeks ago

Answer is C

upvoted 3 times



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



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



Correct Answer: A



Community vote distribution



A (100%)



  **jcmoranp** Highly Voted 2 years, 4 months ago
Correct A, you have to recreate the indexes
upvoted 25 times

  **kumarp6** 1 year, 4 months ago
Yes, use this command in cloud sell to create indexes.
gcloud datastore create indexes
upvoted 3 times



  **tartar** 1 year, 6 months ago
A is ok
upvoted 11 times



  **nitinz** 12 months ago
A, if index is missing then create it.
upvoted 2 times



  **Eroc** Highly Voted 2 years, 4 months ago
A is incorrect because the command is actually gcloud datastore indexes create.
(<https://cloud.google.com/sdk/gcloud/reference/datastore/indexes/create>).
upvoted 10 times



  **bogd** 1 year ago
It might have changed recently - I was able to find documentation mentioning "datastore create-indexes":



<https://cloud.google.com/appengine/docs/standard/python/datastore/indexes>
upvoted 6 times

  **vincy2202** Most Recent 2 months, 1 week ago
Selected Answer: A
A is the correct answer
upvoted 1 times


  **menon_sarath** 2 months, 3 weeks ago
Why not C? Shouldnt the command be datastore indexes create and not create-index as incorrectly stated in option A? Please advice
upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago
Go for A.
<https://cloud.google.com/appengine/docs/standard/python/datastore/indexes>
upvoted 2 times

  **haroldbenites** 2 months, 3 weeks ago
New docs :
<https://cloud.google.com/sdk/gcloud/reference/datastore/indexes/create>
upvoted 2 times



  **joe2211** 3 months ago
Selected Answer: A
vote A
upvoted 1 times



 **MaxNRG** 4 months, 1 week ago

A – Point gcloud datastore create-indexes to you config.yaml.
Now this command is `gcloud datastore indexes create`
<https://cloud.google.com/sdk/gcloud/reference/datastore/indexes/create>

More details on Configuring Datastore Indexes .
<https://cloud.google.com/appengine/docs/standard/python/config/indexconfig>
upvoted 2 times

  **unnikrisb** 4 months, 3 weeks ago



Change in command : gcloud datastore indexes create INDEX_FILE [GLOUD_WIDE_FLAG ...]
For this question gcloud datastore indexes create ~/myapp/index.yaml
upvoted 1 times

  **Sarin** 6 months ago

A is correct
upvoted 1 times

  **MamthaSJ** 7 months, 3 weeks ago

Answer is A
upvoted 3 times

  **victory108** 9 months, 2 weeks ago

A. Point gcloud datastore create-indexes to your configuration file
upvoted 2 times

  **un** 9 months, 3 weeks ago

A is correct
https://cloud.google.com/appengine/docs/standard/python/config/indexconfig#updating_indexes
upvoted 1 times

  **Ausias18** 11 months, 1 week ago

Answer is A
upvoted 1 times

  **lynx256** 11 months, 1 week ago

A is ok
upvoted 1 times

  **AsokanSelvaraj** 1 year ago

Looks A is right answer
<https://cloud.google.com/sdk/gcloud/reference/datastore/indexes/create>
upvoted 1 times

  **Darzan** 1 year ago

A is the answer: According to google docs: To upload your index configuration to Datastore, run the following command from the directory where your index.yaml is located:
gcloud datastore indexes create index.yaml
upvoted 2 times

  **CloudGenious** 1 year ago

ans is not present in option. you need to run gcloud datastore ondex create <yaml.file> to create the new index
upvoted 1 times

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

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

Correct Answer: C

Community vote distribution

C (100%)

- Eroc

Highly Voted

2 years, 4 months ago

Groups are better for management that non-groups so A and B are eliminated. Keeping the the instances in the same project will help maintain consistency, so C is better than D.

upvoted 18 times

nitinz

12 months ago

C, because external LB needs **IG** period. It can either be managed or un-managed. You can not do External HTTP LB on instances. Also External HHTTP LB is a Regional resource.

upvoted 7 times

VT001

Most Recent

2 weeks, 5 days ago

Selected Answer: C

I got similar question on my exam.

upvoted 2 times

vincy2202

2 months, 1 week ago

C is the correct answer

upvoted 1 times

haroldbenites

2 months, 3 weeks ago

Go for C.

Best practice for resilience is Managed instance group.

Work with an only VM instance for solution regional is not recommended.

upvoted 2 times

exam_war

3 months, 4 weeks ago

C is correct. D is not, since C uses two different project for creating instance groups which causes un-necessary steps for networking

upvoted 1 times

MaxNRG

4 months, 1 week ago

C – deploy app in 2 Compute Engine instance groups, each in the same project, but in different region.

(satisfies all reqs and follows GCP design practices)

upvoted 1 times

gigibit

5 months, 2 weeks ago

Yes, but why not choose a cost-effective solution like A, preferring a not required performance optimization solution like C? The question it's just asking for a simple fail over

upvoted 4 times

diluvioniv

7 months, 2 weeks ago

It is C. But I thought that it is going to create ONE instance group (not 2)

upvoted 2 times

MamthaSJ

7 months, 3 weeks ago

Answer is C


upvoted 3 times

victory108

9 months, 2 weeks ago

C. Deploy the application on two Compute Engine instance groups, each in the same project but in a different region. Use the first instance group to serve traffic, and use the HTTP load balancing service to fail over to the standby instance group in case of a disaster.

upvoted 3 times

  **un** 9 months, 3 weeks ago

C is ok

upvoted 1 times

  **Ausias18** 11 months, 1 week ago

Answer is C

upvoted 1 times

  **lynx256** 11 months, 1 week ago

C is Ok.

upvoted 1 times

  **ga** 1 year ago



C is the right ans

upvoted 1 times

  **Darzan** 1 year ago

C is the answer. Keeping within the same project.

upvoted 1 times



  **GS14** 1 year, 1 month ago

B is not correct as its a single instance, not a good DR solution

D is not correct as its recommending to use separate projects which will be additional configuration and connectivity

That leaves A & C, I would prefer C as instance groups provide better resiliency than single VM instance as mentioned in optionnA

upvoted 3 times

  **MikeB19** 6 months ago

I agree with c for the test. In reality i may use a different project for dr to segregate cost and quotas

upvoted 1 times

  **asheesh0574** 1 year, 5 months ago

C as load balancer supports instance groups

upvoted 2 times

You are deploying an application on App Engine that needs to integrate with an on-premises database. For security purposes, your on-premises database must not be accessible through the public internet. What should you do?



- A. Deploy your application on App Engine standard environment and use App Engine firewall rules to limit access to the open on-premises database.
- B. Deploy your application on App Engine standard environment and use Cloud VPN to limit access to the on-premises database.
- C. Deploy your application on App Engine flexible environment and use App Engine firewall rules to limit access to the on-premises database.
- D. Deploy your application on App Engine flexible environment and use Cloud VPN to limit access to the on-premises database.



Correct Answer: D



Community vote distribution



D (50%)



C (50%)



  **MyPractice** Highly Voted 2 years, 2 months ago
Agree with D - "When to choose the flexible environment" "Accesses the resources or services of your Google Cloud project that reside in the Compute Engine network."
<https://cloud.google.com/appengine/docs/the-appengine-environments>
upvoted 30 times



  **AWS56** 2 years, 1 month ago
Why not B ? <https://cloud.google.com/appengine/docs/flexible/python/using-third-party-databases>
upvoted 2 times



  **haroldbenites** 2 months, 3 weeks ago
In a forum mentions that GCE and CAP flex are designed for connect to VPC . With GAP standard is needed a proxy .
<https://stackoverflow.com/questions/47537204/how-to-connect-app-engine-and-on-premise-server-through-vpn>
upvoted 3 times



  **areza** 8 months, 3 weeks ago
because app engine standard cant connect to on-prem db
upvoted 5 times



  **jcmoranp** Highly Voted 2 years, 4 months ago
Right is D:
<https://stackoverflow.com/questions/37137914/is-it-possible-to-use-google-app-engine-with-google-cloud-vpn>
upvoted 14 times

  **anjuagrawal** Most Recent 3 weeks, 5 days ago
Selected Answer: C
Option C because incase of VPN external IP address would be needed and which may not be good idea for a DB to be exposed. Firewall rules on AppEngine side would be better to restrict access.
upvoted 3 times

  **pulkit0627** 1 month, 4 weeks ago
Sorry to say, can I ask why this is not C please.
Question says - "your on-premises database must not be accessible through the public internet" and VPN using public internet and encrypts the traffic. So dont we need to remove the VPN options and consider firewall.
upvoted 3 times

  **anjuagrawal** 3 weeks, 5 days ago
Agree. I also opted C
upvoted 2 times


  **SanLi** 2 months ago
"on-premises database must not be accessible through the public internet".
I don't understand how it is possible to setup VPN without external IP?
can someone please clarify??
upvoted 1 times

  **ehgm** 2 months ago
Besides needing App Engine flexible environment to connect to on-premises, the App Engine Firewall only filter ingress traffic (external access to your app deployed)
upvoted 1 times

  **vincy2202** 2 months, 1 week ago

D is the correct answer

upvoted 1 times

  **pakilodi** 2 months, 2 weeks ago

Selected Answer: D

D is right. it would have been also B if the method to connect to On prem would be serverless vpc

upvoted 1 times

  **RCasagrande** 2 months, 3 weeks ago

Selected Answer: D

Agree with D.

upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago

Go for D.

CPE and GAE flex are designed for this propuse. GAE standard needs a proxy yet.

<https://stackoverflow.com/questions/47537204/how-to-connect-app-engine-and-on-premise-server-through-vpn>

upvoted 1 times

  **joe2211** 3 months, 1 week ago

Selected Answer: D

Vote D

upvoted 1 times

  **MaxNRG** 4 months, 1 week ago



D – Deploy on AppEngine Flexible, and use VPN to limit access to on-prem DB. Why?

Cloud VPN – provides secure IPsec connection between on-prem and Cloud networks. Firewall Rules on AE don't have any impact on on-prem DB.

Flex AE – because it is a Compute Engine instance, which has fixed IP. And Cloud VPN requires fixed IP for peers communication. Standard AE is a fully managed service without IP, accessed via URL request.



<https://stackoverflow.com/questions/37137914/is-it-possible-to-use-google-app-engine-with-google-cloud-vpn>

upvoted 4 times

  **Bakili** 4 months, 1 week ago

D seems okay

upvoted 1 times



  **djosani** 6 months, 3 weeks ago

It's no longer the truth. App engine standard can connect to VPC via VPC connector, so it can reach on-prem environment.

<https://stackoverflow.com/a/43729091>

The question is outdated, both B and D would suit.

upvoted 8 times

  **mikesp** 3 months, 3 weeks ago

I agree. On 2021: App Engine Standar for Python:

<https://cloud.google.com/appengine/docs/standard/python3/storage-options>

upvoted 1 times

  **MamthaSJ** 7 months, 3 weeks ago



Answer is D

upvoted 2 times

  **kopper2019** 8 months, 1 week ago

hey guys check Q3 for new Qs, 49 New Qs

upvoted 4 times

  **aviratna** 8 months, 1 week ago

D: App Engine Flexible is the right answer to connect using VPN. App engine Standard can not connect to VPC network directly.New version App Engine standard has option to connect using Serverless VPC access and then use connector, its a complex solution.

upvoted 3 times

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

- A. Upload the required installation files to Cloud Storage. Configure the VM on a subnet with a Private Google Access subnet. Assign only an internal IP address to the VM. Download the installation files to the VM using gsutil.
- B. Upload the required installation files to Cloud Storage and use firewall rules to block all traffic except the IP address range for Cloud Storage. Download the files to the VM using gsutil.
- C. Upload the required installation files to Cloud Source Repositories. Configure the VM on a subnet with a Private Google Access subnet. Assign only an internal IP address to the VM. Download the installation files to the VM using gcloud.
- D. Upload the required installation files to Cloud Source Repositories and use firewall rules to block all traffic except the IP address range for Cloud Source Repositories. Download the files to the VM using gsutil.

Correct Answer: B

Community vote distribution

A (90%)

10%

- zaki_b

Highly Voted

2 years, 4 months ago

Internet access is not allowed so it should be A. CMIIW

upvoted 47 times
- nitinz

12 months ago

A is the best answer.

upvoted 3 times
- kumarp6

1 year, 4 months ago

A is the answer

upvoted 3 times
- tartar

1 year, 6 months ago

A is ok

upvoted 10 times
- KNG

Highly Voted

2 years ago

Should be A

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

Note: Even though the IP addresses for Google APIs and services are public, the traffic path from instances that are using Private Google Access to the Google APIs remains within Google's network.

upvoted 11 times
- celina123123

Most Recent

1 month, 4 weeks ago

Selected Answer: A

You have to set Private Google Access for communicating between VM and Storage

upvoted 2 times
- ehgm

2 months ago

Unfortunately the question it's poorly designed.

B is correct: <https://cloud.google.com/vpc/docs/configure-private-google-access>

upvoted 1 times
- vincy2202

2 months, 1 week ago

A is the correct answer

upvoted 1 times
- gcp_learner

2 months, 3 weeks ago

It cannot be B because I don't think anything like "restricted IP range for GCS" exists, at best we can use the private access feature. So while I agree the answer is A, can someone explain why it's not C please?

upvoted 1 times
- vartiklis

2 months, 2 weeks ago

Cloud Source Repositories = Git repositories (for storing source code).

Cloud Storage is perfectly suitable for storing things like installation files.

So it's A :)

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

upvoted 2 times

  **PhilipKoku** 2 months, 3 weeks ago

Selected Answer: A

Google Cloud Storage + Private Google Access

upvoted 1 times

  **menon_sarath** 2 months, 3 weeks ago

Selected Answer: B

Option B is better suited as it explicitly restricts external access only to DataStore



upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago

Go for A.

Traffic from internet is not allowed.


upvoted 1 times

  **pakilodi** 2 months, 3 weeks ago

Selected Answer: A

A is correct here



upvoted 2 times

  **ggzzzzzzzz** 2 months, 4 weeks ago

Selected Answer: A



A is the answer, internet access is not allowed

upvoted 1 times

  **pnvijay** 3 months, 1 week ago

Is answer A or B?

upvoted 1 times

  **Igonzf** 3 months, 1 week ago

Selected Answer: A

Answer is A, Internet is not allowed



upvoted 2 times

  **TheCloudBoy77** 3 months, 1 week ago

Selected Answer: A



A is correct answer.

upvoted 1 times

  **ravisar** 3 months, 2 weeks ago

Answer is A - Transfer Appliance is recommended for data that exceeds 20 TB or would take more than a week to upload.

upvoted 1 times

  **BSING246** 4 months ago

A is correct by using VM with private VPC.

B is wrong selection.

upvoted 1 times

  **MaxNRG** 4 months, 1 week ago

A – enable Google private access for VM, upload file to GCS, and download it with gsutil.

B – doesn't work since GCS is managed service, so is accessed via URL, it doesn't have IP needed by firewall.

A – first enables Private access for VM, which only an option for VMs with internal IP only to access Google services. And such service in GCS.

Moreover, without Private access mode, VM can access only VMs on the same subnet (and not to Google APIs, services).

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

upvoted 1 times

  **HenkH** 2 months ago

The hostname in the URL however will resolve to an IP address.

The wording of this answer still is weird.

upvoted 1 times

Your company is moving 75 TB of data into Google Cloud. You want to use Cloud Storage and follow Google-recommended practices. What should you do?

- A. Move your data onto a Transfer Appliance. Use a Transfer Appliance Rehydrator to decrypt the data into Cloud Storage.
- B. Move your data onto a Transfer Appliance. Use Cloud Dataprep to decrypt the data into Cloud Storage.
- C. Install gsutil on each server that contains data. Use resumable transfers to upload the data into Cloud Storage.
- D. Install gsutil on each server containing data. Use streaming transfers to upload the data into Cloud Storage.

Correct Answer: A

Community vote distribution

A (75%)

C (25%)

- KouShikyou**

Highly Voted

2 years, 4 months ago

Why not A?

upvoted 26 times
- Trappatoni**

9 months, 1 week ago

<https://cloud.google.com/transfer-appliance/docs/4.0>
answer is C : Transfer Appliance is a hardware appliance you can use to securely migrate large volumes of data (from hundreds of terabytes up to 1 petabyte) to Google Cloud Platform without disrupting business operations.

upvoted 1 times
- Trappatoni**

9 months, 2 weeks ago

IT IS C <https://cloud.google.com/transfer-appliance/docs/4.0#suitability>

upvoted 1 times
- Koushick**

10 months ago

Answer is A.

upvoted 3 times
- nitinz**

12 months ago

A, anything over 10TB goes via appliance.

upvoted 10 times
- AshishK**

Highly Voted

2 years, 2 months ago

It should be 'A'

Transfer Appliance lets you quickly and securely transfer large amounts of data to Google Cloud Platform via a high capacity storage server that you lease from Google and ship to our datacenter. Transfer Appliance is recommended for data that exceeds 20 TB or would take more than a week to upload.

upvoted 22 times
- Yahowmy**

1 year, 7 months ago

To this date Transfer Appliance supported locations are only
United States
Canada
European Union
Norway
Switzerland.
What if data reside in a location other than this?
C is the most convenience for this scenario.

upvoted 4 times
- MyPractice**

2 years, 2 months ago

where did u get that 20 TB number - can help to share link?

upvoted 1 times
- onashwani**

1 year, 2 months ago

Here is the link:
<https://cloud.google.com/transfer-appliance/docs/2.2/overview>

upvoted 2 times
- gcp_learner**

2 months, 2 weeks ago

But that link mentions a few hundred terabytes to 1 petabyte not 20TB or did I read that incorrectly?

upvoted 1 times
- awsarchitect5**

Most Recent

2 weeks, 5 days ago

Selected Answer: A

<https://cloud.google.com/blog/ja/topics/developers-practitioners/how-transfer-your-data-google-cloud>

upvoted 2 times

🗲️ 👤 **Narinder** 1 month, 1 week ago

A, is the correct option for transferring data of few TB to PB.
gsutil is viable option if the data size is about 1TB or less than that.

Reference: <https://cloud.google.com/architecture/migration-to-google-cloud-transferring-your-large-datasets>

upvoted 1 times

🗲️ 👤 **OrangeTiger** 1 month, 4 weeks ago

Selected Answer: A

I vote A is correct.

Agree with this thread.

<https://cloud.google.com/blog/ja/topics/developers-practitioners/how-transfer-your-data-google-cloud>

upvoted 1 times

🗲️ 👤 **Atnafu** 2 months ago

The gsutil tool is the standard tool for small- to medium-sized transfers (less than 1 TB)

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

upvoted 2 times

🗲️ 👤 **Atnafu** 2 months ago

A is the Answer

upvoted 1 times

🗲️ 👤 **vincy2202** 2 months, 1 week ago

A is the correct answer

<https://cloud.google.com/blog/products/storage-data-transfer/introducing-transfer-appliance-in-the-eu-for-cloud-data-migration>

upvoted 1 times

🗲️ 👤 **gcp_learner** 2 months, 2 weeks ago

Selected Answer: C

I'll go with C because the file size ie 75TB is smaller than the recommended size for Transfer Appliance (btw a few hundred TBs to 1 Petabyte.

upvoted 1 times

🗲️ 👤 **vartiklis** 2 months, 2 weeks ago

Nope - it's A because using C would take an unreasonably long time.

upvoted 1 times

🗲️ 👤 **MaxNRG** 4 months, 1 week ago

A – move data on Transfer appliance. Use Data Transfer rehydrator to decrypt data for Cloud Storage,
Google recommends to use Transfer appliance, for moving 20+ TB of data or if upload takes more than a week.

<https://cloud.google.com/blog/products/storage-data-transfer/introducing-transfer-appliance-in-the-eu-for-cloud-data-migration>

upvoted 1 times

🗲️ 👤 **BSING246** 4 months, 1 week ago

A is correct. Some suggesting C is not Ok as per google guidelines.

upvoted 1 times

🗲️ 👤 **alexgrig** 4 months, 2 weeks ago

Google recommends that enterprises use Transfer Appliance in cases where it would take them over a week to upload data to the cloud via the internet, or when an enterprise needs to migrate over 60 TB of data.

upvoted 1 times

🗲️ 👤 **[Removed]** 4 months, 3 weeks ago

Transfer Appliance Rehydrator appears to be a deprecated (or at least obscured) piece of technology. If you look all through the docs there is no longer a reference to this. So I believe it is A, but I also bet the test does not include a reference to the Rehydrator.

<https://cloud.google.com/transfer-appliance/docs/4.0/installation-guide?hl=en#validating>

upvoted 1 times

🗲️ 👤 **pr2web** 5 months, 3 weeks ago

Answer is A.

Transfer appliance is a good use case for data size greater than or equal to 10TB

<https://cloud.google.com/transfer-appliance/docs/4.0/overview>


upvoted 1 times

🗲️ 👤 **hongha** 7 months, 1 week ago

A is the correct answer.

To understand all types of the data transfer (gsutil, Transfer Service, Transfer Appliance) refer to https://www.youtube.com/watch?v=9H8abw_bOL8

upvoted 1 times

  **rm_2495** 7 months, 2 weeks ago

Ans should be A.

"Google recommends that enterprises use Transfer Appliance in cases where it would take them over a week to upload data to the cloud via the internet, or when an enterprise needs to migrate over 60 TB of data.

"<https://searchcloudcomputing.techtarget.com/definition/Google-Transfer-Appliance>

upvoted 2 times

  **MamthaSJ** 7 months, 3 weeks ago


Answer is A

upvoted 3 times

  **kopper2019** 8 months, 1 week ago

hey guys check Q3 for new Qs, 49 New Qs

upvoted 1 times

  **zira** 5 months ago

What does Q3 mean? and where I can find it?

upvoted 1 times

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

- A. Use kubectl set image deployment/echo-deployment <new-image>
- B. Use the rolling update functionality of the Instance Group behind the Kubernetes cluster
- C. Update the deployment yaml file with the new container image. Use kubectl delete deployment/echo-deployment and kubectl create λ€"f <yaml-file>
- D. Update the service yaml file which the new container image. Use kubectl delete service/echo-service and kubectl create λ€"f <yaml-file>



Correct Answer: A



Community vote distribution



A (100%)



  **ffk** Highly Voted 2 years, 4 months ago
A is correct.

B is funny
upvoted 34 times

  **tartar** 1 year, 6 months ago
A is ok
upvoted 14 times



  **nitinz** 12 months ago
Only logical answer is A.
upvoted 1 times



  **kumarp6** 1 year, 4 months ago
Yes A is correct
upvoted 3 times



  **DrLu** 2 years, 2 months ago
This question asked "You need to perform an update to the application with minimal downtime to the application."
upvoted 2 times

  **jcmoranp** Highly Voted 2 years, 4 months ago
Correct is A
upvoted 12 times



  **OrangeTiger** Most Recent 1 month, 4 weeks ago
I think B.
upvoted 1 times

  **OrangeTiger** 1 month, 4 weeks ago
I really confused by a sentence 'Instance Group behind the Kubernetes cluster' .
It's correct to use the rolling update feature, but in gke, do it with a pod and replica.
A is how to work rolling updatee in GKE. So A is correct.
upvoted 1 times

  **vincy2202** 2 months, 1 week ago
Selected Answer: A
A is the correct answer
upvoted 2 times

  **MaxNRG** 4 months, 1 week ago
A – kubectl set image deployment/my-deployment mycontainer=myimage
B is also possible, it is basically same as A but described verbally. A is just more specific.


So, pay attention to such Q, maybe there could be rough mistake in one of them, so you would choose another. But, the rule of thumb – more specific is right.
Also, managed Instance group is a “bad smell” in B, normally it is not mentioned in GKE design (though GKE underneath is based on GCE and instance group).
upvoted 2 times

  **AWSPPro24** 3 months, 3 weeks ago



B is not okay. You aren't supposed to touch the instance groups manually when using GKE. Let GKE manage them.
upvoted 2 times

  **MamthaSJ** 7 months, 3 weeks ago


Answer is A
upvoted 3 times

  **kopper2019** 8 months, 1 week ago

hey guys check Q3 for new Qs, 49 New Qs
upvoted 2 times

  **ale183** 5 months, 1 week ago



hey kopper2019 , are any of old questions appearing on new exam or only new Qs ?
upvoted 2 times

  **aviratna** 8 months, 1 week ago


A is correct. No disruption, it will rollout in stages for each POD running behind service. Other option there is a disruption.
upvoted 3 times

  **victory108** 9 months, 2 weeks ago

A. Use kubectl set image deployment/echo-deployment <new-image>
upvoted 2 times

  **un** 9 months, 3 weeks ago



A is correct
upvoted 1 times

  **Ausias18** 11 months ago


Answer is A
upvoted 1 times

  **nitinz** 12 months ago

Correct Answer is A, reason check the k8s cheat-sheet: -
kubectl set image deployment/frontend www=image:v2 # Rolling update "www" containers of "frontend" deployment, updating the image
upvoted 3 times



  **GS14** 1 year, 1 month ago

I would go with "A", command mentioned in "A" does the rolling update, B is just confusing as there is no instance group for K8S
upvoted 1 times

  **bnlcnd** 1 year, 1 month ago

kubectl set image deployment nginx nginx=nginx:1.9.1
or: change the deployment setting in yaml and then
kubectl apply -f abc.yaml


A is the answer
upvoted 1 times

  **Prakzz** 1 year, 2 months ago

A is correct
upvoted 1 times

  **sdsdfasdf4** 1 year, 2 months ago

A is correct, B is incorrect because you're rolling the pods not the nodes of the kubernetes.
upvoted 2 times

  **Mndwsk** 1 year, 2 months ago

A.
"set image ..." initiates a k8s rolling update of the deployment. Search for rolling update deployment strategy. It minimizes downtime during deployment.
upvoted 1 times

Your company is using BigQuery as its enterprise data warehouse. Data is distributed over several Google Cloud projects. All queries on BigQuery need to be billed on a single project. You want to make sure that no query costs are incurred on the projects that contain the data. Users should be able to query the datasets, but not edit them.

How should you configure users' access roles?

- A. Add all users to a group. Grant the group the role of BigQuery user on the billing project and BigQuery dataViewer on the projects that contain the data.
- B. Add all users to a group. Grant the group the roles of BigQuery dataViewer on the billing project and BigQuery user on the projects that contain the data.
- C. Add all users to a group. Grant the group the roles of BigQuery jobUser on the billing project and BigQuery dataViewer on the projects that contain the data.
- D. Add all users to a group. Grant the group the roles of BigQuery dataViewer on the billing project and BigQuery jobUser on the projects that contain the data.

Correct Answer: C

Community vote distribution

C (100%)

  **kimharsh** 3 weeks, 4 days ago

Selected Answer: C

C is the correct Answer ,
A is wrong because bq User Permission will allow you to edit the dataset, which is something that we don't want in this scenario.
B and D is wrong because "You want to make sure that no query costs are incurred on the projects that contain the data" so you don't want users to fire queries on the Project that contains the dataset , hence the "dataViewer" permission

<https://cloud.google.com/bigquery/docs/access-control>
upvoted 1 times

  **kimharsh** 3 weeks, 4 days ago

C is the correct Answer ,
A is wrong because bq User Permission will allow you to edit the dataset, which is something that we don't want in this scenario.
B and D is wrong because "You want to make sure that no query costs are incurred on the projects that contain the data" so you don't want users to fire queries on the Project that contains the dataset , hence the "dataViewer" permission

<https://cloud.google.com/bigquery/docs/access-control>
upvoted 1 times

  **victory108** 2 months ago

C. Add all users to a group. Grant the group the roles of BigQuery jobUser on the billing project and BigQuery dataViewer on the projects that contain the data.
upvoted 4 times

  **LoveT** 2 months ago

C looks to be the correct answer
upvoted 2 times

  **HenkH** 2 months ago

Selected Answer: C

JobUser is the correct terminology for bq. Only read access to data sources is required.
upvoted 1 times

  **HenkH** 2 months ago

bq is using jobs - so "user" isn't specific enough, jobuser is.
upvoted 2 times



  **elenamatay** 1 month, 4 weeks ago



Hence C
upvoted 1 times



You have developed an application using Cloud ML Engine that recognizes famous paintings from uploaded images. You want to test the application and allow specific people to upload images for the next 24 hours. Not all users have a Google Account. How should you have users upload images?



- A. Have users upload the images to Cloud Storage. Protect the bucket with a password that expires after 24 hours.
- B. Have users upload the images to Cloud Storage using a signed URL that expires after 24 hours.
- C. Create an App Engine web application where users can upload images. Configure App Engine to disable the application after 24 hours. Authenticate users via Cloud Identity.
- D. Create an App Engine web application where users can upload images for the next 24 hours. Authenticate users via Cloud Identity.



Correct Answer: B



  **jcmoranp** Highly Voted 2 years, 4 months ago
Correct answer is B
upvoted 43 times



  **nitinz** 12 months ago
B signed URL
upvoted 3 times



  **kumarp6** 1 year, 4 months ago
Signed URL ... B is correct
upvoted 3 times



  **tartar** 1 year, 6 months ago
B is ok
upvoted 8 times



  **MyPractice** Highly Voted 2 years, 2 months ago
Ans B
"When should you use a signed URL? In some scenarios, you might not want to require your users to have a Google account in order to access Cloud Storage" "Signed URLs contain authentication information in their query string, allowing users without credentials to perform specific actions on a resource"
<https://cloud.google.com/storage/docs/access-control/signed-urls>
upvoted 16 times



  **vincy2202** Most Recent 2 months, 1 week ago
B is the correct answer
upvoted 2 times

  **haroldbenites** 2 months, 3 weeks ago
Go for B.
upvoted 1 times

  **MaxNRG** 4 months, 1 week ago
B – Have users upload the images to Cloud Storage via signed URL which expires after 24 hours.
Signed URL is a preferable way to allow something with limited timeframe, doesn't require the account
upvoted 1 times

  **BSING246** 4 months, 1 week ago
B is right. Signed URL are best for users for short term access.
upvoted 1 times

  **MamthaSJ** 7 months, 3 weeks ago
Answer is B
upvoted 3 times

  **rishab86** 8 months, 4 weeks ago
Answer B
A signed URL is a URL that provides limited permission and time to make a request. Signed URLs contain authentication information in their query string, allowing users without credentials to perform specific actions on a resource. When you generate a signed URL, you specify a user or service account which must have sufficient permission to make the request that the signed URL will make. After you generate a signed URL, anyone who possesses it can use the signed URL to perform specified actions, such as reading an object, within a specified period of time.

When should you use a signed URL?



In some scenarios, you might not want to require your users to have a Google account in order to access Cloud Storage, but you still want to control access using your application-specific logic.

upvoted 4 times

  **victory108** 9 months, 2 weeks ago

B. Have users upload the images to Cloud Storage using a signed URL that expires after 24 hours.

upvoted 2 times

  **un** 9 months, 3 weeks ago

B is correct

upvoted 1 times

  **Ausias18** 11 months ago

Answer is B

upvoted 1 times

  **lynx256** 11 months, 1 week ago

B is the simplest.... But isn't it too simple ?

I assume we will create a Cloud Finction to get the uploaded images from the bucket where users will upload images and this Cloud Function will be triggered and will move the objects (images) to final destination, where users haven't access. That's ok.

So. Do we want users to read (get) or delete the images they uploaded for a few minutes after uploading (before Cloud Function moves them)? If NOT - it would've be too strange and restrictive. In the other hand, if we created Signed URL also with read/delete permission, all users can read (get) and/or delete images uploaded from others (imagine a malicious app).

Maybe we should consider C or D ? What do you think ?

upvoted 1 times

  **lynx256** 11 months, 1 week ago

Sorry, I went too far...



This is only testing app and users will upload well-known paintings (not pictures of people) - so in such scenario no one would create malicious app I wrote above.

upvoted 1 times

  **AD3** 11 months, 2 weeks ago

'B', is correct, search on google for "google signed url" the page was updated on Jan 2021, it says in the beginning "This page provides a 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...."

upvoted 1 times

  **Kiroo** 11 months, 2 weeks ago

I thought about B and D because allow only a specific set of users , but since app engine standard and would be hard to create a user and password to everyone I think that would be easier to use a signed url. A is just wrong

upvoted 1 times

  **padamdha** 11 months, 2 weeks ago



B is correct.

upvoted 1 times

  **joshuaquek** 1 year, 1 month ago

It should be B. There is no such "bucket password" feature available for Google Cloud Storage.

upvoted 1 times

  **bolu** 1 year, 1 month ago

if you practice all 230 questions and come back to this answers list, you will choose B by default since A (what chosen as answer in question is illogical). B is appropriate.

upvoted 1 times

Your web application must comply with the requirements of the European Union’s General Data Protection Regulation (GDPR). You are responsible for the technical architecture of your web application. What should you do?

- A. Ensure that your web application only uses native features and services of Google Cloud Platform, because Google already has various certifications and provides “pass-on” compliance when you use native features.
- B. Enable the relevant GDPR compliance setting within the GCP Console for each of the services in use within your application.
- C. Ensure that Cloud Security Scanner is part of your test planning strategy in order to pick up any compliance gaps.
- D. Define a design for the security of data in your web application that meets GDPR requirements.



Correct Answer: D



Reference:

<https://www.mobiloud.com/blog/gdpr-compliant-mobile-app/>



Community vote distribution



D (100%)



  **AWS56** Highly Voted 2 years, 1 month ago
Agree D
upvoted 16 times



  **AshokC** Highly Voted 1 year, 5 months ago
D - <https://cloud.google.com/security/gdpr>
The GDPR lays out specific requirements for businesses and organizations who are established in Europe or who serve users in Europe. It:



Regulates how businesses can collect, use, and store personal data
Builds upon current documentation and reporting requirements to increase accountability
Authorizes fines on businesses who fail to meet its requirements
upvoted 9 times



  **VT001** Most Recent 2 weeks, 5 days ago
Selected Answer: D
I got similar question on my exam.
upvoted 3 times



  **vincy2202** 2 months, 1 week ago
D is the correct answer
upvoted 1 times



  **haroldbenites** 2 months, 3 weeks ago
Go for D
upvoted 1 times

  **joe2211** 3 months, 1 week ago
Selected Answer: D
vote D
upvoted 1 times

  **MaxNRG** 4 months, 1 week ago
D – Define a design for the security of data in your web app that meets GDPR requirements.
upvoted 1 times

  **MikeB19** 6 months ago
A is wrong D is correct. The q refers is “Microsoft sql” not “MySQL”. App replication in MSsql is achieved with Availability Groups within MSsql
<https://docs.microsoft.com/en-us/sql/database-engine/availability-groups/windows/overview-of-always-on-availability-groups-sql-server?view=sql-server-ver15>
upvoted 1 times

  **MamthaSJ** 7 months, 3 weeks ago
Answer is D
upvoted 3 times

  **victory108** 9 months, 2 weeks ago
D. Define a design for the security of data in your web application that meets GDPR requirements.
upvoted 2 times

🗨️ 👤 **un** 9 months, 3 weeks ago

D is correct

upvoted 1 times

🗨️ 👤 **Ausias18** 11 months ago

Answer is D

upvoted 1 times

🗨️ 👤 **lynx256** 11 months, 1 week ago

D is ok

upvoted 1 times

🗨️ 👤 **CloudGenious** 1 year ago

you should design your app such that they meet GDPR req. As a customer google cloud, GDPR should be part of protection strategy .So the ans is D.

upvoted 2 times

🗨️ 👤 **bnlcnd** 1 year, 1 month ago

There is really no real answer in the 4 choices.

D is so generic that it cannot go wrong :)

upvoted 2 times

🗨️ 👤 **kimberjdaw** 1 year, 5 months ago

It's an architect test, obviously D.

upvoted 1 times

🗨️ 👤 **mlantonis** 1 year, 8 months ago

D is correct

upvoted 1 times

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

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

Correct Answer: D



Community vote distribution



A (69%)



D (31%)



  **learningpv** Highly Voted 2 years, 1 month ago



A seems correct.
"... high availability (HA) configuration for Cloud SQL instances... A Cloud SQL instance configured for HA is also called a regional instance and is located in a primary and secondary zone within the configured region.
In the event of an instance or zone failure, this configuration reduces downtime, and your data continues to be available to client applications."
upvoted 31 times



  **diluvioniv** 7 months, 2 weeks ago
but it says: you need to setup SQL Server
upvoted 6 times

  **learningpv** 2 years, 1 month ago
It applies for MySQL and HA is not available for MS SQL
upvoted 3 times



  **cetanx** 1 year, 8 months ago
It is available, please see;
https://cloud.google.com/sql/docs/sqlserver/high-availability?_ga=2.30855355.-503483612.1582800507
Also a video from Google;
<https://youtu.be/vMUpNoukwnM>
upvoted 6 times



  **Jos** 2 years, 1 month ago
Yes it is available, its in beta, but when creating a "SQL Server 2017 Standard" in Cloud SQL menu you can chose single one or HA (regional).
upvoted 3 times


  **SMS** Highly Voted 1 year, 11 months ago
Answer is A. Cloud SQL supports SQL Server and selecting high availability provides automatic failover within a region.
upvoted 16 times

  **vpatiltech** Most Recent 2 weeks, 2 days ago
Selected Answer: A
The purpose of an HA configuration is to reduce downtime when a zone or instance becomes unavailable. This might happen during a zonal outage, or when an instance becomes corrupted. With HA, your data continues to be available to client applications.

Ref- <https://cloud.google.com/sql/docs/mysql/high-availability>
upvoted 2 times

  **pondai** 3 weeks, 2 days ago
Cloud SQL HA matintenance still have downtime, so I go with D
upvoted 1 times

  **ashehzad** 1 month, 2 weeks ago
Selected Answer: D
set up Microsoft SQL Server is the key here.... D is the right answer.
upvoted 2 times

  **OrangeTiger** 1 month, 4 weeks ago

In a past D was correct. But now A is correct.
But D is correct because they won't change the answer from the time you set the question.
Its really confusional question.
I hope it doesn't appear in the current exam.

upvoted 2 times

  **OrangeTiger** 1 month, 4 weeks ago

In official recommend A. It released in 2021.
<https://events.withgoogle.com/solution-design-pattern-infra-rdb-network/high-availability/>
But cleally said 'You need to set up Microsoft SQL Server on GCP'.
It's a really confusing issue. The harder you study, the more wrong you will be.

upvoted 3 times

  **AsadZaidi** 1 month, 4 weeks ago

Selected Answer: D

<https://cloud.google.com/compute/docs/instances/sql-server/configure-availability>

upvoted 2 times

  **Pramodkumarnayak** 2 months ago

Cloud SQL and MS SQL is both different blend . So D is the perfect answer .

upvoted 2 times

  **Shark666** 2 months, 1 week ago

Answer is D, they are asking how to take the "SQL Server" functionality to GCP



upvoted 2 times

  **ABO_Doma** 2 months, 1 week ago

Selected Answer: D

A) This option is quite close, but it is important to note that although Cloud SQL offers HA mode, there is downtime when a zone/instance fails. It would help if you had SQL Server AlwaysOn Availability Groups for zero downtime which Cloud SQL for SQL Server does not support.

upvoted 1 times

  **pddddd** 1 month, 3 weeks ago

It appears you do not know how AAG works - in case of failover, there is downtime...

upvoted 1 times

  **phantomsg** 2 months, 2 weeks ago

Selected Answer: A


As of today, GCP supports SQLServer and HA in CloudSQL. Hence Answer A. The answer D was correct 1 year ago.

upvoted 2 times

  **haroldbenites** 2 months, 3 weeks ago

Go for A.
Cloud SQL supports SQL Server, MySQL, PostgreSQL



upvoted 1 times

  **pakilodi** 2 months, 3 weeks ago

Selected Answer: A

Vote A



upvoted 2 times

  **joe2211** 3 months, 1 week ago

Selected Answer: A

vote A



upvoted 2 times

  **toyot0** 3 months, 1 week ago

Selected Answer: A

A is correct. Question mentioned "no downtime in case of a data center outage in any of the zones within a GCP region" So its single region not multi-region. For single region enable HA by setting --availability-type REGIONAL gcloud sql instances patch INSTANCE_NAME \ --availability-type REGIONAL Deploy a "multi-regional" disaster-recovery environment on Google Cloud by using Microsoft SQL Server's AlwaysOn Availability Groups <https://cloud.google.com/architecture/deploying-microsoft-sql-server-multi-regional-disaster-recovery>



upvoted 3 times

  **ravisar** 3 months, 2 weeks ago

Cloud SQL instances are fully managed, relational MySQL, PostgreSQL, and SQL Server databases.. CloudSQL Support Microsoft SQL. When creating Cloud SQL MS. SQL it ask about
Multiple zones (Highly available)
Automatic failover to another zone within your selected region. Recommended for production instances. Primary zone, Secondary zone

So Answer is A

upvoted 1 times

  **FERIN_02** 3 months, 4 weeks ago

While creating SQL server in Google cloud console we can see following HA configurations selection after selecting region

Region

us-central1 (Iowa)

Zonal availability

Single zone

In case of outage, no failover. Not recommended for production.

Multiple zones (Highly available)

Automatic failover to another zone within your selected region. Recommended for production instances. Increases cost.

Hence Option A is right

upvoted 1 times

The development team has provided you with a Kubernetes Deployment file. You have no infrastructure yet and need to deploy the application. What should you do?

- A. Use gcloud to create a Kubernetes cluster. Use Deployment Manager to create the deployment.
- B. Use gcloud to create a Kubernetes cluster. Use kubectl to create the deployment.
- C. Use kubectl to create a Kubernetes cluster. Use Deployment Manager to create the deployment.
- D. Use kubectl to create a Kubernetes cluster. Use kubectl to create the deployment.

Correct Answer: B

Community vote distribution

B (100%)

- MeasService**

Highly Voted

2 years, 4 months ago

It has to be B. gcloud for creating cluster and kubectl for creating deployment

upvoted 47 times
- KouShikyou**

Highly Voted

2 years, 4 months ago

May I ask why C is correct?
I thought B was correct.

upvoted 26 times
- nitinz**

12 months ago

B, gcloud to manage GKE and to manage pods use kubectl.

upvoted 2 times
- kumarp6**

1 year, 4 months ago

B is correct, when you create a nodes in GKE you use gcloud rather than kubectl...

upvoted 4 times
- res3**

1 year, 8 months ago

yeap, gcloud command to create K8s cluster <https://cloud.google.com/kubernetes-engine/docs/how-to/creating-a-cluster>

upvoted 3 times
- tartar**

1 year, 6 months ago

B is ok

upvoted 9 times
- ghadxx**

Most Recent

1 month ago

Selected Answer: B

Deployment Manager is used to automate the process of provisioning infrastructure. Therefore, gcloud and Deployment Manager do the same thing. Meanwhile, kubectl is used to run commands against an already created cluster.

upvoted 2 times
- haroldbenites**

2 months, 3 weeks ago

Go for B.
gcloud for create clusters.
kubectl is used when the cluster already has been created. For example to create deployments.
Kubectl has configured a config file where is specified the default cluster.

upvoted 1 times
- vincy2202**

3 months ago

B is correct

upvoted 1 times
- Zinhle**

3 months, 4 weeks ago

Hi all may someone please share the link for the bank of questions because I cannot seem to locate them.

thank you

upvoted 1 times
- MaxNRG**

4 months, 1 week ago


B – use gcloud to create cluster, use kubectl to create a deployment.
<https://cloud.google.com/kubernetes-engine/docs/how-to/creating-a-zonal-cluster>
In fact, kubectl run creates a deployment.
<https://cloud.google.com/kubernetes-engine/docs/tutorials/hello-app>

upvoted 1 times

  **ale183** 5 months, 1 week ago



Question for all , do we know if only new questions are part of the bank for new exam? Have any of the old questions appeared on new exam?

upvoted 3 times

  **xaliq** 5 months, 2 weeks ago

B is corrent

upvoted 1 times

  **Raja101** 5 months, 2 weeks ago

Why not A ?

upvoted 1 times

  **MamthaSJ** 7 months, 3 weeks ago



Answer is B

upvoted 2 times

  **kopper2019** 8 months, 1 week ago

hey guys check Q3 for new Qs

upvoted 1 times

  **aviratna** 8 months, 1 week ago


B is correct. 1st create GKE cluster using gcloud command and then use kubectl command for application deployment using deployment

upvoted 1 times

  **certificationjjmmm** 9 months ago



No doubt about it is "B"

upvoted 1 times

  **victory108** 9 months, 2 weeks ago

B. Use gcloud to create a Kubernetes cluster. Use kubectl to create the deployment.

upvoted 2 times

  **un** 9 months, 3 weeks ago

B is correct

upvoted 1 times

  **getAlok** 10 months, 1 week ago

B

Create kubernaes cluster - gcloud container clusters create my-cluster --zone

Do deployment - kubectl apply -f file name

upvoted 2 times

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



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



Correct Answer: A



Community vote distribution



B (86%) 14%



  **KouShikyou** Highly Voted 2 years, 3 months ago
B is correct.
upvoted 31 times



  **nitinz** 12 months ago
B, looks like cooked up question. Not gonna show up on actual test. Even if it does show up, its not market.
upvoted 4 times



  **ACE_ASPIRE** 5 months, 1 week ago
exactly
upvoted 1 times

  **kumarp6** 1 year, 4 months ago
Yes it is
upvoted 1 times

  **passnow** 2 years, 2 months ago
I would agree with you because the question says create a skills gap plan
upvoted 2 times

  **mawsman** Highly Voted 2 years ago
I think it's B. "You must perform the evaluation and create a skills gap plan incorporates the business goal of cost optimization." The goal is to cost optimize - they might have deployed 2 projects but are they cost optimized? I think the only way to evaluate the skills gap in cost optimization is to make them get certified and use the results to determine cost optimization skills gap. Quickly pushing another project deadline would not help with cost optimization.
upvoted 16 times

  **Smart** 2 years ago
Agreed. How is setting up a GCP project deadline helping towards skill gap and cost optimization.
upvoted 3 times



  **AWS56** Most Recent 1 week, 3 days ago

Selected Answer: C

E
Copy
Look Up
Translate
Share....
New Quick Note



AWS56 0 minutes ago Awaiting moderator approval



C is the correct answer in real life. In Capgemini we hire external contractors give them a deadline. So IMHO, the correct answer is C as I have a live example.
upvoted 1 times



  **AWS56** 1 week, 3 days ago
C is the correct answer in real life. In Capgemini we hire external contractors give them a deadline and say bye bye after the work. So IMHO, the correct answer is C as I have a live and scenario. What more would you need to prove it wrong ?
upvoted 1 times

  **OrangeTiger** 1 month, 4 weeks ago

They have already succeeded in two projects.
I think that qualification is rarely set as a goal in actual work.
Do they need to get certified?
However, since the problem statement says'skill gap plan', I think it is effective to acquire certification to judge the success or failure of the plan.
upvoted 1 times

  **OrangeTiger** 1 month, 4 weeks ago
I vote B.
upvoted 2 times



  **OrangeTiger** 1 month, 4 weeks ago
If I'm an inexperienced leader, rely on C. Of course, the answer is a joke.
upvoted 2 times



  **PhilipKoku** 2 months, 3 weeks ago



Selected Answer: B

B is the only valid answer

upvoted 2 times

  **RCasagrande** 2 months, 3 weeks ago
Agree with B.
upvoted 1 times



  **haroldbenites** 2 months, 3 weeks ago
Go for B.
upvoted 1 times

  **pakilodi** 2 months, 3 weeks ago

Selected Answer: B

Vote B



upvoted 1 times



  **ggzzzzzzzz** 2 months, 4 weeks ago

Selected Answer: B

B is correct,

upvoted 1 times



  **vincy2202** 3 months ago
B is correct answer
upvoted 1 times

  **joe2211** 3 months, 1 week ago

Selected Answer: B

vote B



upvoted 1 times



  **toyot0** 3 months, 1 week ago



Selected Answer: B



I think it's B. "You must perform the evaluation and create a skills gap plan incorporates the business goal of cost optimization." The goal is to cost optimize - they might have deployed 2 projects but are they cost optimized? I think the only way to evaluate the skills gap in cost optimization is to make them get certified and use the results to determine cost optimization skills gap. Quickly pushing another project deadline would not help with cost optimization.

upvoted 1 times

  **exam_war** 3 months, 4 weeks ago
I vote for B
upvoted 2 times

  **MaxNRG** 4 months, 1 week ago
B – budget for team training, create a roadmap for your team to achieve certification based on job role.
Per Google Cert page:
• Get job role certification after 1+ year with GCP products (they delivered 2 products so far).
• It validates your tech expertise
• When preparing to cert you are expected to find and fill your skill gaps.
A seems also right, but it doesn't answer if team is ready.
C/D would be more expensive with external consultant.
upvoted 1 times

  **VikramMohariya** 6 months ago
In Real Time, Getting Training is good to start the wokr,, Certification can be done after successful training and hands on.
upvoted 1 times

  **diaga2** 6 months, 1 week ago
As mentioned "business goal of cost optimization" and "Team already delivered two GCP projects", I will go for A.

upvoted 3 times

Question #63

Topic 1



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



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



Correct Answer: A



Community vote distribution



A (100%)



  **victory108** Highly Voted 2 months ago
A. Cloud Functions
upvoted 5 times

  **vpatiltech** 2 weeks, 2 days ago
Cloud function is more for event driven computing. We surely need k8s or app engine. Flex always have 1 instance running. So GKE should be the option
upvoted 1 times

  **Sskhan** Most Recent 1 month, 1 week ago
Selected Answer: A
Answer is A, As Option D App engine flexible can have minimum 1 instance active.
upvoted 1 times

  **Sskhan** 1 month, 1 week ago
Answer is A, As Option D App engine flexible can have minimum 1 instance active.
upvoted 1 times

  **elenamatay** 1 month, 4 weeks ago
Isn't it that with Kubernetes version 1.7 you can have a minimum of 0 in your node pool, being able to scale to 0? See https://cloud.google.com/kubernetes-engine/docs/concepts/cluster-autoscaler#minimum_and_maximum_node_pool_size blue note
upvoted 2 times

  **HenkH** 2 months ago
Functions is the only service billed against actual usage
upvoted 1 times

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

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

Correct Answer: A

Community vote distribution

A (100%)

  **shashu07** Highly Voted 1 year, 8 months ago

Correct Answer: A
Create the Key object for each Entity and run a batch get operation
<https://cloud.google.com/datastore/docs/best-practices>
Use batch operations for your reads, writes, and deletes instead of single operations. Batch operations are more efficient because they perform multiple operations with the same overhead as a single operation.
Firestore in Datastore mode supports batch versions of the operations which allow it to operate on multiple objects in a single Datastore mode call. Such batch calls are faster than making separate calls for each individual entity because they incur the overhead for only one service call. If multiple entity groups are involved, the work for all the groups is performed in parallel on the server side.
upvoted 22 times

  **AWS56** Highly Voted 2 years, 1 month ago



Agree A
upvoted 6 times

  **haroldbenites** Most Recent 2 months, 3 weeks ago



go for A.
upvoted 1 times

  **vincy2202** 3 months ago

A is the right answer
upvoted 1 times


  **joe2211** 3 months, 1 week ago

Selected Answer: A
vote A
upvoted 1 times



  **MaxNRG** 4 months, 1 week ago

A – create a key object for each entity, and run a batch get operations.
See Batch Operations section here: <https://cloud.google.com/datastore/docs/concepts/entities>
`var keys = new Key[] { _keyFactory.CreateKey(1), _keyFactory.CreateKey(2) };`
`var tasks = _db.Lookup(keys[0], keys[1]);`

1 and 2 are identifiers of the Key. Check Key / Identifier definition on the same link (top of that page)
Such batch calls are faster than making separate calls for each individual entity because they incur the overhead for only one service call.
upvoted 1 times

  **victory108** 9 months, 2 weeks ago

A. Create the Key object for each Entity and run a batch get operation
upvoted 1 times

  **un** 9 months, 3 weeks ago

A is correct
upvoted 1 times

  **Ausias18** 11 months ago

Answer is A
upvoted 1 times

  **Ausias18** 11 months ago

Answer is A
upvoted 1 times

🗨️ 👤 **lynx256** 11 months, 1 week ago

Agree A.

Look at best practices: Ref: https://cloud.google.com/datastore/docs/best-practices#api_calls

"Use batch operations for your reads, writes, and deletes instead of single operations. Batch operations are more efficient because they perform multiple operations with the same overhead as a single operation."

C is also good but is no longer recommended: <https://cloud.google.com/appengine/docs/standard/java/datastore/queries>

upvoted 2 times

🗨️ 👤 **Steve21** 11 months, 1 week ago

Ans. A like this in Java `Iterator<Entity> tasks = datastore.get(datastore.get(taskKey1), datastore.get(taskKey2));`
and `taskKey1`

upvoted 2 times

🗨️ 👤 **CloudGenious** 1 year ago

if there is identifier for each data then you need to query every time for each identifier .that will increase the hit ratio. and down the optimization

upvoted 1 times

🗨️ 👤 **Kevinzhang** 1 year, 2 months ago

I would go with A.

(<https://cloud.google.com/datastore/docs/concepts/entities#datastore-datastore-named-key-python>)

Each entity in a Datastore mode database has a key that uniquely identifies it. The key consists of the following components:

- The namespace of the entity, which allows for multitenancy
- The kind of the entity, which categorizes it for the purpose of queries
- An identifier for the individual entity, which can be either
 - a key name string
 - an integer numeric ID
- An optional ancestor path locating the entity within the database hierarchy

An application can fetch an individual entity from the database using the entity's key, or it can retrieve one or more entities by issuing a query based on the entities' keys or property values.

upvoted 2 times

🗨️ 👤 **CosminCiuc** 1 year, 2 months ago

I think the correct answer is C, create a query filter and run a batch operation.

https://cloud.google.com/datastore/docs/concepts/entities#batch_operations

upvoted 1 times

🗨️ 👤 **amxexam** 6 months ago

That is a batch operation, not a batch query operation.

upvoted 1 times

🗨️ 👤 **cucu** 1 year ago

there's no such thing as "batch query operation"

upvoted 1 times

🗨️ 👤 **fankan** 1 year, 3 months ago

Batch Operations is true. But " for which you have the identifiers", so D is the answer

upvoted 3 times

🗨️ 👤 **fankan** 1 year, 3 months ago

Sorry, I mean C.

upvoted 2 times

🗨️ 👤 **AshokC** 1 year, 5 months ago

Answer: A

upvoted 1 times

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

- A. Supply the encryption key in a .boto configuration file. Use gsutil to upload the files.
- B. Supply the encryption key using gcloud config. Use gsutil to upload the files to that bucket.
- C. Use gsutil to upload the files, and use the flag --encryption-key to supply the encryption key.
- D. Use gsutil to create a bucket, and use the flag --encryption-key to supply the encryption key. Use gsutil to upload the files to that bucket.

Correct Answer: A

Community vote distribution

A (100%)

- KouShikyou**

Highly Voted

 2 years, 4 months ago

In GCP document, key could be configured in .boto.
I didn't find information show gsutil supports flag "--encryption-key".

<https://cloud.google.com/storage/docs/encryption/customer-supplied-keys>
upvoted 30 times
- kumarp6** 1 year, 4 months ago

.boto file with encryption key, but it will work for individual users, every user should update their own .boto with same key. Also while retrieving you should use the same key to decryption.

upvoted 2 times
- nitinz** 12 months ago

A is correct

upvoted 4 times
- tartar** 1 year, 6 months ago

A is ok

upvoted 14 times
- Eroc**

Highly Voted

 2 years, 4 months ago

I agree, A.(<https://cloud.google.com/storage/docs/gsutil/addlhelp/UsingEncryptionKeys#generating-customer-supplied-encryption-keys>)

upvoted 18 times
- haroldbenites**

Most Recent

 2 months, 3 weeks ago

Go for A

upvoted 1 times
- vincy2202** 3 months ago

A is the correct answer

upvoted 1 times
- joe2211** 3 months, 1 week ago

Selected Answer: A

vote A

upvoted 1 times
- iobluedot** 3 months, 1 week ago

Answer is A.
<https://cloud.google.com/storage/docs/boto-gsutil#boto>

upvoted 1 times
- MamthaSJ** 7 months, 3 weeks ago

Answer is A

upvoted 3 times
- kopper2019** 8 months ago

all New Questions released in June 2021 are in Question number 3 or share your email

upvoted 2 times
- wabadabadub** 5 months, 1 week ago

they seem to be deleted from the discussion of Q3. Where can we find them?

upvoted 1 times



Wonka 1 month, 1 week ago

are they added somewhere else? please confirm.

upvoted 1 times



aviratna 8 months, 1 week ago

A is correct. use gsutil to upload file in Cloud Storage. And Cloud Storage configuration is defined in .boto on client side.

upvoted 3 times



victory108 9 months, 2 weeks ago

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

upvoted 1 times



un 9 months, 3 weeks ago

I will go with A

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

upvoted 1 times



Ausias18 11 months ago

Answer is A

upvoted 1 times



sdsdfasdf4 1 year, 2 months ago

Note that if you'd like to specify CMEKs on a per-command basis without needing to edit your boto file, you may specify the key name as top-level boto option:

```
gsutil -o 'GSUtil:encryption_key=projects/PROJECT_ID/locations/LOCATION/keyRings/KEYRING/cryptoKeys/KEYNAME' \  
cp /some/local/file gs://my-bucket/
```

Answer is A (boto+encryption key)

upvoted 2 times



Chulbul_Pandey 1 year, 3 months ago

A is ok

upvoted 1 times



AshokC 1 year, 5 months ago

A is correct

<https://cloud.google.com/storage/docs/gsutil/addlhelp/UsingEncryptionKeys>

gsutil accepts CSEKs for interacting with Cloud Storage objects using the JSON API. The keys are provided via the .boto configuration file

upvoted 3 times



wiqi 1 year, 6 months ago

A is correct.

upvoted 1 times



kimhok 1 year, 8 months ago

Answer is A. Configured this in one of the labs.

upvoted 1 times

Your customer wants to capture multiple GBs of aggregate real-time key performance indicators (KPIs) from their game servers running on Google Cloud Platform and monitor the KPIs with low latency. How should they capture the KPIs?

- A. Store time-series data from the game servers in Google Bigtable, and view it using Google Data Studio.
- B. Output custom metrics to Stackdriver from the game servers, and create a Dashboard in Stackdriver Monitoring Console to view them.
- C. Schedule BigQuery load jobs to ingest analytics files uploaded to Cloud Storage every ten minutes, and visualize the results in Google Data Studio.
- D. Insert the KPIs into Cloud Datastore entities, and run ad hoc analysis and visualizations of them in Cloud Datalab.

Correct Answer: A

Reference:
<https://cloud.google.com/solutions/data-lifecycle-cloud-platform>

Community vote distribution

B (100%)

- suryalsp**

Highly Voted

2 years, 2 months ago

Ans is B. Data studio cannot be used with BigTable
<https://datastudio.google.com/data>
upvoted 24 times
- Raja101**

5 months, 2 weeks ago

A is correct
upvoted 2 times
- kolcsarzs**

Highly Voted

2 years, 2 months ago

correct is B
upvoted 10 times
- BeetleJuice**

Most Recent

1 month, 1 week ago

Selected Answer: B

B, it is
upvoted 1 times
- OrangeTiger**

1 month, 4 weeks ago

I don't think there is a correct answer, but B looks correct in this.
If use Bigquery, then A is correct .
C is not for realtime.
D Datastore is for small usecase.
Keywords 'real time' , 'analytics'
<https://events.withgoogle.com/solution-design-pattern-gaming/analytics-pattern/>
upvoted 1 times
- Wonka**

2 months ago

B is okay
upvoted 1 times
- gcp_learner**

2 months, 2 weeks ago

Selected Answer: B

I will go with B because you can meet the requirement with Cloud Monitoring, formerly Stackdriver monitoring
upvoted 1 times
- gcp_learner**

2 months, 2 weeks ago

Selected Answer: B

You can do this with Cloud Monitoring, formerly Stackdriver Monitoring
upvoted 1 times
- ABO_Doma**

2 months, 3 weeks ago

Selected Answer: B

While Google Bigtable may be a good place for this data, there is no direct connector between Bigtable and Google Data Studio. To enable Google Data Studio to pick up this information, we would have to use something like BigQuery (<https://cloud.google.com/bigquery/external-data-Bigtable>) to query data stored in Bigtable, and Google Data Studio can then make use of this data.
upvoted 3 times

🗑️ 👤 **pakilodi** 2 months, 3 weeks ago

Selected Answer: B

B is the answer here

upvoted 1 times

🗑️ 👤 **PhilipKoku** 2 months, 3 weeks ago

Selected Answer: B

Stackdriver is designed to Monitor GCP

upvoted 1 times

🗑️ 👤 **haroldbenites** 2 months, 3 weeks ago

Go for B.

Bigtable don't support integrations with datastudio

<https://cloud.google.com/bigtable/docs/integrations>

upvoted 1 times

🗑️ 👤 **pnvijay** 3 months ago

Selected Answer: B

Answer is B. Stackdriver is used for creating custom metrics and displaying them

upvoted 2 times

🗑️ 👤 **joe2211** 3 months, 1 week ago

Selected Answer: B

vote B

upvoted 2 times

🗑️ 👤 **sam1972** 3 months, 1 week ago

A is correct

<https://cloud.google.com/bigquery/docs/visualize-data-studio>

upvoted 1 times

🗑️ 👤 **MaxNRG** 4 months ago

B - output custom metrics to Stackdriver from game servers and create a Dashboard in Stackdriver Console to view them.

Stackdriver is designed for KPIs/metrics monitoring:

<https://cloud.google.com/monitoring/api/v3/metrics>

A – potentially could be, though Bigtable can't be connected to DataStudio directly. Data Studio can read data from BiqQuery, MySQL, PostgreSQL, or CSV file uploaded to Cloud Storage.

<https://datastudio.google.com/data>

upvoted 5 times

🗑️ 👤 **MaxNRG** 4 months, 1 week ago

B - output custom metrics to Stackdriver from game servers and create a Dashboard in Stackdriver Console to view them.

Stackdriver is designed for KPIs/metrics monitoring:

<https://cloud.google.com/monitoring/api/v3/metrics>

A – potentially could be, though Bigtable can't be connected to DataStudio directly. Data Studio can read data from BiqQuery, MySQL, PostgreSQL, or CSV file uploaded to Cloud Storage.

<https://datastudio.google.com/data>

upvoted 1 times

🗑️ 👤 **MamthaSJ** 7 months, 3 weeks ago

Answer is B

upvoted 3 times

You have a Python web application with many dependencies that requires 0.1 CPU cores and 128 MB of memory to operate in production. You want to monitor and maximize machine utilization. You also want to reliably deploy new versions of the application. Which set of steps should you take?

- A. Perform the following: 1. Create a managed instance group with f1-micro type machines. 2. Use a startup script to clone the repository, check out the production branch, install the dependencies, and start the Python app. 3. Restart the instances to automatically deploy new production releases.
- B. Perform the following: 1. Create a managed instance group with n1-standard-1 type machines. 2. Build a Compute Engine image from the production branch that contains all of the dependencies and automatically starts the Python app. 3. Rebuild the Compute Engine image, and update the instance template to deploy new production releases.
- C. Perform the following: 1. Create a Google Kubernetes Engine (GKE) cluster with n1-standard-1 type machines. 2. Build a Docker image from the production branch with all of the dependencies, and tag it with the version number. 3. Create a Kubernetes Deployment with the imagePullPolicy set to 'IfNotPresent' in the staging namespace, and then promote it to the production namespace after testing.
- D. Perform the following: 1. Create a GKE cluster with n1-standard-4 type machines. 2. Build a Docker image from the master branch with all of the dependencies, and tag it with 'latest'. 3. Create a Kubernetes Deployment in the default namespace with the imagePullPolicy set to 'Always'. Restart the pods to automatically deploy new production releases.

Correct Answer: B

Community vote distribution

C (91%)

9%

- jcmoranp

Highly Voted

2 years, 4 months ago

C is correct, need "ifnotpresent"when uploads to container registry

upvoted 33 times
- Tos0

Highly Voted

2 years, 3 months ago

C is the best choice. You can create a k8s cluster with just one node and use a different namespaces for staging and production. In staging, you will test the changes

upvoted 15 times
- mani4bose

Most Recent

1 month, 1 week ago

Why cant be A? MIG with 2 f1micro instances can help and rolling reboot can help the new update.

upvoted 1 times
- vincy2202

2 months, 1 week ago

Selected Answer: C

C is the correct answer

upvoted 2 times
- gcp_learner

2 months, 2 weeks ago

Selected Answer: C

C is the best answer - this is a typical case in which containerisation finds its niche i.e. GKE!

upvoted 1 times
- joe2211

2 months, 3 weeks ago

Selected Answer: C

IMHO B seems not correct, at least in term of process order. In real case, we need to do the following order: 1. Build custom image, 2. Create template, 3. Create MIG, 4. Create new template, 5. Update MIG with the new template

upvoted 1 times
- RCasagrande

2 months, 3 weeks ago

Selected Answer: C

C is correct

upvoted 1 times
- pakilodi

2 months, 3 weeks ago

Selected Answer: C

Vote C

upvoted 2 times
- PhilipKoku

2 months, 3 weeks ago

Selected Answer: A

Compute Engine with smallest config
upvoted 1 times



  **RCasagrande** 2 months, 3 weeks ago

Selected Answer: C



Agree with C.
upvoted 2 times

  **haroldbenites** 2 months, 3 weeks ago

Go for B.
C , are descarted beacuse using cluster with containers is not necessary. Containers is useful for others escenaries like microservices. link:
<https://www.docker.com/blog/vm-or-containers/>
A is descated because using "clone repository" is not a best practice. Better is use images of VMs.
upvoted 2 times



  **sliard** 2 months, 3 weeks ago

Not B because : "you cannot update an existing instance template or change an instance template after you create it."
<https://cloud.google.com/compute/docs/instance-templates>
upvoted 3 times

  **joe2211** 3 months, 1 week ago

Selected Answer: C

vote C
upvoted 1 times



  **ravisar** 3 months, 2 weeks ago

Answer is B. "Python web application with many dependencies" - Nothing to say about microserices or container. Also I don't think in GKE, you can specify the VM types.
upvoted 1 times

  **MaxNRG** 4 months ago

C – 1. Create GKE cluster with n1-standard-1 type machine.
2. Build a docker image from production branch with all the dependencies and tag it with version #.
3. Create a Kubernetes Deployment with the imagePullPolicy set to “IfNotPresent” in the staging namespace, and then promote it to production namespace after testing.

Pretty interesting questions, where all options physically work, though C corresponds mostly to all requirements.
First of all why GKE, but not GCE? Because, GKE can better utilize resources (pods autoscaling on the same node), and also it has advanced dashboard for resource utilization.
Also, GKE abstracts you from VM/OS – focus just on app.
Then C or D?
C - follows Kubernetes best practices (uses normal image version #, instead of marking as "latest"), and also image is deployed automatically by node agent (kubelet), after test is passed in staging env (Google Best practice).
In D version is marked as latest , which would sophisticate roll-back process. In Addition with “Always” policy you need to restart pods manually to deploy new version.
upvoted 5 times

  **Bakili** 4 months, 1 week ago

B seems okay as its only application
upvoted 1 times

  **medeis_jar** 5 months ago

B -> <https://cloud.google.com/compute/docs/instance-templates>
upvoted 1 times

Your company wants to start using Google Cloud resources but wants to retain their on-premises Active Directory domain controller for identity management.

What should you do?

- A. Use the Admin Directory API to authenticate against the Active Directory domain controller.
- B. Use Google Cloud Directory Sync to synchronize Active Directory usernames with cloud identities and configure SAML SSO.
- C. Use Cloud Identity-Aware Proxy configured to use the on-premises Active Directory domain controller as an identity provider.
- D. Use Compute Engine to create an Active Directory (AD) domain controller that is a replica of the on-premises AD domain controller using Google Cloud Directory Sync.

Correct Answer: B

🗨️ 👤 **KouShikyou** Highly Voted 👍 2 years, 4 months ago

According to the reference, my understanding is B is correct.

And in the document(<https://cloud.google.com/iap/docs/concepts-overview>), it says:

If you need to create Google Accounts for your existing users, you can use Google Cloud Directory Sync to synchronize with your Active Directory or LDAP server.

Is it possible to explain why correct answer is C?

upvoted 39 times

🗨️ 👤 **MikeB19** 6 months ago

It's simple. Domain controllers are not meant to authenticate SaaS or web applications. This includes IAM. Domain controllers speak NTLM and Kerberos.

This is why we use federation. Because web apps do not speak Kerberos or NTLM. They speak languages such as OAuth. Hence the need for a federation proxy.

B is correct

upvoted 4 times

🗨️ 👤 **Bill831231** 4 months, 2 weeks ago

Thanks for the explanation, may I ask if we go with SAML, why need to sync the user account? Seems we just need to set up the federation between cloud and on-premise.

upvoted 2 times

🗨️ 👤 **nitinz** 12 months ago

B, use GCDS.

upvoted 5 times

🗨️ 👤 **kumarp6** 1 year, 4 months ago

B should be correct

upvoted 5 times

🗨️ 👤 **tartar** 1 year, 6 months ago

B is ok

upvoted 9 times

🗨️ 👤 **MeasService** Highly Voted 👍 2 years, 4 months ago

B is the nearest answer I feel!

upvoted 25 times

🗨️ 👤 **haroldbenites** Most Recent 🕒 2 months, 3 weeks ago

Go for B.

Cloud Directory Sync

<https://cloud.google.com/blog/products/identity-security/using-your-existing-identity-management-system-with-google-cloud-platform>

upvoted 3 times

🗨️ 👤 **vincy2202** 3 months ago

B is the correct answer

upvoted 1 time

🗨️ 👤 **pulkit0627** 3 months, 1 week ago

B as AD groups are directly mapped to Cloud Directory Sync

upvoted 1 time

🗨️ 👤 **MaxNRG** 4 months ago


B – use Google Cloud Directory Sync to sync Active Directory user names with cloud identities and configure SAML SSO. Check the flowchart here illustrating integration of your existing identity management system into GCP: <https://cloud.google.com/blog/products/identity-security/using-your-existing-identity-management-system-with-google-cloud-platform>
C – does not work, since Cloud IAP serves different purpose. It s a building block toward BeyondCorp, an enterprise security model that enables every employee to work from untrusted networks without the use of a VPN.

upvoted 1 times

  **MamthaSJ** 7 months, 3 weeks ago

Answer is B

upvoted 4 times

  **victory108** 9 months, 2 weeks ago

B. Use Google Cloud Directory Sync to synchronize Active Directory usernames with cloud identities and configure SAML SSO.

upvoted 3 times

  **skvi** 10 months, 2 weeks ago



B or C ?

This link states that IAP supports integration with external identities

<https://cloud.google.com/iap/docs/external-identities>

So in this case do we need Directory Synch? If not then C is the right answer.

upvoted 1 times

  **Ausias18** 11 months ago

Answer is B

upvoted 2 times

  **lynx256** 11 months, 1 week ago

IMO - B is ok.

upvoted 2 times

  **AD3** 11 months, 1 week ago

'C' is correct if it implies that the company doesn't want the list of users to be copied over. The company can still achieve to keep the identities on GCP and do the SAML with the option 'B'. The pain point in 'C' is the dependency on on-premises and it can cause single point of failure & latency. Again if the security is more concern then 'C' is correct.

upvoted 3 times

  **MikeB19** 5 months, 3 weeks ago



C would require adfs to correct. The native dc alone would not be able to provide authentication for gcp resources

upvoted 1 times

  **VenV** 12 months ago

B should be correct

upvoted 1 times

  **bnlcnd** 1 year, 1 month ago

checked some online resources and seems B is cleaner.

But there is a way to use IAP and on-prem AD: <https://cloud.google.com/iap/docs/cloud-iap-for-on-prem-apps-overview>

upvoted 1 times

  **Arimaverick** 1 year, 1 month ago

B is correct. Its funny that the correct answer to this question given is C but the documentation points to B. :)

upvoted 1 times

  **NeoFer** 1 year, 2 months ago

B is correct. For those wondering why SAML is also needed : Synch will only synch user data not passwords. SAML will delegate the authentication part to on-prem AD.

upvoted 3 times

  **Prakzz** 1 year, 2 months ago

B is correct

upvoted 1 times

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

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

Correct Answer: B

- jcmoranp

Highly Voted

2 years, 4 months ago

think answer is B. C cannot be, you don't need to connect to the container to view logs, you connect to stackdriver for this

upvoted 31 times
- nitinz

12 months ago

B, google wants you to use stackdriver.

upvoted 5 times
- crypt0

2 years, 4 months ago

Stackdriver Logging seems to be enabled by default for GKE.

Looking here:
<https://cloud.google.com/monitoring/kubernetes-engine/legacy-stackdriver/logging>
For container and system logs, GKE deploys a per-node logging agent that reads container logs, adds helpful metadata, and then stores them.
The logging agent checks for container logs in the following sources:

Standard output and standard error logs from containerized processes

I would also go with B

upvoted 8 times
- kumarp6

1 year, 4 months ago

Yes it is B

upvoted 3 times
- crypt0

2 years, 4 months ago

Is Stackdriver enabled by default?
Stackdriver Logging is independent and first needs to enable with GKE I guess?

upvoted 1 times
- tartar

1 year, 6 months ago

B is ok

upvoted 7 times
- Jack_in_Large

1 year, 9 months ago

Yes for GKE

upvoted 1 times
- crypt0

2 years, 4 months ago

Please forget this comment ^
Answer B should be correct.

upvoted 6 times
- JoeShmoe

Highly Voted

2 years, 3 months ago

B is correct. Serial console doesnt give you StdOut

upvoted 8 times
- OrangeTiger

Most Recent

1 month, 4 weeks ago

B is correct ans.I agree.
<https://cloud.google.com/blog/ja/products/management-tools/finding-your-gke-logs>

upvoted 2 times
- haroldbenites

2 months, 3 weeks ago

Go for B

upvoted 1 times

🗨️ 👤 **vincy2202** 3 months ago

B is the correct answer

upvoted 1 times

🗨️ 👤 **MaxNRG** 4 months ago

B – Review Stackdriver logs for specific GKE container that is serving the unresponsive part of the app.

This is a most directly matching answer for this Q, since it reviews GKE container logs, by that advertising this Stackdriver feature.

“For container and system logs, GKE deploys a per-node logging agent that reads container logs, adds helpful metadata, and then stores them.

The logging agent checks for container logs in the following sources:

- Standard output and standard error logs from containerized processes
- kubelet and container runtime logs
- Logs for system components, such as VM startup scripts”

Originally we thought, that D is a right answer, since were confused with 2 seconds restart. But, that's restart for Pod, not for Node (GCE)

D – Review Serial Port logs for each Compute Engine instance, that is serving as the in the cluster.

Serial Port output is standard feature of Compute Engine (which retains 1 MB most recent logs for analysis). But, it is irrelevant for Pod's restart, caused by malfunction of some container.

upvoted 2 times

🗨️ 👤 **MamthaSJ** 7 months, 3 weeks ago

Answer is B

upvoted 3 times

🗨️ 👤 **lovingsmart2000** 7 months, 4 weeks ago

B is right answer. There is a catch here - Legacy logging of GKE with Stackdriver has deprecated. If this is used, you need to migrate to Cloud Operations for GKE, a new enhanced offering by Google with same functionality.

Future questions will have the answer choices with new tool "Cloud Operations for GKE" instead of Stackdriver.

<https://cloud.google.com/monitoring/kubernetes-engine/legacy-stackdriver/logging>

upvoted 2 times

🗨️ 👤 **lovingsmart2000** 7 months, 4 weeks ago

B is right answer. There is a catch here - Legacy logging of GKE with Stackdriver has deprecated. If this used, you need to migrate to Cloud Operations for GKE, a new enhanced offering by Google with same functionality.

Future questions will have the answer choices with new tool "Cloud Operations for GKE" instead of Stackdriver.

upvoted 2 times

🗨️ 👤 **areza** 8 months, 3 weeks ago

B is ok

upvoted 1 times

🗨️ 👤 **victory108** 9 months, 2 weeks ago

B. Review the Stackdriver logs for the specific GKE container that is serving the unresponsive part of the application.

upvoted 2 times

🗨️ 👤 **Kiroo** 10 months, 2 weeks ago

If the container keeps restarting connect to container to check the logs is stupid, the only one that makes sense is B

upvoted 1 times

🗨️ 👤 **Ausias18** 11 months ago

Answer is B

upvoted 1 times

🗨️ 👤 **lynx256** 11 months, 1 week ago

IMO - B is ok.

upvoted 1 times

🗨️ 👤 **VenV** 12 months ago

B should be correct

upvoted 1 times

🗨️ 👤 **Alekshar** 1 year ago

C cannot be correct, having your pods restarting each 2 seconds implies your logs in GKE are deleted each 2 seconds, not ideal for debugging.

upvoted 2 times

🗨️ 👤 **Prakzz** 1 year, 2 months ago

How can you see the logs for the specific container when all pods keep restarting after 2 seconds?

I think is A you can see the logs for the compute engine instance that is working like node

upvoted 2 times

You are using a single Cloud SQL instance to serve your application from a specific zone. You want to introduce high availability. What should you do?

- A. Create a read replica instance in a different region
- B. Create a failover replica instance in a different region
- C. Create a read replica instance in the same region, but in a different zone
- D. Create a failover replica instance in the same region, but in a different zone

Correct Answer: D

🗲️ 👤 **AWS56** Highly Voted 👍 2 years, 1 month ago

Agree D

upvoted 25 times

🗲️ 👤 **nitinz** 12 months ago

D, its regional product and failover is required for HA

upvoted 1 times

🗲️ 👤 **kumarp6** 1 year, 4 months ago

Yes D is right

upvoted 2 times

🗲️ 👤 **tartar** 1 year, 6 months ago

D is ok

upvoted 6 times

🗲️ 👤 **GunjGupta** Highly Voted 👍 1 year, 9 months ago

Cloud SQL is regional. For high availability, we need to think for a failover strategy. So Option D meets the requirement. create failover replica in the same region but in different Zone

upvoted 11 times

🗲️ 👤 **Rajasa** Most Recent ⌚ 2 months ago

D Agree

upvoted 1 times

🗲️ 👤 **Rajasa** 2 months ago

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

upvoted 1 times

🗲️ 👤 **vincy2202** 2 months ago

D is the correct answer.

Cloud SQL is a regional resource.

Read Replica helps to reduce latency & improve performance.

Failover Replica is used for High Availability.

upvoted 3 times

🗲️ 👤 **AmitMittal** 2 months, 1 week ago

D is NOT OK. It is for DR.

For HA, it should be C.

All of you (almost) are wrong here by voting D :-D

upvoted 1 times

🗲️ 👤 **pdddd** 1 month, 3 weeks ago

seems you do not understand HA and DR...

upvoted 1 times

🗲️ 👤 **haroldbenites** 2 months, 3 weeks ago

Go for D.

It says HA.

upvoted 1 times

🗲️ 👤 **vincy2202** 3 months ago

D is the right answer

upvoted 1 times

🗨️ 👤 **MaxNRG** 4 months ago

D – create failover replicate in the same region, but in different zone.
The HA configuration consist of primary instance (in primary zone) and failover replicate in secondary zone.
<https://cloud.google.com/sql/docs/mysql/high-availability>
upvoted 2 times

🗨️ 👤 **cugena** 5 months, 2 weeks ago

Now uses regional persistence disks

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

The legacy configuration for high availability used a failover replica instance. The new configuration does not use a failover replica. Instead, it uses Google's regional persistent disks, which synchronously replicate data at the block level between two zones in a region. If you have an existing MySQL instance that uses the legacy high availability configuration, you can update your configuration to use the
upvoted 2 times

🗨️ 👤 **amxexam** 6 months ago

We are talking about HA not DR, hence C
upvoted 2 times

🗨️ 👤 **amxexam** 5 months, 3 weeks ago

D is also will act HA, C is also HA... But why D is better than C is the question?
upvoted 1 times

🗨️ 👤 **victory108** 9 months, 2 weeks ago

D. Create a failover replica instance in the same region, but in a different zone
upvoted 1 times

🗨️ 👤 **Ausias18** 11 months ago

Answer is D
upvoted 1 times

🗨️ 👤 **lynx256** 11 months, 1 week ago

D is ok
upvoted 2 times

🗨️ 👤 **DheerajP** 1 year, 1 month ago

Answer : D
check quick demo at https://www.youtube.com/watch?v=BFI-2_qAmdQ
upvoted 2 times

🗨️ 👤 **AshokC** 1 year, 5 months ago

D is correct
upvoted 2 times

🗨️ 👤 **ESP_SAP** 1 year, 5 months ago

Correct Answer is (D):

<https://cloud.google.com/sql/docs/mysql/high-availability#failover>
upvoted 1 times

🗨️ 👤 **mlantonis** 1 year, 8 months ago

Read Replica is for performance. Failover Replica is for High Availability.

I agree with D.
upvoted 6 times

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

- A. Create a snapshot of the existing disk. Create an instance template from the snapshot. Create an autoscaled managed instance group from the instance template.
- B. Create a snapshot of the existing disk. Create a custom image from the snapshot. Create an autoscaled managed instance group from the custom image.
- C. Create a custom image from the existing disk. Create an instance template from the custom image. Create an autoscaled managed instance group from the instance template.
- D. Create an instance template from the existing disk. Create a custom image from the instance template. Create an autoscaled managed instance group from the custom image.

Correct Answer: C

Community vote distribution

C (100%)

- sdsdfasdf4

Highly Voted

1 year, 2 months ago

The easiest way would be to create template from --source-instance, and then create MIG, but it is not listed here, also you cannot create a MIG from image directly, you need a template, so answer is C (image -> template -> mig).

upvoted 18 times
- AWS56

Highly Voted

2 years, 1 month ago

C is the right answer

upvoted 12 times
- SHalgatti

Most Recent

3 weeks ago

I think Snapshot option are not correct in this scenario as to take snapshot you need to stop the VM so C looks best option

upvoted 2 times
- PhuocT

2 months ago

Selected Answer: C

C is the answer

upvoted 1 times
- Rajasa

2 months ago

Selected Answer: C

C is the answer

upvoted 1 times
- haroldbenites

2 months, 3 weeks ago

Go for C.

Instance template can not be created from snapshot. Only from an image.

upvoted 1 times
- vincy2202

3 months ago

C is the right answer.

https://cloud.google.com/compute/docs/instance-templates/create-instance-templates#using_custom_or_public_images_in_your_instance_templates

upvoted 2 times
- joe2211

3 months, 1 week ago

Selected Answer: C

vote C

upvoted 1 times
- MaxNRG

4 months ago

C – create a custom image from the existing disk. Create an instance template from the custom image. Create an autoscaled MIG from instance template.

A could work if a snapshot was transformed to a custom image. Instance Template can be created only from image.

upvoted 2 times
- MamthaSJ

7 months, 3 weeks ago

Answer is C
upvoted 3 times

🗨️ 👤 **victory108** 9 months, 2 weeks ago
C. Create a custom image from the existing disk. Create an instance template from the custom image. Create an autoscaled managed instance group from the instance template.
upvoted 1 times

🗨️ 👤 **Ausias18** 11 months ago
Answer is C
upvoted 1 times

🗨️ 👤 **bnlcnd** 1 year, 1 month ago
The key point is to have a "autoscaled managed instance group". for that, you need a image. you can either create image from snapshot or from persistent disk.
Only C covers the right route.
upvoted 2 times

🗨️ 👤 **Prakzz** 1 year, 2 months ago
I would go with C as it is a stateless server, it won't need a backup snapshot and image can be created by the persistence disk directly
upvoted 1 times

🗨️ 👤 **doumx** 1 year, 2 months ago
C : https://cloud.google.com/compute/docs/instance-templates/create-instance-templates#using_custom_or_public_images_in_your_instance_templates
upvoted 2 times

🗨️ 👤 **Surf** 1 year, 2 months ago
I think all answers are wrong.
A is wrong. You cannot create an instance template from the snapshot. You can create an instance template from the instance itself.
B is wrong. You cannot create an autoscaled managed instance group from the custom image. You need an instance template to create an autoscaled managed instance group.
C is wrong. You cannot create an instance template from the custom image. You can create an instance template from the instance itself.
D is wrong. You cannot create an instance template from the existing disk. You can create an instance template from the instance itself. Also you cannot create a custom image from the instance template. You can create a custom image from the drive or from a snapshot.

I do not know what the proper answer is. I assume none. If I had to pick one, maybe C. And only if C meant that you create an instance template using the custom image (not "from the custom image").
upvoted 6 times

🗨️ 👤 **lxgywil** 1 month, 3 weeks ago
Regarding C, "you can either use a custom image or a public image for your instance templates" - https://cloud.google.com/compute/docs/instance-templates/create-instance-templates#using_custom_or_public_images_in_your_instance_templates
upvoted 1 times

🗨️ 👤 **vibhavchavan** 1 year, 4 months ago
C is right. Specify custom image while creating the instance template. <https://cloud.google.com/compute/docs/instance-templates/create-instance-templates>
upvoted 2 times

Your web application has several VM instances running within a VPC. You want to restrict communications between instances to only the paths and ports you authorize, but you don't want to rely on static IP addresses or subnets because the app can autoscale. How should you restrict communications?

- A. Use separate VPCs to restrict traffic
- B. Use firewall rules based on network tags attached to the compute instances
- C. Use Cloud DNS and only allow connections from authorized hostnames
- D. Use service accounts and configure the web application to authorize particular service accounts to have access

Correct Answer: B

🗲️ 👤 **AWS56** Highly Voted 👍 2 years, 1 month ago

Agree B

upvoted 23 times

🗲️ 👤 **nitinz** 12 months ago

B is correct

upvoted 2 times

🗲️ 👤 **kumarp6** 1 year, 4 months ago

Yes B it is

upvoted 2 times

🗲️ 👤 **haroldbenites** Most Recent ⌚ 2 months, 3 weeks ago

Go for B.

upvoted 2 times

🗲️ 👤 **vincy2202** 3 months ago

B is the right answer

upvoted 1 times

🗲️ 👤 **MaxNRG** 4 months ago

B – use firewall rules based on network tags attached to the compute instances

This answer avoids using IP, which are replaced by tags.

upvoted 2 times

🗲️ 👤 **MamthaSJ** 7 months, 3 weeks ago

Answer is B

upvoted 4 times

🗲️ 👤 **areza** 8 months, 3 weeks ago

B is ok

upvoted 1 times

🗲️ 👤 **victory108** 9 months, 2 weeks ago

B. Use firewall rules based on network tags attached to the compute instances

upvoted 2 times

🗲️ 👤 **Ausias18** 11 months ago

Answer is B

upvoted 1 times

🗲️ 👤 **lynx256** 11 months, 1 week ago

B is ok

upvoted 1 times

🗲️ 👤 **Vika** 1 year ago

Agree B

upvoted 1 times



🗲️ 👤 **ga** 1 year ago



B is the answer



upvoted 1 times



🗲️ 👤 **AshokC** 1 year, 5 months ago



B is correct
upvoted 1 times

  **OnomeOkuma** 1 year, 7 months ago
Agree B
upvoted 1 times

  **RM07** 1 year, 7 months ago
Agree with B
upvoted 1 times

  **mlantonis** 1 year, 8 months ago
I agree with B
upvoted 1 times

  **Tushant** 1 year, 8 months ago
B is the correct answer
upvoted 1 times

  **gfhbox0083** 1 year, 8 months ago
B, for sure
Use firewall rules based on network tags attached to the compute instances
upvoted 4 times

You are using Cloud SQL as the database backend for a large CRM deployment. You want to scale as usage increases and ensure that you don't run out of storage, maintain 75% CPU usage cores, and keep replication lag below 60 seconds. What are the correct steps to meet your requirements?

- A. 1. Enable automatic storage increase for the instance. 2. Create a Stackdriver alert when CPU usage exceeds 75%, and change the instance type to reduce CPU usage. 3. Create a Stackdriver alert for replication lag, and shard the database to reduce replication time.
- B. 1. Enable automatic storage increase for the instance. 2. Change the instance type to a 32-core machine type to keep CPU usage below 75%. 3. Create a Stackdriver alert for replication lag, and deploy memcache to reduce load on the master.
- C. 1. Create a Stackdriver alert when storage exceeds 75%, and increase the available storage on the instance to create more space. 2. Deploy memcached to reduce CPU load. 3. Change the instance type to a 32-core machine type to reduce replication lag.
- D. 1. Create a Stackdriver alert when storage exceeds 75%, and increase the available storage on the instance to create more space. 2. Deploy memcached to reduce CPU load. 3. Create a Stackdriver alert for replication lag, and change the instance type to a 32-core machine type to reduce replication lag.



Correct Answer: A

  **AWS56** Highly Voted 2 years, 1 month ago

Agree with A
upvoted 21 times

  **haroldbenites** Most Recent 2 months, 3 weeks ago

Go for A
upvoted 1 times

  **vincy2202** 3 months, 2 weeks ago

A is the correct answer
upvoted 1 times

  **amxexam** 6 months ago

We can directly eliminate C and D we are doing some work that is already automated.

Still, I cannot make a point why not B is better than A?
I believe adding memcash will give an additional boost

Can someone help me point out why A is better than B?
upvoted 3 times

  **[Removed]** 4 months, 3 weeks ago

Just to back up what amxexam said, here is the link on automatically increasing storage based on trend analysis:

<https://cloud.google.com/sql/docs/mysql/instance-settings#storage-capacity-2ndgen>

upvoted 2 times

  **HenkH** 2 months ago

That is correct - but doc only mentions auto storage increase for this specific product (cloud SQL).
upvoted 1 times

  **cotam** 4 months, 3 weeks ago

I suppose B is not a better option, since it indicates 'add 32core cpu', with no info of the current usage that seems like a over-kill.
upvoted 2 times

  **MamthaSJ** 7 months, 3 weeks ago

Answer is A
upvoted 3 times

  **areza** 8 months, 3 weeks ago

A it is
upvoted 1 times

  **victory108** 9 months, 2 weeks ago

A. 1. Enable automatic storage increase for the instance. 2. Create a Stackdriver alert when CPU usage exceeds 75%, and change the instance type to reduce CPU usage. 3. Create a Stackdriver alert for replication lag, and shard the database to reduce replication time.
upvoted 1 times

🗨️ 👤 **un** 9 months, 3 weeks ago
Agree with A
upvoted 2 times

🗨️ 👤 **Ausias18** 11 months ago
Answer is A
upvoted 1 times

🗨️ 👤 **lynx256** 11 months, 1 week ago
A is ok.
upvoted 2 times

🗨️ 👤 **sekhrivijay** 1 year ago
Sharing means multiple cloud sql instances. Application will manage selection of cloud instance
Changing instance types mean restating and downtime. Why would you do that anytime the CPU reaches 75%. Manually doing this seems so 2000.
B should be correct
upvoted 1 times

🗨️ 👤 **Alekshar** 1 year ago
I am not sure option B fits any better.
Sure you will have no downtimes as you are already using the biggest possible machine but it also means you pay for the biggest machine even if you do not need it, maybe 4-cores are enough for now and you will never need more than 8-cores but you will pay 32-cores, it seems pretty exepensive to avoid rare and small downtimes.
upvoted 2 times

🗨️ 👤 **bnlcnd** 1 year, 1 month ago
cannot find doc about sharding the replicas. can anyone help?
upvoted 1 times

🗨️ 👤 **lynx256** 11 months, 1 week ago
There is not about sharding REPLICAS but sharding database (e.g. table names according to MY_TABLE_202001, to MY_TABLE_202002 and so on - one table for each month). Sharding is another way of partitioning . But the partitioning is more relevant, not sharding.
upvoted 1 times

🗨️ 👤 **AshokC** 1 year, 5 months ago
Answer: A
upvoted 1 times

🗨️ 👤 **Tushant** 1 year, 8 months ago
A is the answer
upvoted 3 times

🗨️ 👤 **Tushant** 1 year, 8 months ago
Correct answer is A
upvoted 2 times

🗨️ 👤 **gfhbox0083** 1 year, 8 months ago
A, for sure.
when CPU usage exceeds 75%
upvoted 3 times

🗨️ 👤 **Ziegler** 1 year, 9 months ago
A is the correct answer
upvoted 2 times

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

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

Correct Answer: D

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

Community vote distribution

D (75%)

A (25%)

- AWS56

Highly Voted

2 years, 1 month ago

Agree D

upvoted 19 times
- JasonL_GCP

4 months, 3 weeks ago

The question asks "This requires a relational database that can operate on hundreds of terabytes of data", but bq doesn't meet this condition?

upvoted 1 times
- nitinz

12 months ago

D, OLAP=BQ

upvoted 2 times
- kumarp6

1 year, 4 months ago

Yes it is D

upvoted 2 times
- tartar

1 year, 6 months ago

D is ok

upvoted 5 times
- Nastrand

1 year, 1 month ago

What about the relational part? BigQuery uses SQL but it's not relational... I'm not sure its D

upvoted 2 times
- lovingsmart2000

7 months, 4 weeks ago

Pls do not confuse - Cloud SQL and BigQuery are RDBMS. Cloud Datastore, Bigtable are NoSQL. Right answer is D - BQ

upvoted 3 times
- riflerrick

8 months, 3 weeks ago

BigQuery is relational!

upvoted 3 times
- gfhbox0083

Highly Voted

1 year, 8 months ago

D, for sure.

BigQuery for OLAP

Google Cloud Spanner for OLTP.

upvoted 11 times
- Laufente

Most Recent

2 weeks, 2 days ago

Selected Answer: D

D, OLAP is BigQuery

upvoted 2 times
- ZackW

3 weeks, 2 days ago

Selected Answer: D

dude that voted is wrong lol.

Ans is D as all others have said.

upvoted 1 times

🗋️ 👤 **KevPinto** 1 month ago

Selected Answer: A

Cloud Spanner -- 2 reasons 1) Relational 2) > 30 TB requirement
upvoted 1 times

🗋️ 👤 **haroldbenites** 2 months, 3 weeks ago

Go for D
upvoted 1 times

🗋️ 👤 **vincy2202** 3 months ago

D is the correct answer.
upvoted 1 times

🗋️ 👤 **MaxNRG** 4 months ago

D – BigQuery works for 100+ TB and is for analytics.
upvoted 1 times

🗋️ 👤 **hardharsh** 4 months, 4 weeks ago

D is ok
upvoted 1 times

🗋️ 👤 **amxexam** 6 months ago

To give more clarity for people swaying between Cloud Spanner or Bigquery

The big query does not provide you relationship between tables but you can join them freely. If your performance falls cluster then partition on the joining fields.

<https://stackoverflow.com/questions/48267761/is-it-possible-to-create-relationships-between-tables>

Some more literature if some want to go into the details.

"By using MapReduce, enterprises can cost-effectively apply parallel data processing on their Big Data in a highly scalable manner, without bearing the burden of designing a large distributed computing cluster from scratch or purchasing expensive high-end relational database solutions or appliances. "

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

Hence D

upvoted 1 times

🗋️ 👤 **MamthaSJ** 7 months, 3 weeks ago

Answer is D
upvoted 2 times

🗋️ 👤 **areza** 8 months, 3 weeks ago

D is ok
upvoted 1 times

🗋️ 👤 **victory108** 9 months, 2 weeks ago

D. BigQuery, because it is designed for large-scale processing of tabular data
upvoted 2 times

🗋️ 👤 **un** 9 months, 3 weeks ago

D is ok
upvoted 1 times

🗋️ 👤 **lynx256** 11 months, 1 week ago

D is ok.
upvoted 1 times

🗋️ 👤 **humbling_learning** 1 year ago

D - BigQuery.
Please refer "What Storage Type" section in the below page.
<https://medium.com/google-cloud/a-gcp-flowchart-a-day-2d57cc109401>
upvoted 1 times

🗋️ 👤 **CloudGenious** 1 year ago

cloud sql, cloud spanner and big query is ration sql for oltp and best for analys so ans is D
upvoted 1 times

You have deployed an application to Google Kubernetes Engine (GKE), and are using the Cloud SQL proxy container to make the Cloud SQL database available to the services running on Kubernetes. You are notified that the application is reporting database connection issues. Your company policies require a post-mortem. What should you do?

- A. Use gcloud sql instances restart.
- B. Validate that the Service Account used by the Cloud SQL proxy container still has the Cloud Build Editor role.
- C. In the GCP Console, navigate to Stackdriver Logging. Consult logs for (GKE) and Cloud SQL.
- D. In the GCP Console, navigate to Cloud SQL. Restore the latest backup. Use kubectl to restart all pods.

Correct Answer: C

Community vote distribution

C (100%)

- jcmoranp** Highly Voted

2 years, 4 months ago

post mortem always includes log analysis, answer is C

upvoted 49 times
- AWS56**

2 years, 1 month ago

AGREE C

upvoted 3 times
- haroldbenites** Most Recent

2 months, 3 weeks ago

Go for C

upvoted 1 times
- pakilodi**

2 months, 3 weeks ago

Selected Answer: C

post mortem = logs

upvoted 1 times
- vincy2202**

3 months ago

C is the correct answer

upvoted 1 times
- joe2211**

3 months, 1 week ago

Selected Answer: C

vote C

upvoted 1 times
- MaxNRG**

4 months ago

C – in GCP Console navigate to Stackdriver Logging. Consult logs for Kubernetes Engine and Cloud SQL.
A/D – is an immediate attempt to fix an issue. No analysis.
B – is irrelevant at all. Cloud SQL proxy should not build anything in production.

upvoted 2 times
- MamthaSJ**

7 months, 3 weeks ago

Answer is C

upvoted 4 times
- lovingsmart2000**

7 months, 3 weeks ago

Answer is C. I request all here - not to blindly follow the answers published at coursera or udemy as most of them are copy-pasted answer and are not real. Examtopis provides the more accurate answers and also support with comments

upvoted 2 times
- lovingsmart2000**

7 months, 3 weeks ago

Answer is B. I request all here - not to blindly follow the answers published at coursera or udemy as most of them are copy-pasted answer and are not real. Examtopis provides the more accurate answers and also support with comments

upvoted 1 times
- ashish_t**

4 months, 2 weeks ago

Why Service Account needs Cloud Build Editor role for accessing Cloud SQL?
The role is misleading/wrong, so B is wrong.

upvoted 3 times

🗨️ 👤 **victory108** 9 months, 2 weeks ago

C. In the GCP Console, navigate to Stackdriver Logging. Consult logs for Kubernetes Engine and Cloud SQL.
upvoted 2 times

🗨️ 👤 **un** 9 months, 3 weeks ago

C is correct
upvoted 1 times

🗨️ 👤 **Ausias18** 11 months ago

Answer is C
upvoted 2 times

🗨️ 👤 **lynx256** 11 months, 1 week ago

IMO - C is ok.
upvoted 1 times

🗨️ 👤 **getzsagar** 10 months, 4 weeks ago

what is IMO ?
upvoted 1 times

🗨️ 👤 **tzKhalil** 10 months, 4 weeks ago

In My Opinion
upvoted 2 times

🗨️ 👤 **BikramY** 11 months, 2 weeks ago

Agree with C
upvoted 1 times

🗨️ 👤 **Rothmansua** 1 year, 1 month ago

Cloud _Build_ Editor role for Cloud SQL?
upvoted 2 times

🗨️ 👤 **pepYash** 1 year, 3 months ago

B does not make sense.
C is the only legit answer here with the "post mortem" thing
Justification:
https://cloud.google.com/sql/docs/mysql/connect-kubernetes-engine#providing_the_service_account_to_the_proxy
upvoted 1 times

🗨️ 👤 **AdityaGupta** 1 year, 4 months ago

I will go with answer C: In the GCP Console, navigate to Stackdriver Logging. Consult logs for Kubernetes Engine and Cloud SQL..

After analysing the logs the answer may come out to be B, but it is not necessary all the time.

upvoted 2 times



Your company pushes batches of sensitive transaction data from its application server VMs to Cloud Pub/Sub for processing and storage. What is the Google- recommended way for your application to authenticate to the required Google Cloud services?



- A. Ensure that VM service accounts are granted the appropriate Cloud Pub/Sub IAM roles.
- B. Ensure that VM service accounts do not have access to Cloud Pub/Sub, and use VM access scopes to grant the appropriate Cloud Pub/Sub IAM roles.
- C. Generate an OAuth2 access token for accessing Cloud Pub/Sub, encrypt it, and store it in Cloud Storage for access from each VM.
- D. Create a gateway to Cloud Pub/Sub using a Cloud Function, and grant the Cloud Function service account the appropriate Cloud Pub/Sub IAM roles.



Correct Answer: A



Community vote distribution



A (100%)



  **AWS56** Highly Voted 2 years, 1 month ago
Agree A
upvoted 23 times



  **nitinz** 12 months ago
A is correct
upvoted 1 times



  **kumarp6** 1 year, 4 months ago
Yes A it is
upvoted 2 times



  **Pazzooo** Most Recent 1 month ago
Selected Answer: A
The combination of Roles assigned to Service accounts granted to VMs is the way to go. :)
upvoted 1 times



  **elenamatay** 1 month, 4 weeks ago
Service accounts are recommended for almost all cases in Pub/Sub (see <https://cloud.google.com/pubsub/docs/authentication#service-accounts>)
upvoted 2 times

  **haroldbenites** 2 months, 3 weeks ago
Go for A.
upvoted 1 times

  **vincy2202** 3 months ago
A is the correct answer
upvoted 1 times

  **MaxNRG** 4 months ago
A – ensure that VM service accounts are granted the appropriate Cloud Pub/Sub IAM roles.
Check Migrating Data to GCP section of this page:
<https://cloud.google.com/iam/docs/understanding-service-accounts>
You will create a service account key and use it from an external process to call Cloud Platform APIs.
upvoted 2 times



  **Bakili** 4 months, 1 week ago
A is very correct
upvoted 1 times



  **JustJack21** 5 months, 4 weeks ago
It's because of questions like these that I do not feel guilty about using question banks :D In what world would you accept value requirements like this from your user? Wouldn't you ask "Do you want to just authenticate? or the data to be encrypted on its way to pub/sub?"
I'll ignore the first part of the question and assume all data is sensitive, and focus on "What is the Google- recommended way for your application to authenticate to the required Google Cloud services?" -- The answer then is A.



Use encryption and defense-in-depth for the first part.
upvoted 2 times



  **MamthaSJ** 7 months, 3 weeks ago



Answer is A
upvoted 2 times



  **victory108** 9 months, 2 weeks ago
A. Ensure that VM service accounts are granted the appropriate Cloud Pub/Sub IAM roles.
upvoted 2 times



  **un** 9 months, 3 weeks ago
A is correct
upvoted 1 times



  **kartikjena31** 11 months ago
Ans. A
upvoted 1 times

  **Ausias18** 11 months ago
Answer is A
upvoted 2 times

  **lynx256** 11 months, 1 week ago
A is ok.
upvoted 1 times

  **bnlcnd** 1 year, 1 month ago
for sensitive data, there must be encryption. only C mentioned that.
I choose C
upvoted 1 times

  **Viba** 1 year, 2 months ago
As per -
<https://cloud.google.com/compute/docs/access/create-enable-service-accounts-for-instances>
The service account can only execute API methods that are allowed by both the access scope and the service account's specific IAM roles.
As per the above, correct answer is 'A'
upvoted 3 times

  **AshokC** 1 year, 5 months ago
A is meaningful
upvoted 1 times

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

How should you deploy the VPN?

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

Correct Answer: D

Community vote distribution

D (100%)



  **Googler2** Highly Voted 1 year, 10 months ago

It can't be -A - VPC Network Peering only allows private RFC 1918 connectivity across two Virtual Private Cloud (VPC) networks. In this example is one VPC with on-premise network
<https://cloud.google.com/vpc/docs/vpc-peering>



It is not definitely - B - Can't be



It is not C - Because Cloud VPN gateways and tunnels are regional objects, not global



So, it the answer is D -
<https://cloud.google.com/vpn/docs/how-to/creating-static-vpns>
upvoted 22 times



  **amxexam** 5 months, 3 weeks ago
Why not A?
https://cloud.google.com/vpc/docs/vpc-peering#benefits_of_exchanging_custom_routes
The second use case is exactly what is in the question.



Don't get the argument about RFC 1918.
Will go with A
upvoted 1 times



  **ochanz** 2 months, 2 weeks ago
<https://cloud.google.com/vpc/docs/vpc-peering> allows internal IP address connectivity across two VPC so A is not the answer as the on premise network need to use public IP. cmiw
upvoted 1 times

  **TaherShaker** Highly Voted 1 year, 3 months ago
Just Passed my exam and I answered (D) for this question
upvoted 12 times

  **M_Asep** 2 months, 3 weeks ago
sound promising dude
upvoted 1 times

  **haroldbenites** Most Recent 2 months, 3 weeks ago
Go for D.
Cloud VPN Gateway is regional. NOt Global
gcloud compute vpn-gateways create GW_NAME \
--network=NETWORK \
--region=REGION
upvoted 2 times

  **vincy2202** 3 months ago
D is the correct answer
upvoted 1 times

  **joe2211** 3 months, 1 week ago
Selected Answer: D
vote D
upvoted 2 times

  **MaxNRG** 4 months ago

D – Deploy Cloud VPN Gateway in each region. Ensure that each region has at least one VPN tunnel to on-prem peer gateway.
C – could be an option though there is no such concept at global Cloud VPN gateway. In fact, GCP has HA and Classic VPN topologies:
<https://cloud.google.com/network-connectivity/docs/how-to/choose-product>
In both cases, Cloud VPN gateway is deployed to single region.

upvoted 1 times

  **MamthaSJ** 7 months, 3 weeks ago


Answer is D

upvoted 3 times

  **victory108** 9 months, 2 weeks ago


D. Deploy Cloud VPN Gateway in each region. Ensure that each region has at least one VPN tunnel to the on-premises peer gateway.

upvoted 2 times

  **un** 9 months, 3 weeks ago

D is correct

upvoted 1 times

  **Ausias18** 11 months ago

Answer is D

upvoted 1 times

  **ga** 1 year ago



The correct ans is D

upvoted 2 times

  **SKSKSK** 1 year, 3 months ago

doesn't 1 cloud HA VPN gateway (although setup is per region) provide access to all regions within your VPC network? why do you need to make setting up vpn tunnel in each region then?

upvoted 5 times

  **Surf** 1 year, 2 months ago

I agree that it does not make sense. None of the answers really make sense but the closer to a correct answer is D in my opinion.

upvoted 4 times

  **pepYash** 1 year, 3 months ago

A - One VPC so no peering

B- LOL

C- there is no such thing. These gateways are regional resource.

So ~ D

upvoted 2 times

  **AshokC** 1 year, 5 months ago

Answer D

upvoted 1 times

  **mlantonis** 1 year, 8 months ago


With VPC Peering and Shared VPC you cannot connect to on-prem systems. So A and B are incorrect.

Cloud VPN gateways and tunnels are regional objects.

https://cloud.google.com/network-connectivity/docs/vpn/how-to/creating-static-vpns#creating_a_gateway_and_tunnel

D is the correct answer

upvoted 2 times

  **Tushant** 1 year, 8 months ago

D is the answer

upvoted 2 times

  **syu31svc** 1 year, 8 months ago

Cloud VPN gateways are bound to a single region so answer is D

upvoted 2 times

Your applications will be writing their logs to BigQuery for analysis. Each application should have its own table. Any logs older than 45 days should be removed.

You want to optimize storage and follow Google-recommended practices. What should you do?

- A. Configure the expiration time for your tables at 45 days
- B. Make the tables time-partitioned, and configure the partition expiration at 45 days
- C. Rely on BigQuery's default behavior to prune application logs older than 45 days
- D. Create a script that uses the BigQuery command line tool (bq) to remove records older than 45 days

Correct Answer: B

Community vote distribution

B (100%)

- KouShikyou

Highly Voted

2 years, 4 months ago

Could you please help clarify? I think B is correct.
It looks like table will be deleted with option A.
https://cloud.google.com/bigquery/docs/managing-tables#updating_a_tables_expiration_time
When you delete a table, any data in the table is also deleted. To automatically delete tables after a specified period of time, set the default table expiration for the dataset or set the expiration time when you create the table.

upvoted 32 times
- nitinz

12 months ago

B partition table

upvoted 4 times
- kumarp6

1 year, 4 months ago

it is B, if you use option A, on 46th day there is no table/content in table for application :)

upvoted 5 times
- tartar

1 year, 6 months ago

B is ok

upvoted 8 times
- aviv

Highly Voted

2 years, 2 months ago

Agreed with B.

upvoted 9 times
- VT001

Most Recent

2 weeks, 5 days ago

Selected Answer: B

I got similar question on my exam.

upvoted 1 times
- haroldbenites

2 months, 3 weeks ago

Go for B.
<https://cloud.google.com/bigquery/docs/creating-partitioned-tables#sql>
CREATE TABLE
mydataset.newtable (transaction_id INT64, transaction_date DATE)
PARTITION BY
transaction_date
OPTIONS(
partition_expiration_days=3,
require_partition_filter=true
)

upvoted 1 times
- vincy2202

3 months ago

Selected Answer: B

























B is the correct answer

upvoted 1 times
- MaxNRG

4 months ago

B – Make the tables time-partitioned and configure the partition expiration at 45 days.
A – if you use table expiration time, then it will remove the whole table after 45 days.
D – requires extra work and is not automatic.

upvoted 1 times

-   **Unfaithful** 7 months, 1 week ago
Answer: B
Support: <https://cloud.google.com/bigquery/docs/best-practices-storage>
upvoted 1 times
-   **MamthaSJ** 7 months, 3 weeks ago
Answer is B
upvoted 2 times
-   **victory108** 9 months, 2 weeks ago
B. Make the tables time-partitioned, and configure the partition expiration at 45 days
upvoted 1 times
-   **Ausias18** 11 months ago
Answer is B
upvoted 1 times
-   **lynx256** 11 months, 1 week ago
IMO - B is ok (assuming DAY partitioning or smaller than DAY time interval).
upvoted 1 times
-   **padamdha** 11 months, 2 weeks ago
B is right answers, you want to optimize storage.
upvoted 1 times
-   **CloudGenious** 1 year ago
B is write as A ans will delete whole table
upvoted 1 times
-   **Prakzz** 1 year, 2 months ago
B is correct
upvoted 1 times
-   **RKT20** 1 year, 2 months ago
If the partitioned table also has a table expiration configured, the table and all the partitions in it are deleted according to the table expiration settings. The table expiration takes precedence over the partition expiration. The answer A is correct. The question is on storage optimization and best practices.
upvoted 1 times
-   **sdsdfasdf4** 1 year, 2 months ago
In option A the table is not partitioned, so I'll just have all the data deleted after 45 days.
upvoted 1 times
-   **Hanmant** 1 year, 2 months ago
According to below link "...Cluster autoscaler increases or decreases the size of the node pool automatically, based on the resource requests (rather than actual resource utilization) of Pods running on that node pool's nodes" <https://cloud.google.com/kubernetes-engine/docs/concepts/cluster-autoscaler>
So technically the request to more pods, increases the size of nodes. Thats why A is the correct answer
upvoted 1 times
-   **Bhupals** 1 year, 2 months ago
as per best practices both A& B are right Ans but for B some extra work to do so simple Ans is A
<https://cloud.google.com/bigquery/docs/best-practices-storage>
upvoted 2 times

You want your Google Kubernetes Engine cluster to automatically add or remove nodes based on CPU load. What should you do?

- A. Configure a HorizontalPodAutoscaler with a target CPU usage. Enable the Cluster Autoscaler from the GCP Console.
- B. Configure a HorizontalPodAutoscaler with a target CPU usage. Enable autoscaling on the managed instance group for the cluster using the gcloud command.
- C. Create a deployment and set the maxUnavailable and maxSurge properties. Enable the Cluster Autoscaler using the gcloud command.
- D. Create a deployment and set the maxUnavailable and maxSurge properties. Enable autoscaling on the cluster managed instance group from the GCP Console.

Correct Answer: A

Community vote distribution

A (100%)

- natpilot**

Highly Voted

2 years, 1 month ago

i'm for A, but the question in ambiguous, because requires the autoscale of nodes (not pod) when the cpu overload, but in answer use k8s pod autoscaler based on cpu load (cpu load for pod, not nodes). strange

upvoted 19 times
- skywalker**

1 year, 9 months ago

Confuse with the question like you mentioned. Autoscale is via nodes not pod.. and can only be configure using gcloud command.

upvoted 6 times
- p4**

1 year, 3 months ago

Agreed, the question is not about pods, but answers are also talking about pods (not only)

A is correct because B is wrong according to <https://cloud.google.com/kubernetes-engine/docs/concepts/cluster-autoscaler>

"Caution: Do not enable Compute Engine autoscaling for managed instance groups for your cluster nodes. GKE's cluster autoscaler is separate from Compute Engine autoscaling"

upvoted 9 times
- Unfaithful**

Highly Voted

7 months, 1 week ago

Answer: A

Support:

How does Horizontal Pod Autoscaler work with Cluster Autoscaler?

Horizontal Pod Autoscaler changes the deployment's or replicaset's number of replicas based on the current CPU load. If the load increases, HPA will create new replicas, for which there may or may not be enough space in the cluster. If there are not enough resources, CA will try to bring up some nodes, so that the HPA-created pods have a place to run. If the load decreases, HPA will stop some of the replicas. As a result, some nodes may become underutilized or completely empty, and then CA will terminate such unneeded nodes.

upvoted 12 times
- Rajasa**

2 months, 3 weeks ago

Good Explanation

upvoted 2 times
- VT001**

Most Recent

2 weeks, 5 days ago

I got one question on my exam which showed autoscaling configuration and was asked to select correct configuration.

upvoted 1 times
- OrangeTiger**

1 month, 4 weeks ago

I agree A is correct.

I found quicklab.

Understanding and Combining GKE Autoscaling Strategies.

upvoted 1 times
- ehgm**

2 months ago

Selected Answer: A

B and D: You must never change the GKE managed instance group.

C and D: maxUnavailable and maxSurge are used for rolling update

A. It is the correct.

upvoted 2 times
- haroldbenites**

2 months, 3 weeks ago

Go for A
upvoted 1 times

  **MaxNRG** 4 months ago



Create Horizontal Autoscaler (min,max for pods):
kubectl autoscale deployment my-app --max 6 --min 4 --cpu-percent 50
Autoscaling cluster:
gcloud container clusters create example-cluster \
--zone us-central1-a \
--node-locations us-central1-a,us-central1-b,us-central1-f \
--num-nodes 2 --enable-autoscaling --min-nodes 1 --max-nodes 4
Check scaling an application and Horizontal Pod Autoscaler:
<https://kubernetes.io/docs/tasks/run-application/horizontal-pod-autoscale/>
Manual Cluster Resizing: <https://cloud.google.com/kubernetes-engine/docs/how-to/resizing-a-cluster>
<https://cloud.google.com/kubernetes-engine/docs/how-to/scaling-apps>
upvoted 3 times

  **MaxNRG** 4 months ago


Correct answer A.
upvoted 1 times

  **MaxNRG** 4 months ago

D.
Cloud VPN provides secure IPSec connection, though Direct Peering doesn't. Also, check selection diagram "What GCP connection is right for you?" on Hybrid Connectivity page. <https://cloud.google.com/hybrid-connectivity/>
It explicitly points that Cloud VPN and Dedicated Interconnect are for extension of you Data Center to Cloud (== of private compute resources). And Direct Peering for accessing GSuite (full set of GCP resources).
Direct Peering: <https://cloud.google.com/network-connectivity/docs/direct-peering>
Cloud VPN: <https://cloud.google.com/network-connectivity/docs/vpn/concepts/overview>
Choose Inteconnect Type: <https://cloud.google.com/network-connectivity/docs/how-to/choose-product#cloud-interconnect> only suggests Dedicted/Partner and Cloud VPN.
This Disaster Recovery scenario is described here, in section "Transferring data to and from GCP":
https://cloud.google.com/architecture/dr-scenarios-building-blocks#transferring_data_to_and_from
upvoted 1 times

  **JustJack21** 5 months, 4 weeks ago

Not A but C. Cluster Autoscaler (horizontal infrastructure solution) : designed to add or remove nodes based on demand. When demand is high, cluster autoscaler will add nodes to the node pool to accommodate that demand. When demand is low, cluster autoscaler will scale your cluster back down by removing nodes. This allows you to maintain high availability of your cluster while minimizing superfluous costs associated with additional machines.
upvoted 3 times

  **victory108** 9 months, 2 weeks ago

A. Configure a HorizontalPodAutoscaler with a target CPU usage. Enable the Cluster Autoscaler from the GCP Console.
upvoted 3 times

  **un** 9 months, 3 weeks ago

A is correct
upvoted 1 times

  **Ausias18** 11 months ago

Answer is A
upvoted 1 times

  **lynx256** 11 months ago


A is ok.

HorizontalPodAutoscaler scales PODS

Ref: <https://cloud.google.com/kubernetes-engine/docs/concepts/horizontalpodautoscaler>
"HPA changes the shape of your Kubernetes workload by automatically increasing or decreasing the number of Pods in response to the workload's CPU or memory consumption, or in response to custom metrics reported from within Kubernetes or external metrics from sources outside of your cluster."

Cluster Autoscaler scales CLUSTER (number of NODES)

Ref: <https://cloud.google.com/kubernetes-engine/docs/concepts/cluster-autoscaler>
"When demand is high, the cluster autoscaler adds nodes to the node pool. When demand is low, the cluster autoscaler scales back down to a minimum size that you designate.
[...]
GKE's cluster autoscaler automatically resizes the number of nodes in a given node pool, based on the demands of your workloads. You don't need to manually add or remove nodes or over-provision your node pools. Instead, you specify a minimum and maximum size for the node pool, and the rest is automatic."
upvoted 3 times

  **VenV** 11 months, 4 weeks ago

I thought C is correct, but as per this - A is correct
How does Horizontal Pod Autoscaler work with Cluster Autoscaler?

Horizontal Pod Autoscaler changes the deployment's or replicaset's number of replicas based on the current CPU load. If the load increases, HPA will create new replicas, for which there may or may not be enough space in the cluster. If there are not enough resources, CA will try to bring up some nodes, so that the HPA-created pods have a place to run. If the load decreases, HPA will stop some of the replicas. As a result, some nodes may become underutilized or completely empty, and then CA will terminate such unneeded nodes.

upvoted 6 times

  **joshuaquek** 1 year, 1 month ago

Why is it not D?

From <https://kubernetes.io/docs/tutorials/kubernetes-basics/explore/explore-intro/> , it mentions that:

"A Pod always runs on a Node. A Node is a worker machine in Kubernetes and may be either a virtual or a physical machine, depending on the cluster. Each Node is managed by the Master. A Node can have multiple pods, and the Kubernetes master automatically handles scheduling the pods across the Nodes in the cluster."

The question is asking about how the whole cluster can scale on the underlying VMs (i.e. Nodes) that they are sitting on, yeah?

upvoted 3 times

  **amxexam** 6 months ago

We are talking about CPU load or telling how many instances should be running or to be removed at a time.

upvoted 1 times

  **hiteshrup** 1 year, 2 months ago

Answer should be A.

Because tables are not created. Keyword is "Application **will be** writing the logs" that means, application is not writing. So we can create table with specify expiration strategy. If words said, table are created / application is writing then option B can be the only option. Reason because, if tables are created without this option and need to set expiration then we need to delete those tables and recreate it which normally not a good option. But considering we have previliages to define expiration strategy on table creation, we should choose A.

Ref: <https://cloud.google.com/bigquery/docs/best-practices-storage>

upvoted 2 times

  **Hanmant** 1 year, 2 months ago

According to below link "...Cluster autoscaler increases or decreases the size of the node pool automatically, based on the resource requests (rather than actual resource utilization) of Pods running on that node pool's nodes" <https://cloud.google.com/kubernetes-engine/docs/concepts/cluster-autoscaler>

So technically the request to more pods, increases the size of nodes. Thats why A is the correct answer

upvoted 5 times

You need to develop procedures to verify resilience of disaster recovery for remote recovery using GCP. Your production environment is hosted on-premises. You need to establish a secure, redundant connection between your on-premises network and the GCP network. What should you do?

- A. Verify that Dedicated Interconnect can replicate files to GCP. Verify that direct peering can establish a secure connection between your networks if Dedicated Interconnect fails.
- B. Verify that Dedicated Interconnect can replicate files to GCP. Verify that Cloud VPN can establish a secure connection between your networks if Dedicated Interconnect fails.
- C. Verify that the Transfer Appliance can replicate files to GCP. Verify that direct peering can establish a secure connection between your networks if the Transfer Appliance fails.
- D. Verify that the Transfer Appliance can replicate files to GCP. Verify that Cloud VPN can establish a secure connection between your networks if the Transfer Appliance fails.

Correct Answer: B

Community vote distribution

B (100%)

- KouShikyou

Highly Voted

2 years, 4 months ago

I think B is correct answer.

upvoted 40 times
- nitinz

12 months ago

only B works

upvoted 1 times
- kumarp6

1 year, 4 months ago

Its quite a fun to use Transfer Appliance for DR, I think answer is B

upvoted 4 times
- tartar

1 year, 6 months ago

B is ok

upvoted 8 times
- MeasService

Highly Voted

2 years, 4 months ago

Agree B is correct. Transfer appliance is a physical appliance for transferring huge bulk of data. does not fit into disaster recovery testing. out of A and B, B seems to be more nearest answer. One would not have direct peering and Dedicated interconnect in a solution

upvoted 22 times
- haroldbenites

Most Recent

2 months, 3 weeks ago

Go for B.

Only when u need connect con G.Suite applications you must use Peering.

upvoted 1 times
- vincy2202

3 months ago

B is the correct answer

upvoted 1 times
- joe2211

3 months, 1 week ago

Selected Answer: B

vote B

upvoted 1 times
- BSING246

4 months ago

B is correct. Dedicated Interconnect with option of Cloud VPN for redundancy

upvoted 2 times
- MaxNRG

4 months ago

B.

Cloud VPN provides secure IPSec connection, though Direct Peering doesn't. Also, check selection diagram "What GCP connection is right for you?" on Hybrid Connectivity page. <https://cloud.google.com/hybrid-connectivity/>



It explicitly points that Cloud VPN and Dedicated Interconnect are for extension of you Data Center to Cloud (== of private compute resources).



And Direct Peering for accessing GSuite (full set of GCP resources).



Direct Peering: <https://cloud.google.com/network-connectivity/docs/direct-peering>



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

Choose Interconnect Type: <https://cloud.google.com/network-connectivity/docs/how-to/choose-product#cloud-interconnect> only suggests Dedicted/Partner and Cloud VPN.
This Disaster Recovery scenario is described here, in section “Transferring data to and from GCP”:
https://cloud.google.com/architecture/dr-scenarios-building-blocks#transferring_data_to_and_from
upvoted 3 times

  **Unfaithful** 7 months, 1 week ago
Answer: B
Support: Dedicated Interconnect with VPN is a better solution. If a dedicated connection is possible why anyone will use Direct Peering.
upvoted 2 times



  **MamthaSJ** 7 months, 3 weeks ago
Answer is B
upvoted 2 times



  **Yogikant** 8 months, 1 week ago
Direct Peering exists outside of Google Cloud. Unless you need to access Google Workspace applications, the recommended methods of access to Google Cloud are Dedicated Interconnect or Partner Interconnect.
<https://cloud.google.com/network-connectivity/docs/direct-peering>
Answer: B
upvoted 1 times



  **Yogikant** 9 months ago
Answer: B



When established, Direct Peering provides a direct path from your on-premises network to Google services, including Google Cloud products that can be exposed through one or more public IP addresses.



Requirement is "secure". Enabling public IP address for VMs is not recommended.
upvoted 1 times



  **awfully** 9 months, 1 week ago
is it possible, i mean, if on-premise has down, do i have to wait until transfer appliance has finished? I mean, is that question little bit weird?
upvoted 1 times



  **victory108** 9 months, 2 weeks ago
B. Verify that Dedicated Interconnect can replicate files to GCP. Verify that Cloud VPN can establish a secure connection between your networks if Dedicated Interconnect fails.
upvoted 2 times

  **un** 9 months, 3 weeks ago
B is correct
upvoted 1 times

  **Ausias18** 11 months ago
Answer is B
upvoted 2 times

  **lynx256** 11 months, 1 week ago
B is ok.
upvoted 1 times

  **pawel_ski** 11 months, 3 weeks ago
A is correct.
<https://cloud.google.com/network-connectivity/docs/direct-peering>
"Direct Peering enables you to establish a direct peering connection between your business network and Google's edge network and exchange high-throughput cloud traffic."
Direct Peering supports HIGH-throughput traffic. Cloud VPN supports unto 3 Gbps where as Interconnect can support unto 100 Gbps.
upvoted 1 times

  **kakarooky** 10 months, 1 week ago
I agree. the issue is throuput.
upvoted 1 times

Your company operates nationally and plans to use GCP for multiple batch workloads, including some that are not time-critical. You also need to use GCP services that are HIPAA-certified and manage service costs.
How should you design to meet Google best practices?

- A. Provision preemptible VMs to reduce cost. Discontinue use of all GCP services and APIs that are not HIPAA-compliant.
- B. Provision preemptible VMs to reduce cost. Disable and then discontinue use of all GCP services and APIs that are not HIPAA-compliant.
- C. Provision standard VMs in the same region to reduce cost. Discontinue use of all GCP services and APIs that are not HIPAA-compliant.
- D. Provision standard VMs to the same region to reduce cost. Disable and then discontinue use of all GCP services and APIs that are not HIPAA-compliant.

Correct Answer: B

Community vote distribution

B (100%)

- Eroc

Highly Voted

2 years, 4 months ago

Disabling and then discontinuing allows you to see the effects of not using the APIs, so you can gauge (check) alternatives. So that leaves B and D as viable answers. The question says only some are not time-critical which implies others are... this means preemptible VMs are good because they will secure a spot for scaling when needed. So I'm also going to choose B.

upvoted 25 times
- Musk

1 year, 7 months ago

If others are time-critical, preemptible does not fit. Answer is D.

upvoted 7 times
- Darahaas

1 year, 5 months ago

And the others are not spoken about. By taking the question just by the context that it sets, preemptible is what I choose. So it's B according to me.

upvoted 2 times
- army234

11 months ago

No mention of others in the question. In an exam it's important to not being in individual assumptions and focus on the information in question. Key word here is "not time-critical"

upvoted 3 times
- Karna

Highly Voted

1 year, 7 months ago

They say that some (not all) of the Batch workloads are not time critical which implies that there are time critical Batch workloads for which Preemptible VMs are not appropriate, so going with D as the answer

upvoted 12 times
- altgml11

1 year, 7 months ago

I dont think it means use premtible vms for everything. It says to use preemptible vms to reduce cost

upvoted 4 times
- Rajasa

Most Recent

2 months ago

Selected Answer: B

go with B

upvoted 1 times

haroldbenites

2 months, 3 weeks ago

Go for B.
<https://cloud.google.com/compute/docs/instances/preemptible>
If your apps are fault-tolerant and can withstand possible instance preemptions, then preemptible instances can reduce your Compute Engine costs significantly. For example, batch processing jobs can run on preemptible instances. If some of those instances stop during processing, the job slows but does not completely stop. Preemptible instances complete your batch processing tasks without placing additional workload on your existing instances and without requiring you to pay full price for additional normal instances.

upvoted 1 times

vincy2202

3 months ago

Selected Answer: B

B is the correct answer

upvoted 1 times

joe2211

3 months, 1 week ago

Selected Answer: B

vote B

upvoted 1 times

  **MaxNRG** 4 months ago

B – Provisioning preemptible VMs to reduce costs. Disable and discontinue use all GCP services and APIs that are not HIPPA-compliant. A - has neat differences from B. It says just “discontinue”, though key word here is “disable”. See this quote from GCP HIPPA page:

Essential best practices:

- 1) Execute a Google Cloud BAA. You can request a BAA directly from your account manager.
- 2) Disable or otherwise ensure that you do not use Google Cloud Products that are not explicitly covered by the BAA (see Covered Products) when working with PHI.

And this page explains that you need to Enable Cloud APIs for your project. You can disable any APIs for your

upvoted 1 times

  **MaxNRG** 4 months ago

https://cloud.google.com/apis/docs/getting-started?hl=en&visit_id=636991287264824416-979825397&rd=1

upvoted 1 times

  **thakursumeet89** 4 months ago

Why to disable APIs since by default API's are disabled. So A?

upvoted 2 times

  **victory108** 9 months, 2 weeks ago

B. Provisioning preemptible VMs to reduce cost. Disable and then discontinue use of all GCP and APIs that are not HIPAA-compliant.

upvoted 4 times

  **un** 9 months, 3 weeks ago

B is correct

upvoted 1 times



  **jasim21** 10 months, 2 weeks ago

https://cloud.google.com/security/compliance/hipaa/#unique_features

GCP's security practices allow us to have a HIPAA BAA covering GCP's entire infrastructure, not a set aside portion of our cloud. As a result, you are not restricted to a specific region which has scalability, operational and architectural benefits. You can also benefit from multi-regional service redundancy as well as the ability to use Preemptible VMs to reduce costs.

HIPPA doesn't need region restriction. Answer is B

upvoted 2 times

  **Ausias18** 11 months ago

Answer is B

upvoted 1 times

  **lynx256** 11 months, 1 week ago

B or D ?

"multiple batch workloads, including SOME that are not time-critical" - this means MOST of them are TIME CRITICAL.

Also we don't know how long particular batches run and if they can be repeated in case of break.

I'll go with D.

upvoted 2 times

  **lynx256** 11 months ago

Wait a moment... About B or D....

So far everyone (including me) wrote about "time-critical" and "not time-critical".

But how about "Your company operates NATIONALLY [...]" and "D.Provision standard VMs to the SAME REGION to reduce cost" ?

So D restricts us to ONE REGION only whereas B restricts us to PREEMPTIBLE VMs only.

About HIPAA. I'm not sure, CMIIW, but I thing HIPAA regulations concern USA only. So our company probably uses GCP resources in many regions in the USA, not only one.

So maybe B is more relevant because it does NOT talk about "region".

What do you think ?

upvoted 3 times

  **LisX** 5 months, 3 weeks ago

B is correct. Data copied cross region will be billed. So low cost really means preemptible and process in the region close to the source.

upvoted 1 times

  **ybe_gcp_cert** 1 year, 1 month ago

B or D. Preemptible or standard.



The question is using "some batches are not time-critical" to mislead.

Even if some are still time critical, they are still batches and, in real life most batch use cases will run nightly and last less than 24h. The question doesn't give details on batch's use case.

Preemptible will do the job.



I would go with B.

upvoted 3 times

  **AshokC** 1 year, 5 months ago

Answer: B


upvoted 4 times

  **wiqi** 1 year, 6 months ago

I will go with B

It makes sense to ensure the usage is disabled and then terminate it.

upvoted 3 times

  **jespinosar** 1 year, 6 months ago

D) is the right answer

As cypt0 stated, the documentation is clear about disabling be preferred (you cannot ensure anything just 'discountinuing', not to talk when you you face an audit process):

<https://cloud.google.com/security/compliance/hipaa/>

The other part (cost) there are 2 options: preemptive VMs or using a common region (I guess to prevent egress costs). preemptive VMs are not an option, because some of the workload is time-critical. It would be an option if it was "a mix of ", but not one-size-fits-all

upvoted 4 times

Your customer wants to do resilience testing of their authentication layer. This consists of a regional managed instance group serving a public REST API that reads from and writes to a Cloud SQL instance.

What should you do?

- A. Engage with a security company to run web scrapers that look your for usersâ€™ authentication data om malicious websites and notify you if any is found.
- B. Deploy intrusion detection software to your virtual machines to detect and log unauthorized access.
- C. Schedule a disaster simulation exercise during which you can shut off all VMs in a zone to see how your application behaves.
- D. Configure a read replica for your Cloud SQL instance in a different zone than the master, and then manually trigger a failover while monitoring KPIs for our REST API.

Correct Answer: C

Community vote distribution

C (100%)

  **Kri_2525** Highly Voted 2 years, 2 months ago

As per google documentation(<https://cloud.google.com/solutions/scalable-and-resilient-apps>) answer is C.

C: A well-designed application should scale seamlessly as demand increases and decreases, and be resilient enough to withstand the loss of one or more compute resources.

Resilience: designed to withstand the unexpected



A highly-available, or resilient, application is one that continues to function despite expected or unexpected failures of components in the system. If a single instance fails or an entire zone experiences a problem, a resilient application remains fault tolerant—continuing to function and repairing itself automatically if necessary. Because stateful information isn’t stored on any single instance, the loss of an instance—or even an entire zone—should not impact the application’s performance.

upvoted 30 times

  **Jack_in_Large** 1 year, 9 months ago

Shutting off all VMs in a zone is not good approach for testing of authentication

upvoted 2 times

  **vartiklis** 2 months, 2 weeks ago

You're not testing *authentication*, you're testing *the resilience of the authentication layer*. "A resilient app is one that continues to function despite failures of system components" (https://cloud.google.com/architecture/scalable-and-resilient-apps#resilience_designing_to_withstand_failures) - such as shutting down all VMs in a zone.

upvoted 3 times

  **KouShikyou** Highly Voted 2 years, 3 months ago

Since the question is asking to do a resilience testing, I prefer C.

upvoted 11 times

  **Darahaas** 1 year, 5 months ago

Resilience testing of the "Authentication Layer", not the "Application". So the answer is B.

upvoted 3 times

  **haroldbenites** Most Recent 2 months, 3 weeks ago

Go for C.

upvoted 2 times

  **vincy2202** 3 months ago

Answer is C

upvoted 1 times

  **mudot** 3 months ago



Selected Answer: C

A & B - not resiliency testing

D - tests only for SQL

its C

upvoted 3 times

  **joe2211** 3 months, 1 week ago

Selected Answer: C

vote C

upvoted 1 times

  **MaxNRG** 4 months ago

C – schedule a disaster simulation exercise during which you can shut off all VMs in a zone to see how your app behaves.

A, B – don't test resilience at all, just security / authentication attacks. But, Q asks different – check if authentication works if some resources are down. So, C and D to consider.

Resiliency definition: a highly-available, or resilient app is one that continues to function despite expected or unexpected failures of components in the system.

D – says about Read Replica and trigger a failover. But, Read replicas neither provide High-Availability nor offer it; a master instance cannot failover to a read replica, and read replicas are unable to fail over in any way during outage.

C – focuses on both aspects: resilience and authentication layer testing by shutting down FrontEnd VMs in the zone. Cloud SQL testing is OOO, since this is back-end / data layer.

upvoted 3 times

  **MaxNRG** 4 months ago

HA Configuration of Cloud SQL – shows Failover example with Master and Read + Failover replica:

<https://cloud.google.com/sql/docs/mysql/high-availability>

Read also about Building scalable and Resilient Apps: <https://cloud.google.com/architecture/scalable-and-resilient-apps>

upvoted 2 times

  **PeppaPig** 7 months ago

I would go with D. Obviously a single DB instance would become a single point of failure. You can prompt a cross-region read replica to the primary in the case of DR.

<https://cloud.google.com/sql/docs/mysql/replication/cross-region-replicas>

upvoted 4 times

  **Unfaithful** 7 months, 1 week ago

Answer: C

Support: Read replicas do not provide failover capability. So option D is out.

upvoted 4 times

  **kopper2019** 7 months, 3 weeks ago

hey guys new Qs posted as of July 12th, 2021, All 21 new Qs in Question #152

upvoted 2 times

  **SSV** 7 months, 2 weeks ago

could you please post those question here itself. I am unable to access #152

upvoted 2 times

  **PeppaPig** 7 months, 3 weeks ago

D is correct.



Regional MIG by default ensures resilience of VMs on application layer

What you really need to test is the Database layer as there is only a single DB instance that's obviously became single point of failure.

Manual failover means you promote a replica as a standalone database, it is a recommended practice by GCP in disaster recovery.



Ref: <https://cloud.google.com/sql/docs/mysql/replication/cross-region-replicas#promote-a-replica>

upvoted 6 times

  **robotgeek** 3 months, 3 weeks ago

agree, in a MIG shutting down VMs serves no purpose, am I right?

upvoted 1 times

  **pnearn** 4 months, 3 weeks ago

This is the correct answer + explanation

upvoted 1 times

  **NYKC** 9 months ago

C is correct

upvoted 1 times

  **victory108** 9 months, 2 weeks ago

C. Schedule a disaster simulation exercise during which you can shut off all VMs in a zone to see how your application behaves.

upvoted 4 times

  **un** 9 months, 3 weeks ago

i would go with C

upvoted 1 times

  **Ausias18** 11 months ago

answer is C

upvoted 1 times

  **lynx256** 11 months, 1 week ago

IMO - C is ok.

D is about resilience architecture/solution. But we want to TEST their authentication layer for RESILIENCY.

A and B are about testing of their authentication layer base functionality, not it's RESILIENCY.

upvoted 2 times

  **AndreUanKenobi** 11 months, 2 weeks ago

Resilience testing is "Resilience testing is a type of software testing that observes how applications act under stress. It's meant to ensure the product's ability to perform in chaotic conditions without a loss of core functions or data; it ensures a quick recovery after unforeseen, uncontrollable events"

I guess it must be C

upvoted 1 times

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

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

Correct Answer: C

Community vote distribution

D (100%)

  **Googler2** Highly Voted 1 year, 10 months ago

D- reasons:
1.-Cloud Audit Logs maintains audit logs for admin activity, data access and system events. BIGQUERY is automatically send to cloud audit log functionality.
2.- In the filter you can filter relevant BigQuery Audit messages, you can express filters as part of the export

<https://cloud.google.com/logging/docs/audit>
<https://cloud.google.com/bigquery/docs/reference/auditlogs#ids>
https://cloud.google.com/bigquery/docs/reference/auditlogs#auditdata_examples
upvoted 28 times

  **GooglecloudArchitect** 1 year, 7 months ago

D is the right as you can get the monthly view of the query usage across all the users and projects for auditing purpose. C does need appropriate permission to see the detail level data. Monthly view is tough to get directly from the bq ls or bq show commands.
upvoted 3 times

  **Zarmi** Highly Voted 1 year, 10 months ago

Answer is D:
https://cloud.google.com/bigquery/docs/reference/auditlogs#example_query_cost_breakdown_by_identity
upvoted 21 times

  **BobbyFlash** 2 months, 1 week ago

Nailed it
upvoted 1 times

  **OrangeTiger** Most Recent 1 month, 3 weeks ago

I vote D.
Actibity log is automatically logged.
We can confirm this on CloudConsole.
upvoted 2 times

  **vincy2202** 2 months ago

Selected Answer: D
D is the correct answer.
Its between B & D.

1.Option B could have been the correct answer if the JOBS was not referred as "Table" rather as a "View" whihc are a part of INFORMATION_SCHEMA.
Ref - <https://cloud.google.com/bigquery/docs/information-schema-jobs#schema>

2. D is the most suited choice, since the BigQuery leverages Cloud Audit logs for admin, data access & system events.
Ref - <https://cloud.google.com/bigquery/docs/reference/auditlogs#overview>
upvoted 1 times

  **ABO_Doma** 2 months, 1 week ago

Selected Answer: D
The bq show command displays information about an object. It can't be used to list all jobs.



https://cloud.google.com/bigquery/docs/reference/bq-cli-reference#bq_show

As described in the syntax here: <https://cloud.google.com/bigquery/docs/managing-jobs#bq>, bq show needs a job id (which we don't have) to show the details of the job.
upvoted 1 times

  **ABO_Doma** 2 months, 2 weeks ago

Selected Answer: D

D is correct
upvoted 1 times

  **gcp_learner** 2 months, 2 weeks ago

Selected Answer: D

Cloud Audit Log is right answer to the question
upvoted 1 times

  **RCasagrande** 2 months, 3 weeks ago

Answer is D
upvoted 1 times



  **PhilipKoku** 2 months, 3 weeks ago

Selected Answer: D

Audit logs is the answer
upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago

Go for D
upvoted 1 times

  **pakilodi** 2 months, 3 weeks ago



Selected Answer: D

D is right here.
upvoted 1 times



  **joe2211** 3 months, 1 week ago

Selected Answer: D

vote D
upvoted 1 times

  **ravisar** 3 months, 2 weeks ago

I would be surprised if we need to go through the audit logs to count number of queries by users. So D seems to be not correct. I agree that this information may be available in logs, but We may have better way to query this.
upvoted 1 times

  **ravisar** 3 months, 2 weeks ago

Is this the job table ? [google.cloud.bigquery.job.QueryJob ?](https://googleapis.dev/python/bigquery/latest/generated/google.cloud.bigquery.job.QueryJob.html)
<https://googleapis.dev/python/bigquery/latest/generated/google.cloud.bigquery.job.QueryJob.html>


Looks like answer is B
upvoted 1 times

  **MaxNRG** 4 months ago


D – Use Cloud Audit Logging to view Cloud Audit Logs and create a filter on the query operation to get required info.
See Audit Logs for BQ, there is example of similar log query in the end of this page – Most Popular Datasets (statistics about table reads/modifications).
<https://cloud.google.com/bigquery/docs/reference/auditlogs/>
Types of Audit Logs are described here: <https://cloud.google.com/logging/docs/audit/> - this Q refers to Data Access audit logs.
A - option maybe also considered as an answer, since DataStudio integrates with BQ. But, DataStudio is used just for data visualization, helps to analyze data interactively.
upvoted 1 times

  **amxexam** 6 months ago

Please don't go with the flow as everyone in the post is going, if you are using a big query you will know you can self query all details about your query execution. Jobs and all are direct. But if you need additional information like slots used and all then you need to sink bigquery logs to bigquery table to query upon.
upvoted 1 times

  **amxexam** 5 months, 3 weeks ago

Will go with B
upvoted 1 times

  **AshwathD** 7 months, 2 weeks ago

It is B.
ex:
SELECT project_id, user_email,count(*) as CNT
FROM region-us.INFORMATION_SCHEMA.JOBS
group by project_id, user_email
;
upvoted 5 times




You want to automate the creation of a managed instance group. The VMs have many OS package dependencies. You want to minimize the startup time for new VMs in the instance group. What should you do?



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



Correct Answer: B



Community vote distribution



B (100%)




  **crypt0**  2 years, 4 months ago
Why is it not answer B?
upvoted 38 times




  **nitinz** 12 months ago
It is B
upvoted 4 times



  **Jos** 2 years, 1 month ago
It is.
upvoted 9 times

  **tartar** 1 year, 6 months ago
B is ok
upvoted 11 times



  **kumarp6** 1 year, 4 months ago
B is the answer,
upvoted 4 times



  **JoeShmoe**  2 years, 3 months ago
B- minimal start time means a pre-baked golden image
upvoted 16 times



  **rogerlovato**  1 month, 1 week ago
Selected Answer: B
B is correct
upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago
Go for B
upvoted 1 times

  **Godlike** 2 months, 4 weeks ago
yes B is right
upvoted 1 times



  **vincy2202** 3 months ago
B is the right answer
upvoted 1 times

  **exam_war** 3 months, 3 weeks ago
go with B. D: it involves so many other third software to configure/manage which makes build more complicated.
upvoted 1 times

  **MaxNRG** 4 months ago
B – create a custom VM instance image with all OS dependencies. Use Deployment Manager to create a MIG with the VM image.
Read more about Public and Custom VM Images: <https://cloud.google.com/compute/docs/images>
Custom images are available in your project only, they don't add cost to your VM instances, incur image storage cost (0.085\$ GB/month)



D – could be also an alternative (if to consider requirement to install dependencies in start up script). But, last sentence stresses on “minimize VM's start up time”. So, B is fastest solution. Also, what is a point to use Ansible if you can complete same task via startup script of Deployment Manager. Ansible won't make this faster, but just will add 3rd party dependency.

upvoted 1 times

  **victory108** 9 months, 2 weeks ago



B. Create a custom VM image with all OS package dependencies. Use Deployment Manager to create the managed instance group with the VM image.

upvoted 2 times

  **un** 9 months, 3 weeks ago



B is correct

upvoted 1 times

  **pentium2000** 10 months, 2 weeks ago



B is best answer

upvoted 1 times

  **Ausias18** 11 months ago



Answer is B

upvoted 1 times

  **BobBui** 1 year ago

The answer is B

upvoted 1 times



  **Rothmansua** 1 year, 1 month ago

We want to minimize VM startup time. And we don't care whether it is serving anything meaningful.

So the quickest way to start is to start empty image. Let whatever tools spend time copying anything inside after VMs are already running.



Is that the reasoning for D?

upvoted 2 times

  **joshuaquek** 1 year, 1 month ago



B is the answer, pre-install all dependencies to reduce deployment timing.

upvoted 2 times

  **Prakzz** 1 year, 2 months ago

Should be B

upvoted 1 times

  **RajeevVij** 1 year, 2 months ago

B is the answer

upvoted 1 times

Your company captures all web traffic data in Google Analytics 360 and stores it in BigQuery. Each country has its own dataset. Each dataset has multiple tables.

You want analysts from each country to be able to see and query only the data for their respective countries.



How should you configure the access rights?


- A. Create a group per country. Add analysts to their respective country-groups. Create a single group `all_analysts`, and add all country-groups as members. Grant the `all_analysts` group the IAM role of BigQuery jobUser. Share the appropriate dataset with view access with each respective analyst country-group.
- B. Create a group per country. Add analysts to their respective country-groups. Create a single group `all_analysts`, and add all country-groups as members. Grant the `all_analysts` group the IAM role of BigQuery jobUser. Share the appropriate tables with view access with each respective analyst country-group.
- C. Create a group per country. Add analysts to their respective country-groups. Create a single group `all_analysts`, and add all country-groups as members. Grant the `all_analysts` group the IAM role of BigQuery dataViewer. Share the appropriate dataset with view access with each respective analyst country- group.
- D. Create a group per country. Add analysts to their respective country-groups. Create a single group `all_analysts`, and add all country-groups as members. Grant the `all_analysts` group the IAM role of BigQuery dataViewer. Share the appropriate table with view access with each respective analyst country-group.

Correct Answer: A

Community vote distribution



A (100%)


-   **Sebatian**

Highly Voted 

 2 years, 3 months ago

It should be A. The question requires that user from each country can only view a specific data set, so BQ dataViewer cannot be assigned at project level. Only A could limit the user to query and view the data that they are supposed to be allowed to.

upvoted 37 times
-   **wk**



Highly Voted 

 2 years, 4 months ago

Should be C
<https://cloud.google.com/bigquery/docs/access-control#bigquery.dataViewer>



When applied to a dataset, dataViewer provides permissions to:

Read the dataset's metadata and to list tables in the dataset.
Read data and metadata from the dataset's tables.
When applied at the project or organization level, this role can also enumerate all datasets in the project. Additional roles, however, are necessary to allow the running of jobs.



upvoted 20 times
-   **Jack_in_Large** 1 year, 9 months ago


Option C grant read permission to all datasets globally, which violated the request "You want analysts from each country to be able to see and query only the data for their respective countries"

So the correct answer is A.

upvoted 13 times
-   **BrunoTostes** 4 months, 2 weeks ago

<https://cloud.google.com/bigquery/docs/access-control#bigquery.dataViewer>
"When applied to a dataset.." you can apply dataViewer role to a specific dataset.



upvoted 1 times
-   **spike0000**

Most Recent 

 4 weeks, 1 day ago

Aswer should be C
The jobUser runs queryjobs, i.e. jobs with a query script inside, so jobUsers can't run queries.
dataViewer can run queries:
"When applied to a DATASET, dataViewer provides permissions to:

Read the dataset's metadata and to list tables in the dataset.
Read DATA and metadata from the dataset's tables."

upvoted 1 times
-   **haroldbenites** 2 months, 3 weeks ago



Go for A.

upvoted 2 times

  **vincy2202** 3 months ago

A is the correct answer

upvoted 1 times

  **joe2211** 3 months, 1 week ago

Selected Answer: A

vote A

upvoted 2 times

  **MaxNRG** 4 months ago

1) bigquery.jobUser is required by data analysts to run queries. This role is applied to "all-analysts" group. Quote: "Note: Most users such as data analysts and data scientists should be granted bigquery.user or bigquery.jobUser."

2) "dataset with view access" means that dataset is shared to corresponding group for READ operation (described here). This means that bigquery.dataViewer role is applied to dataset to allow "Can View" access. Quote: "If you assign the bigquery.user or bigquery.jobUser role, you must also assign access controls to each dataset the user or group needs to access that wasn't created by the user."

3) In case of answer C, if we assign dataViewer role to group – then all users will have access to all datasets. That breaks principle of least privilege and Qs requirement. Instead datasets individually should enable this role for specific groups.

upvoted 1 times

  **MaxNRG** 4 months ago

Read Manage Data Access control on BQ to find how one team learned it hard-way. This article is exactly about our Q.

<https://tech.aaronteoh.com/bigquery-access-controls-setup/>

Datasets – are top-level containers that are used to organize and control access to your tables and views.


https://cloud.google.com/bigquery/docs/datasets-intro#top_of_page

upvoted 1 times

  **BSING246** 4 months, 1 week ago

A is right. BigQuery jobUser on selected dataset will serve query and see data. C is incorrect.

upvoted 3 times

  **sandipk91** 6 months ago


A is correct because analysts are supposed to run queries which is only possible if they have bigquery jobUser role

upvoted 4 times

  **manmohan15** 8 months, 3 weeks ago

I would go with Option D.. DataViewer access to view the data whereas jobUser person can only execute query/jobs

upvoted 1 times

  **victory108** 9 months, 2 weeks ago



A. Create a group per country. Add analysts to their respective country-groups. Create a single group "'all_analysts', and add all country-groups as members. Grant the "'all-analysts' group the IAM role of BigQuery jobUser. Share the appropriate dataset with view access with each respective analyst country-group.

upvoted 2 times

  **un** 9 months, 2 weeks ago

A is correct

upvoted 1 times



  **gosi** 10 months, 1 week ago

C seems most reasonable. "dataViewer" role, when you bind at project level, doesnt let you query any dataset table data. It just lets you enumerate all datasets. this is mentioned very clearly at <https://cloud.google.com/bigquery/docs/access-control>

And further assigning "view" (it is a partitive basic role) role at dataset level, it will let you execute job and or query that dataset table.

A - is wrong because as soon as you assign jobUser role to all_analyst group at project level, they all will get to run job and execute query at each dataset data table. No matter what addiitonal role you apply at dataset level, because the effective permissions are the union of all.

upvoted 2 times

  **gosi** 10 months, 1 week ago

I actually take that back.



A - is correct.

C - is wrong because as soon as you bind "dataViewer" to all_analyts at project level, everyone will be able to see the data because they will get permission - table.getData on all the datasets and tables under them.

(I was wrong in reading the doc at <https://cloud.google.com/bigquery/docs/access-control> in my earlier comment.)

A - is most reasonable. Giving all_analyst group only jobUser at project level will let everyone create a job and query tables across all dataset but this doesnt mean they can also see the data on the dataset where they dotn have view role because they will lack table.getData permissions on them.



upvoted 3 times

  **gosi** 10 months, 1 week ago

Sorry, I pick C again.

C - is ok

upvoted 1 times

  **getzsagar** 10 months, 4 weeks ago

A is the correct answer because bigquery.user can be assigned at project level. bigquery.dataViewer can be given to the datasets actually containing the view that is your source dataset which is country wise dataset. So Option A is correct

upvoted 1 times

  **getzsagar** 10 months, 4 weeks ago

all-analysts' group the IAM role of BigQuery jobUser -- This is at Project level not at DataSet level. At this level dataviewer role cannot be assigned.

upvoted 1 times

  **Ausias18** 11 months ago

Answer is A

upvoted 2 times

  **padamdha** 11 months, 2 weeks ago

Answer is C.

upvoted 1 times

  **lynx256** 11 months, 2 weeks ago

C is wrong. A is ok.

upvoted 1 times

You have been engaged by your client to lead the migration of their application infrastructure to GCP. One of their current problems is that the on-premises high performance SAN is requiring frequent and expensive upgrades to keep up with the variety of workloads that are identified as follows: 20 TB of log archives retained for legal reasons; 500 GB of VM boot/data volumes and templates; 500 GB of image thumbnails; 200 GB of customer session state data that allows customers to restart sessions even if off-line for several days.

Which of the following best reflects your recommendations for a cost-effective storage allocation?

- A. Local SSD for customer session state data. Lifecycle-managed Cloud Storage for log archives, thumbnails, and VM boot/data volumes.
- B. Memcache backed by Cloud Datastore for the customer session state data. Lifecycle-managed Cloud Storage for log archives, thumbnails, and VM boot/data volumes.
- C. Memcache backed by Cloud SQL for customer session state data. Assorted local SSD-backed instances for VM boot/data volumes. Cloud Storage for log archives and thumbnails.
- D. Memcache backed by Persistent Disk SSD storage for customer session state data. Assorted local SSD-backed instances for VM boot/data volumes. Cloud Storage for log archives and thumbnails.

Correct Answer: D

Community vote distribution

B (100%)

  **OSNG** Highly Voted 1 year, 2 months ago

B is correct.

WHY NOT OTHERS.

A: is wrong Local SSD in non-persistent therefore cannot be used for session state (as questions also need to save data for users who are offline for several days).

C: Again Local SSD cannot be used for boot volume (because its Non-persistent again) and always used for temporary data storage.

D: Same reason as C.

WHY B?

Left with B that's why, but the question is how to store Boot/Data volume on Cloud Storage?

- Storing other type of data is easy but most comments were about boot volume.

- Boot volume can be stored to Cloud Storage by creating an Custom Image.

https://cloud.google.com/compute/docs/images/create-delete-deprecate-private-images#selecting_image_storage_location

---- Upvote if agree for the clarification of others ----

upvoted 45 times

  **neversaynever** 1 month, 1 week ago

Answer is D - boot volumes (not boot images) cannot come from Cloud Storage - so B is not the answer.

upvoted 1 times

  **rsamant** 8 months, 3 weeks ago

Cloud Storage can be used to store image but it can't be used for boot.

upvoted 4 times

  **Manh** 5 months, 4 weeks ago

it's B. the question is all about storing data. B is right answer

upvoted 1 times

  **siumk** Highly Voted 1 year, 11 months ago

IMHO Answer is B:

Memcache backed by Cloud Datastore

<https://cloud.google.com/appengine/docs/standard/python/memcache>

Compute Engine image can be stored in Cloud Storage

<https://cloud.google.com/solutions/image-management-best-practices>



After the complete sequence of bytes from the disk are written to the file, the file is archived using the tar format and then compressed using the GZIP format. You can then upload the resulting *.tar.gz file to Cloud Storage and register it as an image in Compute Engine.

upvoted 14 times

  **Ayzen** 1 year, 10 months ago

The problem with B is that they are using SAN for data volumes of working VMs, not just to store templates/images. All answers here are quite bad. But I would go with D, as they are talking about several days of saving users' stale session data, which is something that can be accomplished with SSD.

upvoted 8 times

  **Bijesh** 1 year, 3 months ago

@ayzen yes. IS cloud datastore optimized to handle such a data (200GB)

upvoted 1 times

  **ehgm** Most Recent 2 months ago

"their current problems is that the on-premises high performance SAN", so it makes sense to use SSD, it's more expensive, but it depends on your needs.

upvoted 1 times

  **vincy2202** 2 months ago

Selected Answer: B

B comes very close to be the correct answer to this weird question, where none of the choices given seems to be correct. Reasons -

1. Local SSDs are ephemeral & can't be used as a VM Boot Disk (Option C & Option D are ruled out)

2. Google Cloud Storage can't be used as a VM Boot Disk, but the custom image of the boot disk can be stored in the GCS. But still pragmatically, the GCS can't function as a VM Boot disk.

Hence with no potential choices left, from sheer storage point of view(as asked in the question), option B seems to be the solitary but contentious choice.

upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago



Go for D

A: Local SSD is not for session data

B: Cloud storage is not for boot.

C: Cloud SQL is not session data. It is for transactional process.

upvoted 3 times

  **pakilodi** 2 months, 3 weeks ago

Selected Answer: B

B is the answer here

upvoted 1 times

  **ggzzzzzzzz** 2 months, 4 weeks ago

Selected Answer: B

Local SSD cannot be used for boot volume


upvoted 2 times

  **vchrist** 3 months ago

Selected Answer: B

Memcache backed by Cloud Datastore



upvoted 1 times

  **joe2211** 3 months, 1 week ago

Selected Answer: B

vote B

upvoted 1 times

  **ravisar** 3 months, 2 weeks ago

Answer is D. I think B is wrong. How do we store the VM boot/data volumes in cloud storage? When I create a Compute Engine, I have to select a persistent Disk or SSD. I don't think there is an option to use Cloud storage as boot disk.

upvoted 3 times

  **Zzzz_zzzz** 3 months, 3 weeks ago

Ans: B



200 GB of customer session state data that allows customers to restart sessions even if off-line for several days. Firestore formerly Datastore

<https://cloud.google.com/firestore#section-5>

Live synchronization and offline mode : Built-in live synchronization and offline mode make it easy to build multi-user, collaborative applications on mobile web, and IoT devices,.....

cost-effective storage allocation ... hence I choose cloud storage

upvoted 1 times

  **robotgeek** 3 months, 3 weeks ago

About D: There is not such a thing as "Memcache backed by SSD"

upvoted 1 times

  **BSING246** 4 months ago

Answer is B.

Some are pointing to D, that's not correct. SSD is not storage option for boot VMs. They are ephemeral. Ask is about storage.

User session in Cloud Datastore.

Other vms, boot disks, logs archive in GCS.

upvoted 3 times

  **MaxNRG** 4 months ago

C – Memcache backed by Cloud SQL for customer session state data. Assorted local SSD-backed instances for VM boot/data volumes. Cloud Storage for log archives and thumbnails.

B – also could be considered as an alternative, it looks more appropriate for migrating users sessions (memcache backed by DataStore). Though


2nd part about migration of VM boot/data volumes on Cloud Storage is not possible, since that requires Block Storage device (with file system / LVM on top). That can be Persistent Disk or Local SSD.

upvoted 1 times

  **MaxNRG** 4 months ago


In, C we have Local SSD, but its wording is terrible. “Assorted local SSD-backed instances”, should be treated as: GCE + attached 2-8 Local SSD drives (375 GB each), depending on number of volumes. This makes sense, though better solution would be to use Persistent disk, since local SSD content is erased when its GCE is stopped / deleted. Also persistent disk is cheaper (0.04 vs 0.08 \$/GB) Though. Check all Storage Options here (Cloud Storage, Persistent Disk, Local SSD) <https://cloud.google.com/compute/docs/disks/>
To support memcache backed by Cloud SQL – then it is also possible (mentioned in AppEngine Memcache Best Practices).
D – technically is also right (memcache backed by Persistent Disk) but using of Persistent Disk would require one more GCE hosting it.

upvoted 1 times

  **Sarin** 6 months ago

B is correct

upvoted 1 times

  **victory108** 9 months, 2 weeks ago

B. Memcache backed by Cloud Datastore for the customer session state data. Lifecycle- managed Cloud Storage for log archives, thumbnails, and VM boot/data volumes.

upvoted 4 times

  **un** 9 months, 2 weeks ago

B is correct

upvoted 2 times

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

Which feature of Kubernetes should you use to accomplish this?

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

Correct Answer: A

Community vote distribution

A (100%)

- Eroc**

Highly Voted

2 years, 4 months ago

StatefulSets is a feature of Kubernetes, which the question asks about. Yes, Persistent volumes are required by StatefulSets (<https://kubernetes.io/docs/concepts/workloads/controllers/statefulset/>). See the Google documentations for mentioning of hostnames (<https://cloud.google.com/kubernetes-engine/docs/concepts/statefulset>)... Answer A

upvoted 40 times
- OrangeTiger**

1 month, 3 weeks ago

thank you!

upvoted 1 times
- nitinz**

12 months ago

It is A

upvoted 1 times
- kumarp6**

1 year, 4 months ago

A is correct, statefulset

upvoted 1 times
- tartar**

1 year, 6 months ago

A is ok

upvoted 4 times
- PalSri**

Highly Voted

2 years ago

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

upvoted 7 times
- haroldbenites**

Most Recent

2 months, 3 weeks ago

Go for A.

<https://kubernetes.io/docs/concepts/workloads/controllers/statefulset/>

upvoted 1 times
- vincy2202**

3 months ago

Selected Answer: A

A is the correct answer

upvoted 1 times

MaxNRG

4 months ago

A – StatefulSets

StatefulSets are suitable for deploying Kafka, MySQL, Redis, ZooKeeper, and other applications needing unique, persistent identities and stable hostnames. Read more about StatefulSets. <https://cloud.google.com/kubernetes-engine/docs/concepts/statefulset>

C – Container Env Variable, are good if you need to init containers with some static content. E.g. Pod passes to containers its HOSTNAME (where containers are running), namespace and user defined vars. So, env vars is a way for Pod to init containers at start up. But, stable hostnames must be preserved at Pod level via StatefulSets.

Defining Env Vars for Container: <https://kubernetes.io/docs/tasks/inject-data-application/define-environment-variable-container/>

upvoted 2 times

Arjun1983

4 months, 1 week ago

StatefulSets are designed to deploy stateful applications and clustered applications that save data to persistent storage, such as Compute Engine persistent disks. StatefulSets are suitable for deploying Kafka, MySQL, Redis, ZooKeeper, and other applications needing unique, persistent identities and "stable hostnames". Answer is A

upvoted 1 times

🗨️ 👤 **victory108** 9 months, 2 weeks ago
A. StatefulSets
upvoted 3 times

🗨️ 👤 **un** 9 months, 2 weeks ago
A is correct
upvoted 1 times

🗨️ 👤 **Ausias18** 11 months ago
Answer is A
upvoted 1 times

🗨️ 👤 **Bhupals** 1 year, 2 months ago
A is the Ans
<https://kubernetes.io/docs/concepts/workloads/controllers/statefulset/>
upvoted 1 times

🗨️ 👤 **Chulbul_Pandey** 1 year, 3 months ago
StatefulSets for sequencing..
A is correct
upvoted 1 times

🗨️ 👤 **homer_simpson** 1 year, 4 months ago
For me it is A
upvoted 2 times

🗨️ 👤 **kirgininja** 1 year, 5 months ago
A is right answer
upvoted 1 times

🗨️ 👤 **AshokC** 1 year, 5 months ago
Answer: A
upvoted 1 times

🗨️ 👤 **wiqi** 1 year, 6 months ago
A is correct
upvoted 1 times

🗨️ 👤 **mlantonis** 1 year, 8 months ago
Persistent volumes are required by StatefulSets.
So A is the correct.
upvoted 1 times

🗨️ 👤 **Tushant** 1 year, 8 months ago
A is the right answer
upvoted 1 times

You are using Cloud CDN to deliver static HTTP(S) website content hosted on a Compute Engine instance group. You want to improve the cache hit ratio.

What should you do?

- A. Customize the cache keys to omit the protocol from the key.
- B. Shorten the expiration time of the cached objects.
- C. Make sure the HTTP(S) header `Cache-Region` points to the closest region of your users.
- D. Replicate the static content in a Cloud Storage bucket. Point CloudCDN toward a load balancer on that bucket.

Correct Answer: A

Reference:



https://cloud.google.com/cdn/docs/best-practices#using_custom_cache_keys_to_improve_cache_hit_ratio



Community vote distribution



A (100%)



  **shandy** Highly Voted 2 years, 3 months ago

Option A is Correct.
<https://cloud.google.com/cdn/docs/caching#cache-keys>
upvoted 14 times



  **nitinz** 12 months ago
A, both http and https will use same key.
upvoted 2 times



  **kumarp6** 1 year, 4 months ago
Yes, A is correct
upvoted 2 times



  **tartar** 1 year, 6 months ago
A is ok
upvoted 7 times



  **gfhbox0083** Highly Voted 1 year, 9 months ago
A, for sure.
By default, Cloud CDN uses the complete request URL to build the cache key. For performance and scalability, it's important to optimize cache hit ratio. To help optimize your cache hit ratio, you can use custom cache keys

upvoted 6 times

  **ehgm** Most Recent 2 months ago
I agree that 'A' action will increase the cache hit ratio, but it doesn't make sense for me to remove HTTPS from parts of my app. All access must be over HTTPS and HTTP must be blocked or redirected to HTTPS.
upvoted 1 times



  **haroldbenites** 2 months, 3 weeks ago
Go for A.
upvoted 1 times



  **vincy2202** 3 months ago
A is the correct answer
upvoted 1 times

  **joe2211** 3 months, 1 week ago

Selected Answer: A

vote A
upvoted 1 times

  **fwfw** 3 months, 2 weeks ago
why not D?
upvoted 1 times

  **MaxNRG** 4 months ago
A – customize cache keys to omit the protocol from the key.
Check Cache Keys: <https://cloud.google.com/cdn/docs/caching#cache-keys>
It says that you can omit protocol, host or query string in requesting URL. If you omit protocol, then both requests with HTTPS or HTTP protocol

will hit same cached page. Hence, that increases hit ratio.

C – with “cache-region” pointing to closest region – would improve latency (not hit ratio). But, “cache-region” field doesn’t exist in HTTP header at all. Check more about CDN Caching here: <https://cloud.google.com/cdn/docs/caching>

upvoted 1 times

  **MaxNRG** 4 months ago



B – stackdriver automatically collects admin activity logs for most services. Stackdriver Logging Agenct must be installed on each instance to collect system logs.

Read more about Logging Agent. <https://cloud.google.com/logging/docs/agent/>

Logging agent streams logs from 3rd party apps and systems SW (syslog on Linux) to Logging. It is best practice to run the Logging agent on all your VM instances. It runs on Linux and Windows.

Cloud Audit Logs says that Admin Activity audit logs are always enabled.

upvoted 1 times

  **unnikrisb** 4 months, 3 weeks ago

Agree with Option A.. <https://cloud.google.com/cdn/docs/best-practices#cache-hit-ratio>

upvoted 1 times

  **Unfaithful** 7 months, 1 week ago

Answer: A

Support: <https://cloud.google.com/cdn/docs/best-practices#cache-hit-ratio>

upvoted 1 times

  **victory108** 9 months, 2 weeks ago

A. Customize the cache keys to omit the protocol from the key.

upvoted 3 times

  **un** 9 months, 2 weeks ago

A is correct

upvoted 1 times

  **getzsagar** 10 months, 4 weeks ago

Option A is correct

You can customize cache keys to include or omit any combination of protocol, host, and query string. For example, suppose you have two websites on different domains that use the same logo. To show the logo, use custom cache keys, as follows:

The website content is different, but you use the same company logo on both domains. When you turn on Cloud CDN and customize the cache keys for the backend service that holds the logo, clear the Host checkbox so that the cache ignores the domain but caches the logo.

The logo needs to be cached whether displayed through HTTP or HTTPS. When you customize the cache keys for the backend service that holds the logo, clear the Protocol checkbox so that requests through HTTP and HTTPS count as matches for the logo's cache entry.



To learn how to customize cache keys, see Using cache keys.

upvoted 3 times

  **Ausias18** 11 months ago

Answer is A


upvoted 1 times

  **AshokC** 1 year, 5 months ago

A -

<https://cloud.google.com/cdn/docs/caching#cache-keys>

upvoted 1 times

  **Tushant** 1 year, 8 months ago

A is the right answer

upvoted 2 times

Your architecture calls for the centralized collection of all admin activity and VM system logs within your project. How should you collect these logs from both VMs and services?

- A. All admin and VM system logs are automatically collected by Stackdriver.
- B. Stackdriver automatically collects admin activity logs for most services. The Stackdriver Logging agent must be installed on each instance to collect system logs.
- C. Launch a custom syslogd compute instance and configure your GCP project and VMs to forward all logs to it.
- D. Install the Stackdriver Logging agent on a single compute instance and let it collect all audit and access logs for your environment.

Correct Answer: B

  **MeasService** Highly Voted  2 years, 4 months ago

Does not agree with D. B is the nearest answer I feel !
upvoted 37 times

  **nitinz** 12 months ago



It is B, all rest are BS
upvoted 1 times

  **kumarp6** 1 year, 4 months ago

B is correct, D is SPOF ...
upvoted 1 times

  **KouShikyou** 2 years, 4 months ago

Agree.
upvoted 8 times

  **tartar** 1 year, 6 months ago

B is ok
upvoted 11 times

  **shandy** Highly Voted  2 years, 3 months ago

Admin and event logs are configured by default. VM System logs require a logging agent to be configured. So A is not valid. Answer is B
upvoted 14 times

  **haroldbenites** Most Recent  2 months, 3 weeks ago

Go for B.
upvoted 1 times

  **vincy2202** 3 months ago

B is the correct answer.
upvoted 1 times

  **MaxNRG** 4 months ago

B – stackdriver automatically collects admin activity logs for most services. Stackdriver Logging Agenct must be installed on each instance to collect system logs.
Read more about Logging Agent. <https://cloud.google.com/logging/docs/agent/>
Logging agent streams logs from 3rd party apps and systems SW (syslog on Linux) to Logging. It is best practice to run the Logging agent on all your VM instances. It runs on Linux and Windows.
Cloud Audit Logs says that Admin Activity audit logs are always enabled.
upvoted 1 times

  **unnikrisb** 4 months, 3 weeks ago


Agree with B
upvoted 1 times

  **Unfaithful** 7 months, 1 week ago

Answer: B
Solution: https://cloud.google.com/logging/docs/agent/logging/installation#before_you_begin
upvoted 3 times



  **victory108** 9 months, 2 weeks ago

B. Stackdriver automatically collects admin activity logs for most services. The Stackdriver Logging agent must be installed on each instance to collect system log
upvoted 3 times

  **un** 9 months, 2 weeks ago

B is correct


upvoted 1 times

  **gosi** 10 months, 1 week ago

B.



A is wrong because "VM system logs" is not included by default by GCP. what is included by default is - "System Events" which by definition (refer : <https://cloud.google.com/logging/docs/audit#system-event>) doesn't include VM level system logs e.g. syslogd etc. You need agent for it.

upvoted 1 times

  **Ausias18** 11 months ago

Answer is B

upvoted 1 times

  **lynx256** 11 months ago

B is ok.

upvoted 1 times

  **lynx256** 11 months ago

... because Logging Agent is NOT installed by default on VMs.

Ref: <https://cloud.google.com/logging/docs/agent/installation>

The Logging agent streams logs from your VM instances and from selected third-party software packages to Cloud Logging. It is a best practice to run the Logging agent on all your VM instances.

The VM images for Compute Engine and Amazon Elastic Compute Cloud (EC2) don't include the Logging agent, so you must complete these steps to install it on those instances. The agent runs under both Linux and Windows.

If your VMs are running in Google Kubernetes Engine or App Engine, the agent is already included in the VM image, so you can skip this page.

If you are running specialized logging workloads that require higher throughput and/or improved resource-efficiency compared to the standard Cloud Logging agent, consider using the Ops agent.

upvoted 1 times

  **KSinghal6** 11 months ago

Refer <https://cloud.google.com/logging/docs/audit>, it clearly says

Admin Activity audit logs are always written; you can't configure or disable them.

System Event audit logs are always written; you can't configure or disable them.

Hence answer should be 'A'

upvoted 2 times

  **BikramY** 11 months, 2 weeks ago

B is suitable One

upvoted 1 times

  **ga** 1 year ago

I think B is correct answer. As per <https://cloud.google.com/logging/docs/agent/installation>

The Logging agent streams logs from your VM instances and from selected third-party software packages to Cloud Logging. It is a best practice to run the Logging agent on all your VM instances.

upvoted 2 times

  **Joyrex** 1 year ago

Is this not D? <https://cloud.google.com/logging/docs/agent/installation>

upvoted 1 times

  **Chulbul_Pandey** 1 year, 3 months ago

B is ok

upvoted 2 times

You have an App Engine application that needs to be updated. You want to test the update with production traffic before replacing the current application version.




What should you do?



- A. Deploy the update using the Instance Group Updater to create a partial rollout, which allows for canary testing.
- B. Deploy the update as a new version in the App Engine application, and split traffic between the new and current versions.
- C. Deploy the update in a new VPC, and use Googleλ€™s global HTTP load balancing to split traffic between the update and current applications.
- D. Deploy the update as a new App Engine application, and use Googleλ€™s global HTTP load balancing to split traffic between the new and current applications.



Correct Answer: B




Community vote distribution




B (100%)



  **KouShikyou** Highly Voted  2 years, 4 months ago
I think B is correct. Because GAE supports service version control and A/B test.
Is my understanding correct?
upvoted 49 times



  **nitinz** 12 months ago
Only B works.
upvoted 3 times



  **kumarp6** 1 year, 4 months ago
Yes, B is correct
upvoted 3 times



  **ADVIT** Highly Voted  2 years ago
Only one App Engine application can be created per Project.
So it's B.
upvoted 13 times



  **ghadxx** Most Recent  3 weeks, 1 day ago
Selected Answer: B
Versioning is supported in App Engine.
upvoted 1 times



  **haroldbenites** 2 months, 3 weeks ago
Go for D,
The option B don't say with wich service will split the traffic.
The option D gives more datail and makes sense.
upvoted 1 times

  **vincy2202** 3 months ago
B is the correct answer
upvoted 1 times

  **robotgeek** 3 months, 3 weeks ago
A is not because "Instance Group Updater " is only for Computer Engine MIG
upvoted 1 times

  **MaxNRG** 4 months ago
B – Deploy the update as a new version in AppEngine app, and split traffic between the new and current versions.
Traffic Splitting is feature of AppEngine for A/B testing.
<https://cloud.google.com/appengine/docs/standard/python/splitting-traffic>
upvoted 2 times

  **BSING246** 4 months, 1 week ago
B is correct. App Engine supports versioning.
upvoted 1 times

  **unnikrisb** 4 months, 3 weeks ago
B is correct... Canary Testing -> Traffic Splitting

upvoted 1 times

🗨️ 👤 **victory108** 9 months, 2 weeks ago

B. Deploy the update as a new version in the App Engine application, and split traffic between the new and current versions

upvoted 3 times

🗨️ 👤 **un** 9 months, 2 weeks ago

B is the answer

upvoted 1 times

🗨️ 👤 **getzsagar** 10 months, 4 weeks ago

Answer - B

Configure how much traffic the version that you just deployed should receive.

By default, the initial version that you deploy to your App Engine application is automatically configured to receive 100% of traffic. However, all subsequent versions that you deploy to that same App Engine application must be manually configured, otherwise they receive no traffic.

For details about how to configure traffic for your versions, see Migrating and Splitting Traffic.

<https://cloud.google.com/appengine/docs/admin-api/migrating-splitting-traffic>

upvoted 2 times

🗨️ 👤 **lynx256** 11 months ago

B is ok

upvoted 1 times

🗨️ 👤 **VenV** 11 months, 3 weeks ago

as per this B

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

upvoted 1 times

🗨️ 👤 **BobBui** 1 year, 1 month ago

I go with B

upvoted 1 times

🗨️ 👤 **bnlcnd** 1 year, 1 month ago

B is working as people suggested.

But why D is not? It actually can work in a surgical way. The newly introduced global LB has to take the hostname of the existing one. Yes, we can make the change to allow that. But we have to change it back when we fully rollout the new version since the LB is not required any more. With this complication, B is best answer.

upvoted 1 times

🗨️ 👤 **ahmedemad3** 1 year, 1 month ago

ANS :B

See the link: <https://cloud.google.com/appengine/docs/admin-api/deploying-apps>

upvoted 1 times

All Compute Engine instances in your VPC should be able to connect to an Active Directory server on specific ports. Any other traffic emerging from your instances is not allowed. You want to enforce this using VPC firewall rules.
How should you configure the firewall rules?

- A. Create an egress rule with priority 1000 to deny all traffic for all instances. Create another egress rule with priority 100 to allow the Active Directory traffic for all instances.
- B. Create an egress rule with priority 100 to deny all traffic for all instances. Create another egress rule with priority 1000 to allow the Active Directory traffic for all instances.
- C. Create an egress rule with priority 1000 to allow the Active Directory traffic. Rely on the implied deny egress rule with priority 100 to block all traffic for all instances.
- D. Create an egress rule with priority 100 to allow the Active Directory traffic. Rely on the implied deny egress rule with priority 1000 to block all traffic for all instances.

Correct Answer: A

Community vote distribution

A (100%)

  **wk** Highly Voted 2 years, 4 months ago

Should be A, there is no implied deny egress but only implied allow egress

https://cloud.google.com/vpc/docs/firewalls#default_firewall_rules

Every VPC network has two implied firewall rules. These rules exist, but are not shown in the Cloud Console:

The 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 GCP. Outbound access may be restricted by a higher priority firewall rule. Internet access is allowed if no other firewall rules deny outbound traffic and if the instance has an external IP address or uses a NAT instance. Refer to Internet access requirements for more details.

The 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 traffic to them. Incoming access may be allowed by a higher priority rule. Note that the default network includes some additional rules that override this one, allowing certain types of incoming traffic.

upvoted 66 times

  **nitinz** 12 months ago

It is A, rest all do not make sense. If you think of any other option then go back and read about firewalls. Seriously you are not ready for this exam.

upvoted 1 times

  **p4** 1 year, 3 months ago

from a book:
"Firewall rules control network traffic by blocking or allowing traffic into (ingress) or out of (egress) a network. Two implied firewall rules are defined with VPCs: one blocks all incoming traffic, and the other allows all outgoing traffic. You can change this behavior
Virtual Private Clouds 115
116 Chapter 6 ■ Designing Networks
by defining firewall rules with higher priority. Firewall rules have a priority specified by an integer from 0 to 65535, with 0 being the highest priority and 65535 being the lowest."

so this confirms A

upvoted 4 times

  **kumarp6** 1 year, 4 months ago

B is correct...

upvoted 1 times

  **MeasService** Highly Voted 2 years, 4 months ago

Agree Correct is A. There is no implied deny egress only deny ingress rule

upvoted 10 times

  **MyPractice** 2 years, 2 months ago

Agree with A . only Implied allow egress rule (or) Implied deny ingress rule.
There is No "Implied deny egress rule" which rules out C & D

upvoted 3 times

  **Baumster** Most Recent 2 days, 14 hours ago

OT: why is there no way to mark questions for review/repeat later on?

upvoted 1 times

🗳️ 👤 **haroldbenites** 2 months, 3 weeks ago

Go for A.

While the priority is higher, the egress rule is more restricted.

While the priority is higher, the ingress rule is more free.

upvoted 1 times

🗳️ 👤 **vincy2202** 3 months ago

Selected Answer: A

A is correct answer

upvoted 1 times

🗳️ 👤 **vchrist** 3 months ago

Selected Answer: A

to understand rules priority:

https://cloud.google.com/vpc/docs/firewalls#priority_order_for_firewall_rules

upvoted 1 times

🗳️ 👤 **nqthien041292** 3 months ago

Selected Answer: A

Vote A

upvoted 1 times

🗳️ 👤 **MaxNRG** 4 months ago

A – create an egress rule with priority 1000 to deny all traffic for all instances. Create another egress rule with priority 100 to allow the Active Directory traffic for all instances.

Default Firewall rules (aka implied rules) are following:

1) Egress traffic is allowed to all IP/ports.

2) Ingress traffic is disabled completely.

Both these rules have lowest priority (65535) and cannot be removed.

https://cloud.google.com/vpc/docs/firewalls#default_firewall_rules

upvoted 1 times

🗳️ 👤 **victory108** 9 months, 2 weeks ago

A. Create an egress rule with priority 1000 to deny all traffic for all instances. Create another egress rule with priority 100 to allow the Active Directory traffic for all instances.

upvoted 2 times

🗳️ 👤 **un** 9 months, 2 weeks ago

A is correct

upvoted 1 times

🗳️ 👤 **sidhappy** 10 months, 2 weeks ago

By default all outgoing traffics are allowed in firewall, creating a deny rule with less priority and another one for allowing outgoing traffic with higher priority will work here, the higher priority one(AD rule) will override the deny rule.

upvoted 1 times

🗳️ 👤 **Ausias18** 11 months ago

Answer is A

upvoted 1 times

🗳️ 👤 **gu9singg** 11 months, 1 week ago

A-

egress traffic is allowed by default

with 1000 deny FW rule you can block communication

with 100 to allow AD traffic

upvoted 1 times

🗳️ 👤 **AD3** 11 months, 1 week ago

'D' is correct. But for clear documentation purpose 'A' is good. There is implied Deny. I worked on it. The Deny log says no matching rule found.

upvoted 1 times

🗳️ 👤 **CloudGenious** 1 year ago

100 priority to allow AD traffic from all instance . 1000 to block all traffic for instance. so ans is A

upvoted 2 times

🗳️ 👤 **Chulbul_Pandey** 1 year, 3 months ago

A is the ans

upvoted 3 times

🗳️ 👤 **occupatissimo** 1 year, 3 months ago

Priority default value for implicit rules is 65535.

1000 instead is inserted automatically by GCP if left blank the priority field in rule creation.

Implicit deny egress rule doesn't exist.
A is correct.
upvoted 1 times

Question #92

Topic 1

Your customer runs a web service used by e-commerce sites to offer product recommendations to users. The company has begun experimenting with a machine learning model on Google Cloud Platform to improve the quality of results.

What should the customer do to improve their model's results over time?

A. Export Cloud Machine Learning Engine performance metrics from Stackdriver to BigQuery, to be used to analyze the efficiency of the model.

B. Build a roadmap to move the machine learning model training from Cloud GPUs to Cloud TPUs, which offer better results.

C. Monitor Compute Engine announcements for availability of newer CPU architectures, and deploy the model to them as soon as they are available for additional performance.

D. Save a history of recommendations and results of the recommendations in BigQuery, to be used as training data.

Correct Answer: D

Community vote distribution

D (100%)

ghadxx

3 weeks, 1 day ago

Selected Answer: D

Model performance is generally based on the volume of its training data input. The more the data, the better the model.

upvoted 1 times

Pime13

1 month ago

Selected Answer: D

i vote D

upvoted 1 times

victory108

2 months ago

D. Save a history of recommendations and results of the recommendations in BigQuery, to be used as training data.

upvoted 1 times

LoveT

2 months ago

"training data" is the key in option "D" and that's the answer

upvoted 4 times

vincy2202

2 months ago

Selected Answer: D

D seems to be the correct answer

upvoted 1 times

A development team at your company has created a dockerized HTTPS web application. You need to deploy the application on Google Kubernetes Engine (GKE) and make sure that the application scales automatically.

How should you deploy to GKE?

- A. Use the Horizontal Pod Autoscaler and enable cluster autoscaling. Use an Ingress resource to load-balance the HTTPS traffic.
- B. Use the Horizontal Pod Autoscaler and enable cluster autoscaling on the Kubernetes cluster. Use a Service resource of type LoadBalancer to load-balance the HTTPS traffic.
- C. Enable autoscaling on the Compute Engine instance group. Use an Ingress resource to load-balance the HTTPS traffic.
- D. Enable autoscaling on the Compute Engine instance group. Use a Service resource of type LoadBalancer to load-balance the HTTPS traffic.

Correct Answer: B

Reference:

<https://cloud.google.com/kubernetes-engine/docs/how-to/cluster-autoscaler>

Community vote distribution

A (88%)

13%

🗳️ 👤 **crypt0** Highly Voted 👍 2 years, 4 months ago

Why not using Ingress? (A)

upvoted 15 times

🗳️ 👤 **Smart** 2 years ago

"Ingress is a Kubernetes resource that encapsulates a collection of rules and configuration for routing external HTTP(S) traffic to internal services.

On GKE, Ingress is implemented using Cloud Load Balancing. When you create an Ingress in your cluster, GKE creates an HTTP(S) load balancer and configures it to route traffic to your application."

Are you exposing multiple services through single IP address? Hence, do you need routing your traffic?

Correct answer is B.

upvoted 23 times

🗳️ 👤 **Smart** 2 years ago

My bad, as stated by other, Service doesn't support L7 load balancing. Hence, need to setup ingress resource. Correct answer is A.

upvoted 15 times

🗳️ 👤 **tartar** 1 year, 6 months ago

B is ok.

<https://cloud.google.com/kubernetes-engine/docs/tutorials/hello-app>

upvoted 9 times

🗳️ 👤 **Jphix** 1 year, 1 month ago

Hate to say it but I disagree with tartar on this one. In the tutorial, it's true that they just say to set up a LoadBalancer Service Resource to route traffic, but it never specifies https traffic. The tutorial links to:

<https://cloud.google.com/kubernetes-engine/docs/tutorials/http-balancer>

Which, in the Ingress resource section, explicitly states:

"If you are exposing an HTTP(S) service hosted on GKE, HTTP(S) load balancing is the recommended method for load balancing."

Not a great question, because both A and B will work, but A is right.

B is not optimized for L7 load balancing as Smart mentioned, only L3&4 TCP and UDP, and "requests are not proxied to the destination" with the LoadBalancer Resource.

upvoted 12 times

🗳️ 👤 **nitinz** 12 months ago

It is A, K8s best way to LB is Ingress.

upvoted 2 times

🗳️ 👤 **techalik** 1 year, 3 months ago

I think A is OK:

upvoted 1 times

🗳️ 👤 **jcmoranp** Highly Voted 👍 2 years, 4 months ago

Name is service resource, it's B:

<https://cloud.google.com/kubernetes-engine/docs/concepts/service?hl=es-419>

upvoted 11 times

  **anjuagrawal** Most Recent 2 weeks ago

Selected Answer: B

Ingress is not a resource rather set of rules. The option says use Ingress resource.

upvoted 1 times

  **SHalgatti** 3 weeks ago

GKE cluster are regional type Load balancer will create external network load balancer (which is regional) . Q didn't mention about application being global. Also ingress sit's on top of services so B looks correct

upvoted 1 times

  **mbenhassine1986** 1 month ago

A is the correct response : <https://cloud.google.com/kubernetes-engine/docs/concepts/ingress>

upvoted 1 times

  **elenamatay** 1 month, 3 weeks ago

This page explains the differences between A and B, and when to use each: <https://cloud.google.com/kubernetes-engine/docs/tutorials/http-balancer>

According, to these recommendations, better use A.

upvoted 1 times

  **OrangeTiger** 1 month, 3 weeks ago

To expose your application outside the GKE cluster, GKE provides a built-in GKE Ingress controller and GKE Service controller, which deploy the Google Cloud Load Balancer (GCLB) on behalf of GKE users.

Is written in the document.

Do you interpret this as A or B?

<https://cloud.google.com/blog/ja/products/containers-kubernetes/exposing-services-on-gke>

Really confuse!

upvoted 1 times

  **OrangeTiger** 1 month, 3 weeks ago

I agree with A.

Use ingress for load balancing with GKE.

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

upvoted 1 times

  **vincy2202** 2 months ago

A seems to be the correct answer

upvoted 1 times

  **cloud_enthusiast_in** 2 months ago

A is better than B. Providing application specific load balancing can be achieved by Kubenetes Service Type : loadbalancer. But if we want to scale up across multile service then we should use external LB thru Ingress.yaml

upvoted 1 times

  **ABO_Doma** 2 months, 1 week ago



A)

when you create an Ingress object, the GKE Ingress controller creates a Google Cloud HTTP(S) Load Balancer and configures it according to the information in the Ingress and its associated Services.

Ref: <https://cloud.google.com/kubernetes-engine/docs/concepts/ingress#overview>

And as per https://cloud.google.com/load-balancing/docs/choosing-load-balancer#flow_chart, Cloud HTTP(S) Load balancer is the right load balancer to handle HTTPS traffic.

upvoted 1 times

  **yogi_508** 2 months, 2 weeks ago

definitely A

when you create a service of type LB , it creates only layer4 LB which is network LB

but our traffic is HTTP so, if we create ingress object it creates HTTP(s) LB

Hence answer is A not B

upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago

Go for B.

The ingress resource has prerequisites


Prerequisites

You must have an Ingress controller to satisfy an Ingress. Only creating an Ingress resource has no effect

<https://kubernetes.io/docs/concepts/services-networking/ingress/>

On the other hand, google promotes the use of their services which are already managed and are of easy use. Google don't find complex solutions with others resource that their can provide and are more simple to use.

upvoted 2 times

  **pakilodi** 2 months, 3 weeks ago

Selected Answer: A

Tricky question. A and B works here (Service type LB = cloud provider load balancer). I would choose the best practice, so all PODs with service type ClusterIP/NodePort and exposed via Ingress

upvoted 2 times

  **nqthien041292** 3 months ago

Selected Answer: A

Vote A

upvoted 1 times


  **fwfw** 3 months, 2 weeks ago

B is ok.

Autosclaling + Service of type loadbalancer is good enough, question does not request a HTTPS LB.

To configure ingress HTTPS LB for GKE, you have to configure a Service of type nodePod first which A doesn't mention at all.
<https://cloud.google.com/kubernetes-engine/docs/how-to/load-balance-ingress>


upvoted 2 times

  **Mohitpandey** 3 months, 2 weeks ago

Selected Answer: A

A is correct answer

upvoted 1 times

  **langlowe9** 3 months, 2 weeks ago

Selected Answer: A

<https://cloud.google.com/kubernetes-engine/docs/tutorials/http-balancer>

Ingress

When you specify kind: Ingress in a resource manifest, you instruct GKE to create an Ingress resource. By including annotations and supporting workloads and Services, you can create a custom Ingress controller. Otherwise, GKE makes appropriate Google Cloud API calls to create an external HTTP(S) load balancer.

If you are exposing an HTTP(S) service hosted on GKE, HTTP(S) load balancing is the recommended method for load balancing.

External Network Load Balancing

When you specify kind: Service with type: LoadBalancer in a resources manifest, GKE creates a Service of type LoadBalancer.

Although you can use either of these types of load balancers for HTTP(S) traffic, they operate in OSI layers 3/4 and are not aware of HTTP connections or individual HTTP requests and responses. Another important characteristic is that the requests are not proxied to the destination.

upvoted 3 times

You need to design a solution for global load balancing based on the URL path being requested. You need to ensure operations reliability and end-to-end in- transit encryption based on Google best practices.

What should you do?

- A. Create a cross-region load balancer with URL Maps.
- B. Create an HTTPS load balancer with URL Maps.
- C. Create appropriate instance groups and instances. Configure SSL proxy load balancing.
- D. Create a global forwarding rule. Configure SSL proxy load balancing.

Correct Answer: B

Reference:

<https://cloud.google.com/load-balancing/docs/https/url-map>

Community vote distribution

B (100%)

- victory108**

Highly Voted

9 months, 2 weeks ago

B. Create an HTTPS load balancer with URL maps.

upvoted 7 times
- haroldbenites**

Most Recent

2 months, 3 weeks ago

Go for B

upvoted 1 times
- vincy2202**

3 months ago

Selected Answer: B

B is correct answer

upvoted 1 times
- nqthien041292**

3 months ago

Selected Answer: B

Vote B

upvoted 1 times
- un**

9 months, 2 weeks ago

B is correct

upvoted 1 times
- ccmcwolf**

10 months, 3 weeks ago

there are interl https load balancers they are regional <https://cloud.google.com/load-balancing/docs/l7-internal>

upvoted 1 times
- Ausias18**

11 months ago

Answer is B

upvoted 2 times
- bnlcnd**

1 year, 1 month ago

confused with A vs B. A has the word "cross region" but finally find out HTTP/S Load Balancing is naturally global.

- B

upvoted 3 times
- doumx**

1 year, 2 months ago

B easy

upvoted 2 times
- awadheshk**

1 year, 4 months ago

B is correct

upvoted 2 times
- AshokC**

1 year, 5 months ago

B is correct

upvoted 2 times
- AmazonAu**



1 year, 7 months ago

there is not such thing called cross-region load balancer
so B is correct

upvoted 4 times

  **mlantonis** 1 year, 8 months ago


I agree with B
upvoted 1 times

  **Tushant** 1 year, 8 months ago

B is correct answer
upvoted 2 times

  **gfhbox0083** 1 year, 8 months ago



B, for sure.
URL paths supported in HTTP(S) Load balancing
upvoted 3 times

  **jayaen** 1 year, 9 months ago

answer should be A
cross region load balancing required to support global reach
<https://cloud.google.com/load-balancing/docs/https>
upvoted 2 times

  **rehma017** 1 year, 8 months ago

B - Cross Region LoadBalancing comes by default with premium tier.
upvoted 3 times

  **AD2AD4** 1 year, 9 months ago

Final Decision to go with Option B
upvoted 3 times

You have an application that makes HTTP requests to Cloud Storage. Occasionally the requests fail with HTTP status codes of 5xx and 429. How should you handle these types of errors?

- A. Use gRPC instead of HTTP for better performance.
- B. Implement retry logic using a truncated exponential backoff strategy.
- C. Make sure the Cloud Storage bucket is multi-regional for geo-redundancy.
- D. Monitor <https://status.cloud.google.com/feed.atom> and only make requests if Cloud Storage is not reporting an incident.

Correct Answer: B

Reference:

https://cloud.google.com/storage/docs/json_api/v1/status-codes

Community vote distribution

B (100%)

  **bigob4ek** Highly Voted 2 years, 3 months ago

Answer is B
You should use exponential backoff to retry your requests when receiving errors with 5xx or 429 response codes from Cloud Storage.
<https://cloud.google.com/storage/docs/request-rate>
upvoted 23 times

  **nitinz** 12 months ago



It is B
upvoted 1 times

  **haroldbenites** Most Recent 2 months, 3 weeks ago



Go for B
upvoted 1 times

  **vincy2202** 3 months ago

B is the correct answer
upvoted 2 times

  **nqthien041292** 3 months ago


Selected Answer: B
Vote B
upvoted 1 times

  **joe2211** 3 months, 1 week ago



Selected Answer: B
vote B
upvoted 1 times

  **MaxNRG** 4 months ago

B – Implement retry logic using a truncated exponential backoff strategy.
Per HTTP status and error codes for JSON the status codes are:
2xx – successful requests;
4xx, 5xx – failed requests;
3xx – requests that require redirect.
https://cloud.google.com/storage/docs/json_api/v1/status-codes
429 – Too many requests: your app tries to use more that its limit, additional requests will fail. Decrease your client’s requests and/or use truncated exponential backoff (used for all requests with 5xx and 429 errors).
<https://cloud.google.com/storage/docs/retry-strategy>
upvoted 1 times

  **victory108** 9 months, 2 weeks ago



B. Use Deployment Manager to automate service provisioning. Use Stackdriver to monitor and debug your tests.
upvoted 2 times



  **victory108** 9 months, 2 weeks ago



This B. Implement retry logic using a truncated exponential backoff strategy.
upvoted 1 times



  **un** 9 months, 2 weeks ago



Answer is B.
Link provided by bigob4ek has details
upvoted 1 times



  **Ausias18** 11 months ago
Answer is B
upvoted 1 times



  **CloudGenious** 1 year ago
As per google, if you run into any issue as increase latency or erroe rate ,pause your ramp up this give cloudstorage more time to scale your bucket . Best is backoff when 5xx ,429,408 response code
upvoted 2 times



  **bnlcnd** 1 year, 1 month ago
<https://cloud.google.com/storage/docs/exponential-backoff>
- B
upvoted 2 times



  **awadheshk** 1 year, 4 months ago
B is correct
upvoted 1 times

  **AshokC** 1 year, 5 months ago
Answer: B
upvoted 1 times

  **wiqi** 1 year, 6 months ago
B is correct
upvoted 1 times

  **mlantonis** 1 year, 8 months ago
Yeah B is correct
upvoted 1 times

  **Tushant** 1 year, 8 months ago
B is the right answer
upvoted 1 times

  **gfhbox0083** 1 year, 8 months ago
Using Exponential Backoff Strategy.
upvoted 1 times

You need to develop procedures to test a disaster plan for a mission-critical application. You want to use Google-recommended practices and native capabilities within GCP.

What should you do?

- A. Use Deployment Manager to automate service provisioning. Use Activity Logs to monitor and debug your tests.
- B. Use Deployment Manager to automate service provisioning. Use Stackdriver to monitor and debug your tests.
- C. Use gcloud scripts to automate service provisioning. Use Activity Logs to monitor and debug your tests.
- D. Use gcloud scripts to automate service provisioning. Use Stackdriver to monitor and debug your tests.

Correct Answer: B

Community vote distribution

B (100%)

- crypto0**

Highly Voted

 2 years, 4 months ago

I think answer B is correct:
<https://cloud.google.com/solutions/dr-scenarios-planning-guide>
upvoted 43 times
- tartar** 1 year, 6 months ago

B is ok
upvoted 11 times
- nitinz** 12 months ago

It is B, Google Best practice ---> never use scripts. They do not trust anyone else's code it seems.
upvoted 3 times
- fraloca** 1 year, 1 month ago

https://cloud.google.com/solutions/dr-scenarios-planning-guide#test_your_plan_regularly
upvoted 1 times
- kumarp6** 1 year, 4 months ago

B is correct
upvoted 2 times
- passnow**

Highly Voted

 2 years, 2 months ago

Boom, everyone studied and did their labs, stackdriver is google's recommended tool for monitoring and debbuging. I agree with u all that B is the correct answer
upvoted 16 times
- haroldbenites**

Most Recent

 2 months, 3 weeks ago

Go for B
upvoted 1 times
- vincy2202** 3 months ago

Selected Answer: B

B is the correct answer
upvoted 1 times
- nqthien041292** 3 months ago

Selected Answer: B

Vote B
upvoted 1 times
- ganeshrev** 3 months, 2 weeks ago



Selected Answer: B



Google recommended Practice
upvoted 1 times
- victory108** 9 months, 2 weeks ago



B. Use Deployment Manager to automate service provisioning. Use Stackdriver to monitor and debug your tests.
upvoted 4 times
- un** 9 months, 2 weeks ago



B is correct



upvoted 1 times



  **hero_india** 10 months, 1 week ago
B in the answer
upvoted 1 times



  **Ausias18** 11 months ago
Answer is B
upvoted 1 times



  **BobBui** 1 year ago
Answer is B
upvoted 2 times


  **doumx** 1 year, 2 months ago
B is correct
upvoted 1 times

  **gcparchitect007** 1 year, 4 months ago
B should be correct because we use Logging and monitoring for it.
upvoted 2 times

  **Bharathy** 1 year, 4 months ago
B is correct, use Deployment Manager for provisioning service and use SD logging and monitoring feature to debug test.
upvoted 1 times

  **AshokC** 1 year, 5 months ago
Answer: B
upvoted 1 times

  **wiqi** 1 year, 6 months ago
B is correct...
upvoted 1 times

  **theWildOne** 1 year, 7 months ago
Wait, Activity Logs and not StackDriver? on GCP exam? Yeah right... its B FOR SURE
upvoted 2 times

Your company creates rendering software which users can download from the company website. Your company has customers all over the world. You want to minimize latency for all your customers. You want to follow Google-recommended practices. How should you store the files?

- A. Save the files in a Multi-Regional Cloud Storage bucket.
- B. Save the files in a Regional Cloud Storage bucket, one bucket per zone of the region.
- C. Save the files in multiple Regional Cloud Storage buckets, one bucket per zone per region.
- D. Save the files in multiple Multi-Regional Cloud Storage buckets, one bucket per multi-region.

Correct Answer: A

Community vote distribution

D (75%) A (25%)

- JoeShmoe

Highly Voted

2 years, 3 months ago

Its D, create multi region buckets in Americas, Europe and Asia

upvoted 42 times
- MyPractice

2 years, 2 months ago

why " multiple Multi-Regional"? - A should be the right ans & addressing the global users - "More importantly, is that multiregional heavily leverages Edge caching and CDNs to provide the content to the end user"

<https://medium.com/google-cloud/google-cloud-storage-what-bucket-class-for-the-best-performance-5c847ac8f9f2>

upvoted 7 times
- xavi1

6 months, 2 weeks ago

because a multi-regional includes all the locations of ONE region, not the others.

upvoted 1 times
- Urban_Life

2 months, 2 weeks ago

This can't be D. It should be A.

upvoted 1 times
- MeasService

Highly Voted

2 years, 4 months ago

I would go with A (<https://cloud.google.com/storage/docs/locations>)

upvoted 18 times
- OrangeTiger

Most Recent

1 month, 3 weeks ago

Selected Answer: A

Shoud be A.

upvoted 1 times
- OrangeTiger

1 month, 3 weeks ago

I vote D.

upvoted 1 times
- OrangeTiger

1 month, 3 weeks ago

NO,A is correct.
'All data is stored redundantly across the continent, but it does not show which particular region the data is in.'
It cannot be saved by the user consciously. It automatically stores like D.
<https://cloud.google.com/blog/ja/topics/developers-practitioners/all-you-need-know-about-cloud-storage>

upvoted 2 times
- OrangeTiger

1 month, 3 weeks ago

No, after all D is correct.
I read a page in ABO_Doma comment.
'Object data added to buckets in EU multi-regions is not stored in the EUROPE-WEST2 (London) or EUROPE-WEST6 (Zurich) regions.'

upvoted 1 times
- ABO_Doma

2 months, 1 week ago

Selected Answer: D

if we create a single bucket in a Multi-Region like the US, we are minimizing the latency for customers in the US but not for customers in other parts of the world, e.g. Europe, Asia, etc.

Ref: https://cloud.google.com/storage/docs/locations#available_locations

upvoted 2 times

🗳️ 👤 **ochanz** 2 months, 2 weeks ago

Selected Answer: D

<https://cloud.google.com/storage/docs/locations#location-mr>

multi region only cover several regions in one continent, eg EU, US, Asia.

customer all over the world means to cover in all continent. So we need to apply multiple multi regional (option D).

option A will only cover customers in the same continent.

upvoted 1 times

🗳️ 👤 **blueassemble** 2 months, 2 weeks ago

its D

why not A? : create multi region bucket in only in America, Eu, or Asia. if you choose one of three, it cannot cover another multi region

upvoted 2 times

🗳️ 👤 **qmhao99** 2 months, 2 weeks ago

Selected Answer: D

Multi-region is within a single continent so the answer has to be D in order to be global.

upvoted 1 times

🗳️ 👤 **haroldbenites** 2 months, 3 weeks ago

Go for A.

Multi region is global. This is enough because of the objects within the bucket is replicated in all regions.

The term “multiple” don't is used in google cloud storage bucket.

upvoted 1 times

🗳️ 👤 **qmhao99** 2 months, 2 weeks ago

Multi-region is NOT global. There are three Multi-regions: America, Europe and Asia.

upvoted 2 times

🗳️ 👤 **pakilodi** 2 months, 3 weeks ago

Selected Answer: A

A is correct here

upvoted 1 times

🗳️ 👤 **nqthien041292** 3 months ago

Selected Answer: D

Vote D

upvoted 1 times

🗳️ 👤 **joe2211** 3 months, 1 week ago

Selected Answer: D

vote D

upvoted 1 times

🗳️ 👤 **Danny2021** 3 months, 1 week ago

D. The website needs to serve customers all over the world. GCS currently supports 3 multiple regions - US, Europe and APAC.

upvoted 1 times

🗳️ 👤 **mikesp** 4 months, 1 week ago

Answer is "A". Don't forget what google says:

"Cloud Storage behaves like a Content Delivery Network (CDN) with no work on your part because publicly readable objects are cached in the Cloud Storage network by default"

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

Option D sounds good, but does not explain how to solve the problem of having multiple URLs per the same downloadable object. To that end google recommends Cloud CDN + Cloud Storage + HTTPS Load Balancer which is not among the options.

upvoted 5 times

🗳️ 👤 **MaxNRG** 4 months, 2 weeks ago

D, key points here: minimize latency for all your customers all over the world.

So we need geo-redundancy here.

<https://cloud.google.com/storage/docs/best-practices>

Store your data in a region closest to your application's users. For instance, for EU data you might choose an EU bucket, and for US data you might choose a US bucket. For more information, see Bucket Locations.

upvoted 2 times

🗳️ 👤 **Ari_GCP** 5 months, 1 week ago

D is correct because it meets the latency requirement. Multi-regional bucket will only cover a large geographical area such as a continent like Asia or America - multiple multi-regional buckets will satisfy the worldwide access and latency requirement. So , I'll go with D.

upvoted 2 times

🗳️ 👤 **pr2web** 5 months, 3 weeks ago

Answer is A. This is Google's recommended best practice

Use a multi-region when you want to serve content to data consumers that are outside of the Google network and distributed across large geographic areas, or when you want the higher availability that comes with being geo-redundant.

<https://cloud.google.com/storage/docs/locations>
upvoted 2 times



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



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



Correct Answer: C



Community vote distribution



C (100%)



  **AWS56** Highly Voted 2 years, 1 month ago
Agree C
upvoted 17 times



  **VT001** Most Recent 2 weeks, 5 days ago
I got similar question on my exam which involved life cycle management and bucket lock.
upvoted 1 times



  **Rajasa** 2 months ago
Selected Answer: C
Go for C
upvoted 1 times



  **haroldbenites** 2 months, 3 weeks ago
Go for C
upvoted 1 times



  **vincy2202** 3 months ago
Selected Answer: C
C is the correct answer
upvoted 1 times



  **gabrielzeven** 3 months ago
D sounds like i would do it, but C sound like a lab or exam
upvoted 1 times

  **nqthien041292** 3 months ago
Selected Answer: C
Vote C
upvoted 1 times

  **victory108** 9 months, 2 weeks ago
C. Store the data in Cloud Storage and use lifecycle management to delete files when they expire.
upvoted 4 times

  **un** 9 months, 2 weeks ago
C is correct
upvoted 1 times



  **Pdk123** 10 months, 1 week ago
Agree C
upvoted 1 times



  **JohnWick2020** 10 months, 3 weeks ago
Answer is C.



Noteworthy if you are moving PHI from an on-prem source into cloud storage bucket, the object creation date recorded is the current date and not the original creation date as seen in on-prem source. To port original creation date you could script a function to write to the object metadata field called "Custom time" which is referenced in object lifecycle rules.



So to delete objects up to 4 years, you add an object lifecycle rule specifying the following form parameters:



Action = "Delete object"
Object conditions = select ""Days since custom time" checkbox and specify 1460 days.
upvoted 3 times



  **Ausias18** 11 months ago
Answer is C
upvoted 1 times

  **kimberjdaw** 1 year, 5 months ago
None of the above. It must be an old question. You need a retention policy, not a life-cycle policy.
upvoted 1 times



  **Loganlsh** 1 year, 4 months ago
In a cloud term language called its a life cycle policy not a retention policy, retention policy is called in monolithic solution deployment Mate!
upvoted 2 times



  **AshokC** 1 year, 5 months ago
C is right
upvoted 1 times



  **Musk** 1 year, 8 months ago
For me it's D.
upvoted 2 times



  **hafid** 1 year, 7 months ago
agree, correct answer is D, the object is from the last company which have its own "age" if you put it now in GCS the "age" will not reflect the real "age" but it reflects GCS creation time which is wrong



from google site
Age: This condition is satisfied when an object reaches the specified age (in days). Age is measured from the object's creation time.
upvoted 2 times

  **TotoroChina** 8 months ago
It mentioned "depending on when it was created", that will work with lifecycle management, which should be C.
upvoted 1 times

  **Carsonza** 1 year, 5 months ago
D says the same thing as C, you're still storing in cloud storage so your point is mute. its always best practice to use a native solution over creating a script.
upvoted 1 times

  **Krishna2401** 1 year, 6 months ago
If we use script also it will check for object creation time to delete file ? how script will come to know actual creation time of file ?
upvoted 1 times

  **mlantonis** 1 year, 8 months ago
C is correct
upvoted 2 times

  **gfhbox0083** 1 year, 8 months ago
C, for sure.
upvoted 2 times

You are deploying a PHP App Engine Standard service with Cloud SQL as the backend. You want to minimize the number of queries to the database.



What should you do?



- A. Set the memcache service level to dedicated. Create a key from the hash of the query, and return database values from memcache before issuing a query to Cloud SQL.
- B. Set the memcache service level to dedicated. Create a cron task that runs every minute to populate the cache with keys containing query results.
- C. Set the memcache service level to shared. Create a cron task that runs every minute to save all expected queries to a key called `cached_queries`.
- D. Set the memcache service level to shared. Create a key called `cached_queries`, and return database values from the key before using a query to Cloud SQL.



Correct Answer: A



Community vote distribution



A (100%)

  **Eroc** Highly Voted 2 years, 4 months ago
<https://cloud.google.com/appengine/docs/standard/php/memcache/using>
upvoted 15 times

  **dlzhang** 8 months, 3 weeks ago
<https://cloud.google.com/memorystore/docs/redis/redis-overview>
upvoted 2 times


  **nitinz** 12 months ago
A is correct
upvoted 5 times



  **tartar** 1 year, 6 months ago
A is ok
upvoted 10 times



  **hiteshrup** Highly Voted 1 year, 2 months ago
A dedicated memset is always better than shared until cost-effectiveness specify in the exam as objective. So Option C and D are ruled out.



From A and B, Option B is sending and updating query every minutes which is over killing. So reasonable option left with A which balance performance and cost.


My answer will be A
upvoted 10 times

  **ehgm** Most Recent 2 months ago
Selected Answer: A
Dedicated and shared will resolve the problem, the key is: store all queries in only one key "cached_queries" is not good, we have limits:
<https://cloud.google.com/appengine/docs/standard/python/memcache>
Create a key of each query is better.
upvoted 1 times

  **vincy2202** 3 months ago
A is the correct answer
upvoted 1 times


  **nqthien041292** 3 months ago
Selected Answer: A
Vote A
upvoted 1 times

  **joe2211** 3 months, 1 week ago
Selected Answer: A
vote A
upvoted 1 times

-  **victory108**


9 months, 2 weeks ago

A. Set the memcache service level to dedicated. Create a key from the hash of the query, and return database values from memcache before issuing a query to Cloud SQL.

upvoted 3 times
-  **un**


9 months, 2 weeks ago

A is correct

upvoted 1 times
-  **Ausias18**


11 months ago

Answer is A

upvoted 1 times
-  **ga**


1 year ago

A is correct

upvoted 1 times
-  **BobBui**


1 year ago

My answer is A

upvoted 1 times
-  **bnlcnd**


1 year, 1 month ago

Due to "Create a key called "cached-queries", C&D is wrong. You cannot have only one query. every query need a key. A vs B: run cron job every minute is not minimizing the call to DB. call DB only when cache missed. so, A is right.

upvoted 6 times
-  **BobirmirzoArs**


1 year, 3 months ago

I think A is right

upvoted 1 times
-  **AshokC**


1 year, 5 months ago

A is right

upvoted 1 times
-  **Tonyms04**


1 year, 5 months ago

D, for sure

upvoted 2 times
-  **gfhbox0083**

1 year, 8 months ago

A, for sure

upvoted 3 times
-  **AWS56**

2 years, 1 month ago

Agree A

upvoted 8 times

You need to ensure reliability for your application and operations by supporting reliable task scheduling for compute on GCP. Leveraging Google best practices, what should you do?



- A. Using the Cron service provided by App Engine, publish messages directly to a message-processing utility service running on Compute Engine instances.
- B. Using the Cron service provided by App Engine, publish messages to a Cloud Pub/Sub topic. Subscribe to that topic using a message-processing utility service running on Compute Engine instances.
- C. Using the Cron service provided by Google Kubernetes Engine (GKE), publish messages directly to a message-processing utility service running on Compute Engine instances.
- D. Using the Cron service provided by GKE, publish messages to a Cloud Pub/Sub topic. Subscribe to that topic using a message-processing utility service running on Compute Engine instances.



Correct Answer: B



Community vote distribution



B (100%)



  **JoeShmoe** Highly Voted 2 years, 3 months ago
Answer is B
upvoted 27 times



  **Smart** Highly Voted 2 years ago
B is correct. More appropriately: <https://cloud.google.com/solutions/reliable-task-scheduling-compute-engine>
upvoted 14 times



  **fraloca** 1 year, 1 month ago
<https://cloud.google.com/solutions/reliable-task-scheduling-compute-engine#schedule-compute-engine>
upvoted 2 times



  **pddddd** Most Recent 1 month, 3 weeks ago
none seem correct.
You do not need App Engine - Cloud Scheduler can call Pub/Sub directly...
GKE seems like a massive overkill for job scheduling. Nonetheless, B seems the only choice that makes sense.
upvoted 2 times



  **SHalgatti** 3 weeks ago
To use Cloud Scheduler App Engine must be enable at project level, else you can't use Cloud Scheduler
upvoted 1 times

  **pddddd** 1 month, 3 weeks ago
That said, App Engine has a cron job capabilities, so out of the options, indeed B makes sense, although App Engine is still an overkill comparing to Cloud Scheduler...
upvoted 1 times





















  **haroldbenites** 2 months, 3 weeks ago
Go for B
upvoted 1 times

  **vincy2202** 3 months ago
B is the correct answer
<https://cloud.google.com/architecture/reliable-task-scheduling-compute-engine>
upvoted 1 times

  **nqthien041292** 3 months ago
Selected Answer: B
Vote B
upvoted 1 times

  **Bhagesh** 5 months, 3 weeks ago
B

Cloud Scheduler provides a fully managed, enterprise-grade service that lets you schedule events. After you have scheduled a job, Cloud Scheduler will call the configured event handlers, which can be App Engine services, HTTP endpoints, or Pub/Sub subscriptions.
upvoted 2 times

-   **Hemendra007** 7 months, 1 week ago
GKE also provide cronjob
<https://cloud.google.com/kubernetes-engine/docs/how-to/cronjobs>
upvoted 1 times
-   **victory108** 9 months, 2 weeks ago
B. Using the Cron service provided by App Engine, publish messages to a Cloud Pub/Sub topic. Subscribe to that topic using a message-processing utility service running on Compute Engine instances.
upvoted 4 times
-   **un** 9 months, 2 weeks ago
B is correct
<https://cloud.google.com/solutions/reliable-task-scheduling-compute-engine>
upvoted 1 times
-   **Ausias18** 11 months ago
Answer is B
upvoted 1 times
-   **singlanikhil** 11 months, 1 week ago
It should be B as per below link
<https://cloud.google.com/solutions/reliable-task-scheduling-compute-engine>
upvoted 1 times
-   **AD3** 11 months, 1 week ago
A is probably correct because the sender has to ensure that the receiver has got the message and it's not hanging in the Pub/Sub. If the subscriber is not up and attached to the topic then it's possible that the subscriber may miss it. So, it's not a reliable conversation in that terms.
upvoted 1 times
-   **bnlcnd** 1 year, 1 month ago
Both B & D work. Let's assume the Cron Service in D means CronJob.
But D requires more infra cost while B is simpler and easier.
- B.
upvoted 3 times
-   **HKim** 1 year, 1 month ago
I am debating between A and B. The only concern I have in choosing B that Cloud Pub/Sub can send duplicate messages since it will send the message "at least once". However, the direct messaging option in A can also fail.
upvoted 1 times
-   **mwilbert** 1 year, 1 month ago
B, but of course now you should use Cloud Scheduler.
upvoted 2 times
-   **okixavi** 1 year, 2 months ago
Answer is B friends
upvoted 2 times

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



What actions will meet your company's needs?


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

Correct Answer: B



Community vote distribution



B (100%)



-  **KouShikyou**



Highly Voted 



 2 years, 4 months ago



With option A, daily data would take 27 hours.
My answer is B.
How do you think?
upvoted 45 times
-  **malequardos** 9 months, 2 weeks ago



Direct peering is meant only to connect to G Suite Services. Its reference may invalidate the whole answer.
upvoted 1 times
-  **nitinz** 12 months ago


it is B
upvoted 4 times
-  **Jay_82** 1 year, 2 months ago

ok but dedicated connection is available from 10 GBPS right where as in question it says internet connection is 100 MB, to me D is correct.
upvoted 1 times
-  **Alekshar** 1 year ago

The 100MB is the internet connection Dedicated Interconnect means physically connecting the on-prem server and google with a new network cable, I do hope the internal company network is not limited to only 100MB
upvoted 3 times
-  **kumarp6** 1 year, 4 months ago



B is correct
upvoted 5 times
-  **Jay_82** 1 year, 2 months ago



ok but dedicated connection is available from 10 GBPS right where as in question it says internet connection is 100 MB, to me D is correct.
upvoted 2 times
-  **wk**

Highly Voted 

 2 years, 4 months ago

Agree B. 100Mbps connections for 10TB data transfer is takes too long

<https://cloud.google.com/solutions/transferring-big-data-sets-to-gcp#close>
upvoted 19 times
-  **JJu** 2 years, 2 months ago

not 100Mbps. 100MB
upvoted 3 times
-  **misho** 1 year, 9 months ago

even with 100MB internet it's slow. It's 800 Mbps and transfer for 10 TB will take 2 days
upvoted 4 times

  **bogd** 1 year ago

There is no such thing as a "100MB" internet connection :) . That must be a speed (per second), and I would guess that the "B" is just a typo (it is highly atypical to measure bandwidth in Bps).

upvoted 4 times

  **Ombromanto69** Most Recent 1 month, 1 week ago

Selected Answer: B

It's B. Look at <https://cloud.google.com/architecture/migration-to-google-cloud-transferring-your-large-datasets#transfer-options>

upvoted 1 times

  **OrangeTiger** 1 month, 3 weeks ago

I think C is correct.

upvoted 1 times

  **cloud_enthusiast_in** 2 months ago

gsutil is not a choice for large migration. Leasing Transfer Appliance for one off migation is an option. Use GCS for archieving. Now coming to connectivity: Cloud VPN is only good for low bandwidth work. Google recommends to use Interconnect over Peering. However, here both are under option B. So answer is B

upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago

Go for B.

"100-MB internet connection" is for download. In this case, we are going to send data to the Cloud.

upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago

Consider:

The gsutil tool is the standard tool for small- to medium-sized transfers (less than 1 TB)



upvoted 1 times

  **vincy2202** 3 months ago

Selected Answer: B

B is the correct answer


upvoted 1 times

  **nqthien041292** 3 months ago

Selected Answer: B



Vote B

upvoted 1 times

  **exam_war** 3 months, 3 weeks ago

B is the right answer

upvoted 1 times

  **MaxNRG** 4 months, 2 weeks ago

B

<https://cloud.google.com/architecture/migration-to-google-cloud-transferring-your-large-datasets#close>

10 TB / 100 Mbps = 12 days

upvoted 1 times

  **areza** 8 months, 3 weeks ago

B is ok

upvoted 1 times

  **victory108** 9 months, 2 weeks ago

B. Lease a Transfer Appliance, upload archived files to it, and send it, and send it to Google to transfer archived data to Cloud Storage. Establish a connection with Google using a Dedicated Interconnect or Direct Peering connection and use it to upload files daily.

upvoted 3 times

  **un** 9 months, 2 weeks ago

B is correct

upvoted 1 times

  **JohnWick2020** 10 months, 3 weeks ago

Answer is B.

Breakdown plus solution:

1- Process and load 7 years of archived files totalling 900TB (Cloud Storage/Archive storage class + Transfer Appliance to ship data)



2- Continue loading 10TB data daily (Dedicated Interconnect - 10-200GBps line, typically you will compress files before uploading).

upvoted 4 times

  **Ausias18** 11 months ago

Answer is B

upvoted 1 times

  **AD3** 11 months, 1 week ago

B probably is correct. MB is notation for Mega Bytes. The internet connections are available up to 2000Mbps and more widely maximum rate available is 1000Mbps. Here 100 MB which means 800Mbps (considering 8 bits per byte) which is a realistic internet speed the company has currently. So $10TB=100000000MB/100MBsec=100000\text{ sec}/60sec=1666.66667min/60min=27.77777778hr$. Which is more than 24 hours. Unrealistic on the internet with no connection drops!!!

upvoted 1 times

  **GCB** 1 year ago

It cannot be B, as Dedicated interconnect/Direct Peering needs 10Gbps-80Gbps bandwidth. question clearly mentions available bandwidth is 100Mbps. Its between C and D.

upvoted 1 times

  **Alekshar** 1 year ago

10GB is not the required bandwith but the technology that has to be supported by the physical network of the company.
As Dedicated Interconnect implies to create a new physical link between the company and Google, the bandwith for this connection will be faster than the current internet connection

upvoted 5 times

You are developing a globally scaled frontend for a legacy streaming backend data API. This API expects events in strict chronological order with no repeat data for proper processing.

Which products should you deploy to ensure guaranteed-once FIFO (first-in, first-out) delivery of data?



- A. Cloud Pub/Sub alone
- B. Cloud Pub/Sub to Cloud Dataflow
- C. Cloud Pub/Sub to Stackdriver
- D. Cloud Pub/Sub to Cloud SQL


Correct Answer: D

Reference:
<https://cloud.google.com/pubsub/docs/ordering>

Community vote distribution



B (100%)

-   **exampanic**



Highly Voted 

 2 years, 2 months ago



I believe the answer is B. "Pub/Sub doesn't provide guarantees about the order of message delivery. Strict message ordering can be achieved with buffering, often using Dataflow." <https://cloud.google.com/solutions/data-lifecycle-cloud-platform>


upvoted 42 times
-   **TiagoM** 10 months, 1 week ago

Now Pub/Sub guarantees message order. Until the exam does not change I would pick B.

upvoted 4 times
-   **jask** 5 months ago

Answer is B. The question is talking about guaranteed-once FIFO delivery of data. Although Pub/sub provides data in order (FIFO) but it does 'at-least' once delivery of data. So, we need Dataflow for deduplication of data.



upvoted 2 times
-   **xhova**


Highly Voted 

 1 year, 10 months ago

B is the answer. CloudSQL is only for storage, to get the messages in order you need timestamp processed in dataflow to arrange them before putting it in any storage volume. The system described is not querying a db it is expecting a stream of messages only dataflow can correct the order. ACID has no value here because the db is not being queried. You'll not find any documentation on pub/sub order being corrected with a db. See notes below on pub/sub and dataflow using timestamps and windows to ensure order

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



upvoted 22 times
-   **KevPinto**

Most Recent 

 1 month ago



Selected Answer: B

If messages have the same ordering key and are in the same region, you can enable message ordering and receive the messages in the order that the Pub/Sub service receives them.
This is for a Globally scaled App -- So Pub Sub Message Ordering alone cannot be used -- B it is

upvoted 2 times
-   **AGHPE** 1 month, 3 weeks ago



Selected Answer: B

This B



upvoted 1 times
-   **duhhh** 2 months, 3 weeks ago

Selected Answer: B

Vote B

upvoted 2 times
-   **haroldbenites** 2 months, 3 weeks ago

Go for B

upvoted 1 times
-   **pnvijay** 2 months, 3 weeks ago

Selected Answer: B

Vote B

upvoted 2 times

🗨️ 👤 **pakilodi** 2 months, 3 weeks ago

Selected Answer: B

Vote B

upvoted 2 times

🗨️ 👤 **vincy2202** 3 months ago

B seems to be the correct answer.

upvoted 1 times

🗨️ 👤 **nqthien041292** 3 months ago

Selected Answer: B

Vote B

upvoted 2 times

🗨️ 👤 **iobluedot** 3 months, 1 week ago

Selected Answer: B

B is right answer

upvoted 1 times

🗨️ 👤 **BSING246** 3 months, 1 week ago

Selected Answer: B

B is right answer

upvoted 2 times

🗨️ 👤 **rexo** 4 months ago

Answer is B. "Pub/Sub doesn't provide guarantees about the order of message delivery. Strict message ordering can be achieved with buffering, often using Dataflow."

upvoted 3 times

🗨️ 👤 **rottzy** 4 months, 3 weeks ago

streaming = dataflow

upvoted 2 times

🗨️ 👤 **pr2web** 5 months, 3 weeks ago

Pub/Sub has recently introduced Message ordering. So answer would be A if responded to in third quarter of 2021. Prior to that you'd have to use a persistent store like Cloud SQL to manage the ordering aspect.

upvoted 9 times

🗨️ 👤 **Lorenzot92** 5 months ago

I'm not agree.

Pub/sub have introduced the ordering message, but not guarantee that these message are processed in order.

Moreover, if you confirm to receive one or multiple message in a middle of chain, pub/sub will resend all chain of message in order.

So question require FIFO, that can be satisfied by pub/sub, but to avoid duplication on streaming data, I think Dataflow is required for deduplication.

For me remain B also on Q3 2021.

Some links:

<https://cloud.google.com/pubsub/docs/ordering>

https://cloud.google.com/dataflow/docs/concepts/streaming-with-cloud-pubsub#efficient_deduplication

upvoted 2 times

🗨️ 👤 **Papafel** 7 months, 3 weeks ago

I go for B too

upvoted 1 times

🗨️ 👤 **areza** 8 months, 3 weeks ago

B is ok

upvoted 1 times

Your company is planning to perform a lift and shift migration of their Linux RHEL 6.5+ virtual machines. The virtual machines are running in an on-premises

VMware environment. You want to migrate them to Compute Engine following Google-recommended practices. What should you do?

- A. 1. Define a migration plan based on the list of the applications and their dependencies. 2. Migrate all virtual machines into Compute Engine individually with Migrate for Compute Engine.
- B. 1. Perform an assessment of virtual machines running in the current VMware environment. 2. Create images of all disks. Import disks on Compute Engine. 3. Create standard virtual machines where the boot disks are the ones you have imported.
- C. 1. Perform an assessment of virtual machines running in the current VMware environment. 2. Define a migration plan, prepare a Migrate for Compute Engine migration RunBook, and execute the migration.
- D. 1. Perform an assessment of virtual machines running in the current VMware environment. 2. Install a third-party agent on all selected virtual machines. 3. Migrate all virtual machines into Compute Engine.

Correct Answer: C

The framework illustrated in the preceding diagram has four phases:

⌘ Assess. In this phase, you assess your source environment, assess the workloads that you want to migrate to Google Cloud, and assess which VMs support each workload.

⌘ Plan. In this phase, you create the basic infrastructure for Migrate for Compute Engine, such as provisioning the resource hierarchy and setting up network access.

⌘ Deploy. In this phase, you migrate the VMs from the source environment to Compute Engine.

⌘ Optimize. In this phase, you begin to take advantage of the cloud technologies and capabilities.

Reference:

<https://cloud.google.com/architecture/migrating-vms-migrate-for-compute-engine-getting-started>

Community vote distribution

C (100%)

🗳️ 👤 **kopper2019** Highly Voted 👍 8 months ago

Ans) C ,

Migrate for Compute Engine organizes groups of VMs into Waves. After understanding the dependencies of your applications, create runbooks that contain groups of VMs and begin your migration!

<https://cloud.google.com/migrate/compute-engine/docs/4.5/how-to/migrate-on-premises-to-gcp/overview>

upvoted 15 times

🗳️ 👤 **VT001** Most Recent ⌚ 2 weeks, 5 days ago

Selected Answer: C

I got this question on my exam. Answered C.

upvoted 1 times

🗳️ 👤 **technodev** 1 month, 1 week ago

Selected Answer: C

I got this question in my exam.

upvoted 4 times

🗳️ 👤 **haroldbenites** 2 months, 3 weeks ago

Go for C.

upvoted 1 times

🗳️ 👤 **nikiwi** 2 months, 3 weeks ago

why not A?

seems pretty obvious if you look at the google doc: <https://cloud.google.com/migrate/compute-engine/docs/5.0/concepts/lifecycle>

upvoted 1 times

🗳️ 👤 **atlasga** 2 months, 1 week ago

When you are doing cloud migrations, you do migrations in "waves" which are groupings of one or more applications/workloads. Moving machines individually would break things, such as dependencies. This is standard industry practice.

upvoted 2 times

🗳️ 👤 **vincy2202** 3 months ago

C is the correct answer.



upvoted 1 times

  **joe2211** 3 months, 1 week ago

Selected Answer: C

vote C

upvoted 2 times

  **AnilKr** 6 months, 2 weeks ago

Ans - C, Migrate for compute engine(previously known as Velostrata) organizes group of VMs into Waves. Post understanding the dependencies of applications create runbook and start migration

upvoted 1 times

  **victory108** 7 months, 3 weeks ago

C. 1. Perform an assessment of virtual machines running in the current VMware environment. 2. Define a migration plan, prepare a Migrate for Compute Engine migration RunBook, and execute the migration.

upvoted 1 times

  **XDevX** 8 months ago

C is correct

upvoted 3 times

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

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

Correct Answer: D

Reference:

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

Community vote distribution

D (100%)

  **VishalB** Highly Voted 7 months, 4 weeks ago



Correct Ans : D

Since the Traffic is TCP, Ans A & C gets eliminated as HTTPS load balance is not supported.

B - File storage system is Cloud Firestore which do not give full control, hence eliminated.

D - Unmanaged instance group with network load balance with regional persistent disk for storage gives full control which is required for the migration.

upvoted 21 times

  **poseidon24** 7 months, 1 week ago

almost all good, except for File Storage, is not Cloud Firestore, it is a new service for sharing filesystems across VMs (like a NAS in a traditional infrastructure).

upvoted 2 times

  **kopper2019** Highly Voted 8 months ago

Ans) D , unmanaged instance group as application does not support horizontal scaling and network load balancer as no mention of http traffic .

upvoted 14 times

  **technodev** Most Recent 1 month, 1 week ago

I got this question in my exam, answered D

upvoted 2 times

  **oncelostinma** 2 months ago

D invalid as can't add an instance from different zone to the group. <https://cloud.google.com/compute/docs/instance-groups/creating-groups-of-unmanaged-instances>

B doesn't give full control over storage, though possible to have load balancer direct 100% traffic to single instance until not available, then flip to 2nd zone. This removes concurrent writes which would corrupt the data
(modified my earlier comment)

upvoted 1 times

  **elenamatay** 1 month, 3 weeks ago

business is willing to accept a downtime when an incident occurs

upvoted 1 times

  **oncelostinma** 2 months ago

D invalid as can't add an instance from different zone to the group. <https://cloud.google.com/compute/docs/instance-groups/creating-groups-of-unmanaged-instances>

B doesn't give full control over storage, no answers look viable

upvoted 1 times

  **anjuagrawal** 2 months, 3 weeks ago


Unmanaged instance groups can contain heterogeneous instances that you can arbitrarily add and remove from the group. Unmanaged instance groups do not offer autoscaling, autohealing, rolling update support, multi-zone support, or the use of instance templates and are not a good fit for deploying highly available and scalable workloads --- <https://cloud.google.com/compute/docs/instance-groups>. IT should not be D rather A.

upvoted 1 times

  **anjuangrawal** 2 months, 3 weeks ago

I meant B and not A due to TCP traffic.

upvoted 1 times

  **anjuangrawal** 2 months, 3 weeks ago

Due to horizontal scaling, it looks like Unmanaged Instance Group but does Unmanaged Instance group support High Availability? It does not support Auto healing, Auto scaling etc.

upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago

go for B

upvoted 1 times

  **nqthien041292** 2 months, 3 weeks ago

Selected Answer: D



Vote D

upvoted 2 times

  **vincy2202** 3 months ago

D is the correct answer.

upvoted 1 times

  **nileshlg** 3 months, 1 week ago

Selected Answer: D


Answer is D

upvoted 2 times

  **nehaxlpb** 3 months, 1 week ago

Answer is B
<https://cloud.google.com/architecture/filers-on-compute-engine#elastifile>

upvoted 1 times

  **BSING246** 3 months, 1 week ago

B is wrong due to no horizontal scaled app. Unmanaged Instance Group is needed and PD for file system

upvoted 1 times

  **Aleph2may** 3 months, 2 weeks ago

Ans B)
VMs in an unmanaged instance groupe are in one only zone (<https://cloud.google.com/compute/docs/instance-groups/creating-groups-of-unmanaged-instances>) so C) and D) are wrong

upvoted 5 times

  **Arlima** 3 months ago

When you are using Active passive you must use unmanaged instance group look here
<https://cloud.google.com/load-balancing/docs/internal/setting-up-failover>

upvoted 1 times

  **jp2403** 5 months ago



Eliminate Cloud Filestore as concurrent access causes data corruption
Eliminate HTTPs load balancer as Traffic is TCP
Correct Ans D

upvoted 4 times

  **diaga2** 6 months ago

Yes, It's D - <https://cloud.google.com/load-balancing/docs/load-balancing-overview>

upvoted 1 times

  **AnilKr** 6 months, 2 weeks ago

Ans - D, No horizontal scaling support so unmanaged instance group, TCP traffic so network load balancer.

upvoted 1 times

  **victory108** 7 months, 3 weeks ago

D. Use an unmanaged instance group with an active and standby instance in different zones, use a regional persistent disk, and use a network load balancer in front of the instances.

upvoted 4 times

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

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

Correct Answer: C

Reference -

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

Community vote distribution

D (100%)

- kopper2019**

Highly Voted

8 months ago

Ans) D , Reason : high throughput via internal IPs

upvoted 39 times
- XDevX**

Highly Voted

8 months ago

IMHO the correct answer is D.

Reason: "requires high throughput via internal IPs, while minimizing latency" - both are aspects you cannot guarantee with using VPN traversing the internet.

upvoted 10 times
- GARY1119**

Most Recent

1 month, 1 week ago

D is the answer.

Cloud VPN is not for high throughput and low latency.

upvoted 1 times
- Skr6266**

1 month, 3 weeks ago

Correct Answer is D.

upvoted 1 times
- OrangeTiger**

1 month, 3 weeks ago

Selected Answer: D

vote D

'requires high throughput'

upvoted 1 times
- PhuocT**

1 month, 4 weeks ago

Selected Answer: D

requires high throughput via internal IPs, while minimizing latency, answer D.

upvoted 2 times
- Rawatvs**

2 months ago

Selected Answer: D

Should be in very sense

upvoted 1 times
- mgm7**

2 months, 3 weeks ago

Selected Answer: D

high throughput => D

upvoted 4 times
- duhhh**

2 months, 3 weeks ago

Vote D as answer

upvoted 1 times
- PhilipKoku**

2 months, 3 weeks ago

Selected Answer: D

Dedicated Interconnect = High throughput!

upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago



Go for D

upvoted 1 times

  **thechangman** 2 months, 3 weeks ago

why C? i think ans should be D. requirements: onprem and low latency and high throughput

upvoted 1 times

  **BSING246** 3 months ago

Selected Answer: D

Marked C is wrong

upvoted 1 times

  **vincy2202** 3 months ago

D is the correct answer

upvoted 1 times

  **pakilodi** 3 months ago

Selected Answer: D

Answer is D cause high throughput via internal IPs

upvoted 2 times

  **mudot** 3 months ago

Selected Answer: D

internal IPs, while minimizing latency

upvoted 2 times

  **Neo_ACE** 3 months, 2 weeks ago

Answer is D

upvoted 1 times

You are managing an application deployed on Cloud Run for Anthos, and you need to define a strategy for deploying new versions of the application. You want to evaluate the new code with a subset of production traffic to decide whether to proceed with the rollout. What should you do?

- A. Deploy a new revision to Cloud Run with the new version. Configure traffic percentage between revisions.
- B. Deploy a new service to Cloud Run with the new version. Add a Cloud Load Balancing instance in front of both services.
- C. In the Google Cloud Console page for Cloud Run, set up continuous deployment using Cloud Build for the development branch. As part of the Cloud Build trigger, configure the substitution variable TRAFFIC_PERCENTAGE with the percentage of traffic you want directed to a new version.
- D. In the Google Cloud Console, configure Traffic Director with a new Service that points to the new version of the application on Cloud Run. Configure Traffic Director to send a small percentage of traffic to the new version of the application.

Correct Answer: C

Community vote distribution

A (58%)

C (42%)

🗲️ 👤 **VishalB** Highly Voted 👍 7 months, 4 weeks ago

Correct Answer: A

o Each deployment to a service creates a revision. A revision consists of a specific container image, along with environment settings such as environment variables, memory limits, or concurrency value.

o Once the new revision is deployed to a Service you can manage the traffic using MANAGE TRAFFIC option inside the revision tab
<https://cloud.google.com/run/docs/resource-model>

upvoted 21 times

🗲️ 👤 **kopper2019** Highly Voted 👍 8 months ago

Ans A,

A. Deploy a new revision to Cloud Run with the new version. Configure traffic percentage between revisions.

upvoted 9 times

🗲️ 👤 **muhasinem** 8 months ago

C is better answer , by making use of Cloudbuild .

upvoted 2 times

🗲️ 👤 **cloud91** 6 months ago

TRAFFIC_PERCENTAGE is not available in the approach mentioned in option C... So A is the answer

upvoted 3 times

🗲️ 👤 **Manh** 5 months, 4 weeks ago

gcloud command allow u to update traffic. <https://cloud.google.com/sdk/gcloud/reference/run/services/update-traffic>
u can do it on cloud build as well

upvoted 1 times

🗲️ 👤 **mbenhassine1986** Most Recent 🕒 1 month ago

Correct Answer A

<https://cloud.google.com/run/docs/rollouts-rollbacks-traffic-migration#gradual>

upvoted 2 times

🗲️ 👤 **turtelying** 1 month, 1 week ago

Correct Answer: A,

it is Cloud Run for Athnos, not Cloud Run

upvoted 1 times

🗲️ 👤 **ehgm** 2 months ago

We can set up traffic split manually and using Cloud Build, that's ok.

But "set up continuous deployment using Cloud Build for the development branch" no make sense. Will we use "development branch" to update the service on production?

The person who wrote this question was too lazy!

upvoted 2 times

🗲️ 👤 **CoffeeRoolz** 2 months, 1 week ago

Correct Answer: C

The only argument is see against C is that there is no variable called TRAFFIC_PERCENTAGE, but it mentions clearly SUBSTITUTION variable - one could create a custom variable.

upvoted 2 times

  **michael_wasik** 2 months ago

Can't agree. Custom substitutions must begin with an underscore.

https://cloud.google.com/build/docs/configuring-builds/substitute-variable-values#using_user-defined_substitutions

upvoted 1 times

  **PhilipKoku** 2 months, 3 weeks ago

Selected Answer: A

Split your traffic using a new revision.

upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago

Go for A.

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

Cloud Run allows you to specify which revisions should receive traffic and to specify traffic percentages that are received by a revision.



upvoted 1 times

  **BSING246** 2 months, 3 weeks ago

Selected Answer: A

A is correct. Revision are needed to set percentage value. C is wrong marked

upvoted 1 times

  **pakilodi** 2 months, 3 weeks ago

Selected Answer: A

Select A

upvoted 2 times

  **Chintzz** 3 months ago

Selected Answer: A

<https://cloud.google.com/run/docs/managing/revisions>

upvoted 3 times

  **mudot** 3 months ago

Selected Answer: C

you need to define a strategy not deploy

upvoted 5 times

  **AsutoshPanda** 3 months ago


I think both A & C will work. However I will go with C as it is automated hence more efficient whereas option A is a manual approach.

upvoted 1 times

  **Danny2021** 3 months, 1 week ago

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

upvoted 1 times


  **mikesp** 4 months, 1 week ago

Answer is C.

<https://cloud.google.com/anthos/run/docs/rollouts-rollbacks-traffic-migration#yaml>

As you can see, it is possible to define the percentage of traffic in the yaml file. This percentage can be a variable TRAFFIC_PERCENTAGE substituted during the build process.

upvoted 3 times

  **robotgeek** 3 months, 3 weeks ago

It makes sense, TRAFFIC_PERCENTAGE would be the value assigned to PERCENT-NEW

upvoted 1 times



  **jp2403** 5 months ago

Ans is A

There is no such option in CLI for TRAFFIC_PERCENTAGE <https://cloud.google.com/anthos/run/docs/rollouts-rollbacks-traffic-migration?hl=en#command-line>

for command line options are: gcloud run services update-traffic SERVICE --to-revisions REVISION=PERCENTAGE

upvoted 4 times

  **Bhagesh** 5 months, 3 weeks ago

A

You can specify whether a new revision receives all, none, or some of the traffic, you can gradually roll out a new revision, you can split traffic between several revisions, and you can roll back from a revision. For more information, refer to Rollbacks, gradual rollouts, and traffic migration.

upvoted 2 times

  **diaga2** 6 months ago

Ans C -

It's a new feature of Cloud Run to deploy the new version for testing purpose with Configure traffic percentage. So it's similar to App Engine in terms of canary deployment.

<https://cloud.google.com/blog/products/serverless/new-features-in-cloud-run-for-anthos-ga>

upvoted 1 times

  **diaga2** 6 months ago

Sorry! It's A

There is no variable like "TRAFFIC_PERCENTAGE" with cloud run.This document clearly mentioned about 'Manage Traffic'

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

upvoted 4 times

  **cloud91** 6 months ago

TRAFFIC_PERCENTAGE is not available in the approach mentioned in option C... So A is the answer

upvoted 1 times

You are monitoring Google Kubernetes Engine (GKE) clusters in a Cloud Monitoring workspace. As a Site Reliability Engineer (SRE), you need to triage incidents quickly. What should you do?

- A. Navigate the predefined dashboards in the Cloud Monitoring workspace, and then add metrics and create alert policies.
- B. Navigate the predefined dashboards in the Cloud Monitoring workspace, create custom metrics, and install alerting software on a Compute Engine instance.
- C. Write a shell script that gathers metrics from GKE nodes, publish these metrics to a Pub/Sub topic, export the data to BigQuery, and make a Data Studio dashboard.
- D. Create a custom dashboard in the Cloud Monitoring workspace for each incident, and then add metrics and create alert policies.

Correct Answer: D

Reference:

<https://cloud.google.com/monitoring/charts/dashboards>

Community vote distribution

A (100%)

  **kopper2019** Highly Voted 8 months ago

Ans) A .
upvoted 34 times

  **DiegoMDZ** Highly Voted 7 months, 4 weeks ago



It's A for me... Create a dashboard for each incident?? I think D isn't a good choice...
upvoted 14 times

  **VT001** Most Recent 2 weeks, 5 days ago



Selected Answer: A
I got similar question on my exam. Answered A.
upvoted 1 times

  **turtelying** 1 month, 1 week ago

Answer A: One will not create a dashboard for each incident
upvoted 1 times

  **pddddd** 1 month, 3 weeks ago

when it says 'each incident', it means 'each incident' type.
D
upvoted 1 times

  **GMats** 1 month, 4 weeks ago



A..should be answer..."Quickly" is key word...you can use predefine GKE monitoring dashboard,import it and even customize it.
upvoted 1 times

  **ehgm** 2 months ago

We can waste hours on it, but the doc says: You can't delete or copy these dashboards, and you can't add or remove charts to these dashboards.
<https://cloud.google.com/monitoring/charts/predefined-dashboards>
upvoted 3 times

  **americoleonardo** 2 months, 2 weeks ago

Selected Answer: A
This situation you need be quickly to solve the incidents. I answered A
upvoted 1 times

  **franzo15** 2 months, 3 weeks ago

A for quickly incident management
upvoted 1 times



  **haroldbenites** 2 months, 3 weeks ago

Go for A.
Create a dashboard for each incident is not efficient.
upvoted 1 times

  **Nalo1** 2 months, 3 weeks ago

Selected Answer: A

D sounds to be every incidents has to be known and pre-configured. What happen to new incidents? I would go with A.
upvoted 1 times

  **BSING246** 3 months ago

Selected Answer: A


Should be A not D
upvoted 1 times

  **mudot** 3 months ago



Selected Answer: A

you need to triage incidents quickly.

imagine having multiple incidents. u just dontt sit and keep creating dashboards
upvoted 2 times

  **Neo_ACE** 3 months, 2 weeks ago

A and D are correct but Hint word is "Triage". Which means priority matters.
So i Choose D. It creates dashboard for P1, P2,P3 and other priority incidents.
upvoted 1 times

  **meh009** 4 months, 2 weeks ago

I tested it. Predefined dashboards can be edited to add policies which allow you to set metrics and alerts. A
upvoted 5 times



  **hfhfhfhfh** 5 months ago

D

redefined dashboards have one of the following types:

Google Cloud Platform: These dashboards are for Google Cloud services such as Cloud Spanner and Compute Engine.
Other: These dashboards are for third-party applications such as Cassandra and nginx, and for Amazon Web Services services.
You can modify the chart configuration and the display period for predefined dashboards. For more information, see [Configuring dashboards](#).

You can't delete or modify a predefined dashboard.
upvoted 1 times

  **robotgeek** 3 months, 3 weeks ago

For each incident?... don't think so
upvoted 1 times

  **ET42** 5 months ago

D is wrong because you wouldn't create a dashboard for something that has already happened when you need to be addressing it. You'd want a notification of something actively happening, hence you'd set metrics on parameters in the predefined dashboards. You cannot triage as quickly when you are busy setting up a dashboard for a momentary incident that may never happen again.
B is wrong because its GKE, not compute engine
A is a clear, strait forward answer. Triage off alerts on the environmental variables in play.
upvoted 8 times

You are implementing a single Cloud SQL MySQL second-generation database that contains business-critical transaction data. You want to ensure that the minimum amount of data is lost in case of catastrophic failure. Which two features should you implement? (Choose two.)

- A. Sharding
- B. Read replicas
- C. Binary logging
- D. Automated backups
- E. Semisynchronous replication

Correct Answer: *CD*

Backups help you restore lost data to your Cloud SQL instance. Additionally, if an instance is having a problem, you can restore it to a previous state by using the backup to overwrite it. Enable automated backups for any instance that contains necessary data. Backups protect your data from loss or damage.

Enabling automated backups, along with binary logging, is also required for some operations, such as clone and replica creation.

Reference:

<https://cloud.google.com/sql/docs/mysql/backup-recovery/backups>

Community vote distribution

CD (67%)

BD (33%)

  **kopper2019** Highly Voted  8 months ago

Ans) C and D
Cloud SQL. If you use Cloud SQL, the fully managed Google Cloud MySQL database, you should enable automated backups and binary logging for your Cloud SQL instances. This allows you to perform a point-in-time recovery, which restores your database from a backup and recovers it to a fresh Cloud SQL instance
upvoted 17 times

  **victory108** Highly Voted  7 months, 3 weeks ago

C. Binary logging
D. Automated backups
upvoted 6 times

  **mbenhassine1986** Most Recent  1 month ago



C and D
https://cloud.google.com/sql/docs/mysql/backup-recovery/backups#what_backups_provide
upvoted 1 times

  **ehgm** 2 months ago

The feature in Cloud Console is: Enable point-in-time recovery
Description: Allows you to recover data from a specific point in time, down to a fraction of a second. Enables binary logs (required for replication). Make sure your storage can support the days of logs you're retaining.
upvoted 2 times

  **ttosl** 2 months, 2 weeks ago

Selected Answer: BD
Read replica can be created in another region. HA can only have a second server in different zone. In the worst case that the whole zone is taken out. Just promote read replica to primary. Back up is a must, of course.
upvoted 1 times

  **GMats** 1 month, 4 weeks ago
Question does not speak about Availability.It speaks about minimum data loss.
upvoted 2 times

  **haroldbenites** 2 months, 3 weeks ago

Go for C.D
upvoted 1 times

  **vincy2202** 3 months ago

Selected Answer: CD
C & D are the correct choices
upvoted 2 times

  **nehaxlpb** 3 months, 1 week ago

answer is CD

Binary logging is supported on read replica instances (MySQL 5.7 and 8.0 only). You enable binary logging on a replica with the same API commands as on the primary, using the replica's instance name instead of the primary's instance name.

upvoted 1 times

🗨️ 👤 **aa_desh** 5 months, 2 weeks ago

Ans is B and D

Prerequisites for creating a read replica

1. Before you can create a read replica of a primary Cloud SQL instance, the instance must meet the following requirements:
2. Automated backups must be enabled.
3. Binary logging must be enabled which requires point-in-time recovery to be enabled.

At least one backup must have been created after binary logging was enabled.

So it means Read Replica automatically covers binary logging

Please read following for more information

<https://cloud.google.com/sql/docs/mysql/replication#requirements>

upvoted 4 times

🗨️ 👤 **AnilKr** 6 months, 2 weeks ago

Ans - C, D : Binary logging and Automated backups are needed for point-in-time recovery of data.

upvoted 4 times

🗨️ 👤 **VishalB** 7 months, 3 weeks ago

Answer : C & D

-Point-in-time recovery allows you to recover data from specific point in time, down to a fraction of a second by enabling binary logs(required for replication).

-Automated backups use a 4-hour backup window. The backup starts during the backup window. When possible, schedule backups when your instance has the least activity.

upvoted 4 times

🗨️ 👤 **nohel** 8 months ago

Answer: B,C

I think this question is indirectly asking about Point-in-time recovery,

C) binary log is a set of log files that contain information about data modifications made to a MySQL server instance.

D) Automated backups will help take daily backups of the MySQL

To recover from a catastrophic failure i.e MySQL instance crashed, someone deleted an imp table, etc. we will simply restore to the last automated backup before the failure and replay the binary logs till a specific time/position to reach the desired state of MySQL.

<https://cloud.google.com/sql/docs/mysql/backup-recovery/backups#retention>

<https://cloud.google.com/sql/docs/mysql/backup-recovery/pitr>

upvoted 1 times

🗨️ 👤 **Linus11** 6 months, 3 weeks ago

Then why did you say B,C instead of C, D?

upvoted 1 times

🗨️ 👤 **XDevX** 8 months ago

C and D

upvoted 3 times

🗨️ 👤 **manhmaluc** 8 months ago

C and D

Cloud SQL. If you use Cloud SQL, the fully managed Google Cloud MySQL database, you should enable automated backups and binary logging for your Cloud SQL instances. This allows you to perform a point-in-time recovery, which restores your database from a backup and recovers it to a fresh Cloud SQL instance.

upvoted 4 times

You are working at a sports association whose members range in age from 8 to 30. The association collects a large amount of health data, such as sustained injuries. You are storing this data in BigQuery. Current legislation requires you to delete such information upon request of the subject. You want to design a solution that can accommodate such a request. What should you do?

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



Correct Answer: B



Community vote distribution



A (100%)



  **milan74** Highly Voted 7 months, 3 weeks ago



According to me, the question states "The association collects a large amount of health data, such as sustained injuries." and the nuance on the word such => " Current legislation requires you to delete "SUCH" information upon request of the subject. " So from that point of view the question is not to delete the entire user records but specific data related to personal health data. With DLP you can use InfoTypes and InfoType detectors to specifically scan for those entries and how to act upon them (link <https://cloud.google.com/dlp/docs/concepts-infotypes>)
I would say B.
upvoted 37 times



  **Arad** 3 months ago
as PhilipKoku mentioned below:
A) is the correct answer. B) is only masking the data and then when a request is received, it identified the record but it doesn't delete it. D) Is masking the ID.
upvoted 5 times



  **mgm7** 2 months, 3 weeks ago
B is not masking the data but identifying where it is to take action on at later date if required
upvoted 1 times



  **XDevX** Highly Voted 8 months ago
IMHO a) is the correct answer because it is easier to operate. The question is not how to mask data and so on but just to delete data on request, so I don't think that we have to use for just the deletion of specific data DLP.
upvoted 24 times



  **VT001** Most Recent 2 weeks, 5 days ago
Selected Answer: A
I got similar question on my exam. Answered A.
upvoted 2 times

  **TharaLN** 1 month ago
The question stated "upon request of the subject", meaning no need to delete all the data immediately unless you have been requested to do so, therefore correct ans is B
upvoted 1 times

  **technodev** 1 month, 1 week ago
Got this question in my exam, answered A
upvoted 1 times

  **DoVale** 1 month, 2 weeks ago
Totally sure it's A
upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago
Go for A.
upvoted 1 times

  **nqthien041292** 2 months, 3 weeks ago
Selected Answer: A
Vote A

upvoted 1 times

  **BSING246** 2 months, 3 weeks ago

Selected Answer: A

A is correct.
Marked B does not say delete of data.

upvoted 1 times

  **pakilodi** 3 months ago

Selected Answer: A

it's A. Data should be deleted



upvoted 2 times

  **mudot** 3 months ago

Selected Answer: A

why complicate it with B, when masking is not required.
This question is 'forget me' request option of europe that u can send to search engines



upvoted 1 times

  **pakilodi** 3 months, 1 week ago

Selected Answer: A



it's A. Data should be deleted

upvoted 1 times

  **Neo_ACE** 3 months, 2 weeks ago



Answer is A

upvoted 1 times

  **MaxNRG** 3 months, 4 weeks ago

Yesterday passed the exam, I've chosen A. Use a unique identifier for each individual.
Upon a deletion request, delete all rows from BigQuery with this identifier.

upvoted 5 times

  **ghuria** 3 months, 3 weeks ago



Do you think a lot of questions have come from exam topics?

upvoted 1 times

  **PhilipKoku** 4 months, 1 week ago



A) is the correct answer. B) is only masking the data and then when a request is received, it identified the record but it doesn't delete it. D) Is masking the ID.

upvoted 2 times

  **MaxNRG** 4 months, 2 weeks ago

DLP is about "personal information", not "health data, such as sustained injuries", so I choose A - delete records upon request

upvoted 2 times

  **MaxNRG** 4 months, 2 weeks ago

<https://cloud.google.com/dlp#section-6>

upvoted 1 times

  **[Removed]** 4 months, 3 weeks ago

The thing that kills me about this is we are suppose to read the question and parse out the nuance, but I would like to point out that the "B" answer never says "... and delete the records" it just says query haha. just sayin....

upvoted 3 times

Your company has announced that they will be outsourcing operations functions. You want to allow developers to easily stage new versions of a cloud-based application in the production environment and allow the outsourced operations team to autonomously promote staged versions to production. You want to minimize the operational overhead of the solution. Which Google Cloud product should you migrate to?

- A. App Engine
- B. GKE On-Prem
- C. Compute Engine
- D. Google Kubernetes Engine

Correct Answer: D

Reference:

<https://cloud.google.com/security/compliance/eba-outsourcing-mapping-gcp>

Community vote distribution



kopper2019 Highly Voted 8 months ago
A. App Engine
upvoted 25 times

arsav Highly Voted 7 months, 1 week ago
Answer should be A as only with App Engine we have a default service account which allows the user to deploy the changes per project. for GKE we may have to configure additional permission for both DEV and Operations team to deploy the changes.

<https://cloud.google.com/appengine/docs/standard/php/service-account>
upvoted 11 times

azureaspirant Most Recent 2 weeks, 1 day ago
02/15/21 exam
upvoted 1 times

Paragkk 4 days, 21 hours ago
very useful info
upvoted 1 times

technodev 1 month, 1 week ago
Got this question in my exam, answered A
upvoted 2 times

PhilipKoku 2 months, 3 weeks ago
Selected Answer: A
App Engine is server-less and requires no overhead in operations. The other options require configuration and overhead managing the service.
upvoted 1 times

haroldbenites 2 months, 3 weeks ago
Go for A.
upvoted 1 times

Craigenator 3 months ago
Selected Answer: A
Agree its A
upvoted 2 times

cdcollector 3 months ago
Container registry for applications allows clean separation of code generation vs deployment
upvoted 1 times

pakilodi 3 months ago
Selected Answer: A
it's A
upvoted 1 times



mudot 3 months ago
Selected Answer: B

DEV can deploy to GKE-onprem and then ops can promote them to GKE [Read Anthos use cases]
upvoted 1 times



  **joe2211** 3 months, 1 week ago

Selected Answer: A

vote A
upvoted 2 times

  **Arlima** 3 months, 1 week ago

is A because, App Engine is PaaS so you have less operational overhead, in GKE you have administrative tasks around the management of kubernetes clusters.
upvoted 1 times

  **BSING246** 3 months, 1 week ago

Selected Answer: A

A is right and appropriate
upvoted 2 times



  **nehaxlpb** 3 months, 1 week ago

answer id D
Google Kubernetes Engine is a managed, production-ready environment that allows portability across different clouds as well as on premises environments.

We don't known what cloud thid party is using so eliminate AppEngine
upvoted 2 times

  **rottzy** 5 months ago

App Engine - is a better answer
upvoted 2 times

  **vickynag** 7 months, 2 weeks ago

GKE does not allow staging a version .. so A.
upvoted 3 times

  **Urban_Life** 7 months, 3 weeks ago

If it's a production version, go with GKE
upvoted 2 times

  **Urban_Life** 2 months, 2 weeks ago

I think the answer is A
upvoted 1 times

Your company is running its application workloads on Compute Engine. The applications have been deployed in production, acceptance, and development environments. The production environment is business-critical and is used 24/7, while the acceptance and development environments are only critical during office hours. Your CFO has asked you to optimize these environments to achieve cost savings during idle times. What should you do?

- A. Create a shell script that uses the `gcloud` command to change the machine type of the development and acceptance instances to a smaller machine type outside of office hours. Schedule the shell script on one of the production instances to automate the task.
- B. Use Cloud Scheduler to trigger a Cloud Function that will stop the development and acceptance environments after office hours and start them just before office hours.
- C. Deploy the development and acceptance applications on a managed instance group and enable autoscaling.
- D. Use regular Compute Engine instances for the production environment, and use preemptible VMs for the acceptance and development environments.

Correct Answer: D

Reference:

<https://cloud.google.com/blog/products/it-ops/best-practices-for-optimizing-your-cloud-costs>

Community vote distribution

B (100%)

  **kopper2019** Highly Voted 8 months ago

Ans) B , assuming VM doesn't need to be up after office hours .
upvoted 22 times

  **pamepadero** Highly Voted 7 months, 4 weeks ago

B is the answer.

<https://cloud.google.com/blog/products/it-ops/best-practices-for-optimizing-your-cloud-costs>

Schedule VMs to auto start and stop: The benefit of a platform like Compute Engine is that you only pay for the compute resources that you use. Production systems tend to run 24/7; however, VMs in development, test or personal environments tend to only be used during business hours, and turning them off can save you a lot of money!

<https://cloud.google.com/blog/products/storage-data-transfer/save-money-by-stopping-and-starting-compute-engine-instances-on-schedule>

Cloud Scheduler, GCP's fully managed cron job scheduler, provides a straightforward solution for automatically stopping and starting VMs. By employing Cloud Scheduler with Cloud Pub/Sub to trigger Cloud Functions on schedule, you can stop and start groups of VMs identified with labels of your choice (created in Compute Engine). Here you can see an example schedule that stops all VMs labeled "dev" at 5pm and restarts them at 9am, while leaving VMs labeled "prod" untouched

upvoted 14 times

  **mhenhassine1986** Most Recent 1 month ago

Clearly here , ANSWER B

<https://cloud.google.com/blog/products/storage-data-transfer/save-money-by-stopping-and-starting-compute-engine-instances-on-schedule>

upvoted 1 times

  **ehgm** 2 months ago

No make sense D.

A business requirement: "the acceptance and development environments are only critical during office hours"

We have many reasons not to choose D:

- Compute Engine might stop preemptible instances at any time;
- Compute Engine always stops preemptible instances after they run for 24 hours;
- Can't automatically restart when there is a maintenance event;
- Are finite Compute Engine resources, so they might not always be available

upvoted 1 times

  **Pramodkumarnayak** 2 months ago

Ans)B because here specific time need to act i.e off office hours . preemptible Can be stopped by GCP any time (preempted) within 24 hours.

upvoted 1 times

  **dk2u90fh** 2 months, 1 week ago

Selected Answer: B

"critical" during business hours, and (d) pre-emptible doesn't meet this requirement.

upvoted 3 times

🗨️ 👤 **PhilipKoku** 2 months, 3 weeks ago

Selected Answer: B

B) Enables to stop the environments when they are not required allowing you to pay for only when the resources are required.
upvoted 2 times

🗨️ 👤 **haroldbenites** 2 months, 3 weeks ago

Go for C.
upvoted 4 times

🗨️ 👤 **menon_sarath** 2 months, 3 weeks ago

IMO, B is the correct answer

From Google - "Compute Engine might stop preemptible instances at any time due to system events. The probability that Compute Engine stops a preemptible instance for a system event is generally low, but might vary from day to day and from zone to zone depending on current conditions."

It should be interpreted that the said machines can get disrupted during office hours as well. Hence it only satisfies one requirement - which is LOW COST. But it does not guarantee that it will always be online during office hours. Hence Option D seems a misfit.
upvoted 3 times

🗨️ 👤 **daniva** 2 months, 4 weeks ago

Selected Answer: B

correct answer should be B - why is the suggested answer D?
upvoted 1 times

🗨️ 👤 **pakilodi** 3 months ago

Selected Answer: B

B is the answer
upvoted 1 times

🗨️ 👤 **vincy2202** 3 months ago

Selected Answer: B

B is the correct answer.
<https://cloud.google.com/blog/products/compute/5-best-practices-compute-engine-cost-optimization>
upvoted 1 times

🗨️ 👤 **Craigenator** 3 months ago

Selected Answer: B

Answer is B
upvoted 1 times

🗨️ 👤 **nqthien041292** 3 months ago

Selected Answer: B

Vote B
upvoted 1 times

🗨️ 👤 **mudot** 3 months ago

Selected Answer: B

not 'D' because - you wouldnt want your dev and acceptance envs to go with a minimim notice
upvoted 1 times

🗨️ 👤 **DMC1163** 3 months, 1 week ago

B should be the answer. Acceptance and dev is critical during office hours and so you wouldn't want them to be preempted during those hours. So, can't be D.
upvoted 1 times

🗨️ 👤 **Nikki17** 3 months, 1 week ago

Question has started with "Your company is running its application workloads on Compute Engine" and it is not about executing application but sharing workload to secondary system. If it is about workloads then Answer is "D" and if about application then Answer is "B".
upvoted 1 times

You are moving an application that uses MySQL from on-premises to Google Cloud. The application will run on Compute Engine and will use Cloud SQL. You want to cut over to the Compute Engine deployment of the application with minimal downtime and no data loss to your customers. You want to migrate the application with minimal modification. You also need to determine the cutover strategy. What should you do?

- A. 1. Set up Cloud VPN to provide private network connectivity between the Compute Engine application and the on-premises MySQL server. 2. Stop the on-premises application. 3. Create a mysqldump of the on-premises MySQL server. 4. Upload the dump to a Cloud Storage bucket. 5. Import the dump into Cloud SQL. 6. Modify the source code of the application to write queries to both databases and read from its local database. 7. Start the Compute Engine application. 8. Stop the on-premises application.
- B. 1. Set up Cloud SQL proxy and MySQL proxy. 2. Create a mysqldump of the on-premises MySQL server. 3. Upload the dump to a Cloud Storage bucket. 4. Import the dump into Cloud SQL. 5. Stop the on-premises application. 6. Start the Compute Engine application.
- C. 1. Set up Cloud VPN to provide private network connectivity between the Compute Engine application and the on-premises MySQL server. 2. Stop the on-premises application. 3. Start the Compute Engine application, configured to read and write to the on-premises MySQL server. 4. Create the replication configuration in Cloud SQL. 5. Configure the source database server to accept connections from the Cloud SQL replica. 6. Finalize the Cloud SQL replica configuration. 7. When replication has been completed, stop the Compute Engine application. 8. Promote the Cloud SQL replica to a standalone instance. 9. Restart the Compute Engine application, configured to read and write to the Cloud SQL standalone instance.
- D. 1. Stop the on-premises application. 2. Create a mysqldump of the on-premises MySQL server. 3. Upload the dump to a Cloud Storage bucket. 4. Import the dump into Cloud SQL. 5. Start the application on Compute Engine.

Correct Answer: A

Community vote distribution

C (100%)

  **victory108** Highly Voted 7 months, 3 weeks ago

C. 1. Set up Cloud VPN to provide private network connectivity between the Compute Engine application and the on-premises MySQL server. 2. Stop the on-premises application. 3. Start the Compute Engine application, configured to read and write to the on-premises MySQL server. 4. Create the replication configuration in Cloud SQL. 5. Configure the source database server to accept connections from the Cloud SQL replica. 6. Finalize the Cloud SQL replica configuration. 7. When replication has been completed, stop the Compute Engine application. 8. Promote the Cloud SQL replica to a standalone instance. 9. Restart the Compute Engine application, configured to read and write to the Cloud SQL standalone instance.

upvoted 20 times

  **kopper2019** Highly Voted 8 months ago

Ans C, from this guy muhasinem

External replica promotion migration

In the migration strategy of external replica promotion, you create an external database replica and synchronize the existing data to that replica. This can happen with minimal downtime to the existing database.

When you have a replica database, the two databases have different roles that are referred to in this document as primary and replica.

After the data is synchronized, you promote the replica to be the primary in order to move the management layer with minimal impact to database uptime.

In Cloud SQL, an easy way to accomplish the external replica promotion is to use the automated migration workflow. This process automates many of the steps that are needed for this type of migration.

upvoted 11 times

  **lxgywil** Most Recent 1 month, 3 weeks ago

C is ok

upvoted 1 times

  **GauravLahoti** 2 months ago


Correct Answer is C

upvoted 1 times

  **Pramodkumarnayak** 2 months, 1 week ago

Both A and C are correct . A is short-cut way to save time but our proper path and practice is C . If we ll use C method , there is no chance of any data loss and minimum downtime require than A because through C we are setting up replication and after application test we can finalize the steps . In A where is Online transaction happening every second is not applicable .


upvoted 1 times

  **SamGCP** 2 months, 2 weeks ago

Selected Answer: C

https://cloud.google.com/architecture/migrating-mysql-to-cloudsql-concept#external_replica_promotion_migration_overview



upvoted 1 times

  **KirkD** 2 months, 2 weeks ago

Selected Answer: C

Voted for C.
Official docs suggests that mysql dump requires longer downtime and replica requires only minimal downtime.
https://cloud.google.com/architecture/migrating-mysql-to-cloudsql-concept#migration_methods

upvoted 2 times

  **dk12346** 2 months, 3 weeks ago

Selected Answer: C

make sense
upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago

Go fro C
upvoted 1 times

  **pakilodi** 2 months, 3 weeks ago

Selected Answer: C

C is the answer here guys
upvoted 1 times

  **Nalo1** 2 months, 3 weeks ago

A incur data loss. C is my choice.
upvoted 1 times

  **vincy2202** 3 months ago



Selected Answer: C



C is the correct answer
<https://cloud.google.com/architecture/migrating-mysql-to-cloudsql-concept>
upvoted 1 times

  **mudot** 3 months ago

Selected Answer: C



the question focuses on your use of replica for no downtime
upvoted 1 times



  **mudot** 3 months ago
* minimal downtime
upvoted 1 times

  **joe2211** 3 months, 1 week ago



Selected Answer: C

vote C
upvoted 2 times



  **nqthien041292** 3 months ago
Upvote
upvoted 2 times

  **Neo_ACE** 3 months, 2 weeks ago

Answer is C
upvoted 1 times

  **Firask** 3 months, 2 weeks ago

Answer C: MySQL migration either through Export/Import or Replica Promotion. The Export/Import requires downtime rather than Replica needs a minimal downtime.
upvoted 1 times

  **BSING246** 4 months ago

C is right answer. This will support minimum downtime, no customer data lose and no code modifications.

Suggested A is wrong.
upvoted 2 times

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

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



Correct Answer: D



Reference:

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



Community vote distribution



D (100%)



  **victory108** Highly Voted 7 months, 3 weeks ago
D. Set an Organization Policy with a constraint on constraints/compute.vmExternalIpAccess. List the approved instances in the allowedValues list.
upvoted 14 times



  **AnilKr** Highly Voted 6 months, 2 weeks ago
Ans - D, <https://cloud.google.com/compute/docs/ip-addresses/reserve-static-external-ip-address#disableexternalip>



you might want to restrict external IP address so that only specific VM instances can use them. This option can help to prevent data exfiltration or maintain network isolation. Using an Organization Policy, you can restrict external IP addresses to specific VM instances with constraints to control use of external IP addresses for your VM instances within an organization or a project.
upvoted 9 times



  **VT001** Most Recent 2 weeks, 5 days ago
Selected Answer: D
I got similar question on my exam. Answered D.
upvoted 1 times



  **technodev** 1 month, 1 week ago
Got this question in my exam, answered D
upvoted 1 times



  **haroldbenites** 2 months, 3 weeks ago
Go for D.
<https://cloud.google.com/compute/docs/ip-addresses/reserve-static-external-ip-address#disableexternalip>
upvoted 1 times

  **vincy2202** 3 months ago
D is the correct answer
<https://cloud.google.com/compute/docs/ip-addresses/reserve-static-external-ip-address#disableexternalip>
upvoted 1 times

  **pakilodi** 3 months ago
Selected Answer: D
D) is correct answer here
upvoted 1 times

  **pakilodi** 3 months ago
D is correct here
upvoted 1 times

  **nqthien041292** 3 months ago
Selected Answer: D
Vote D
upvoted 2 times

  **mudot** 3 months ago
Selected Answer: D

This is common practise in finance sector

upvoted 1 times

  **BrunoTostes** 4 months, 1 week ago

Organization Policies can be set on admin level, they will be inherited by projects and enforce constraints on google cloud resources such as VMs and LBs to adhere organization basic requirements at all times. The proper org policy to manage vms instances external IPs access is constraints/compute.vmExternallpAccess. This constraint lets you define a set of compute engine VMs that are allowed to use public IPs on your network.

upvoted 1 times

  **rottzy** 5 months ago

Might sound good as an answer, but an impractical solution!

unless, u don't need GKE, MIG, autohealing, autoscaling

--Caution: Restricting external IPs to specific VM instances can prevent existing GKE clusters and managed instance groups (MIGs) from adding new VMs. If a GKE cluster or a MIG is configured to create VMs that do have external IP addresses,autohealing and autoscaling actions fail.

upvoted 1 times

  **AnilKr** 5 months ago

Ans - D, Set an Organization Policy with a constraint on constraints/compute.vmExternallpAccess. List the approved instances in the allowedValues list.

upvoted 1 times

  **Qbee** 6 months, 2 weeks ago

answer is D

upvoted 1 times

  **Fighter007** 7 months ago

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

upvoted 4 times

  **kopper2019** 7 months, 2 weeks ago

hey guys new Qs posted as of July 12th, 2021, All 21 new Qs in Question #152

upvoted 2 times

  **mantequilla** 4 months ago

what do you mean by the new questions are in question #152? I dont see anything in the discussion of question 152

upvoted 2 times

  **PeppaPig** 7 months, 2 weeks ago

D is correct. Ref: <https://cloud.google.com/resource-manager/docs/organization-policy/overview>

upvoted 4 times

Your company uses the Firewall Insights feature in the Google Network Intelligence Center. You have several firewall rules applied to Compute Engine instances.

You need to evaluate the efficiency of the applied firewall ruleset. When you bring up the Firewall Insights page in the Google Cloud Console, you notice that there are no log rows to display. What should you do to troubleshoot the issue?

- A. Enable Virtual Private Cloud (VPC) flow logging.
- B. Enable Firewall Rules Logging for the firewall rules you want to monitor.
- C. Verify that your user account is assigned the compute.networkAdmin Identity and Access Management (IAM) role.
- D. Install the Google Cloud SDK, and verify that there are no Firewall logs in the command line output.

Correct Answer: B

Reference:

<https://cloud.google.com/network-intelligence-center/docs/firewall-insights/how-to/using-firewall-insights>

Community vote distribution

B (100%)

- victory108**

Highly Voted

7 months, 3 weeks ago

B. Enable Firewall Rules Logging for the firewall rules you want to monitor.

upvoted 11 times
- nohel**

Highly Voted

8 months ago

Answer is B
when you create a firewall rule there is an option for firewall rule logging on/off. It is set to off by default.
To get firewall insights or view the logs for a specific firewall rule you need to enable logging while creating the rule or you can enable it by editing that rule.
<https://cloud.google.com/network-intelligence-center/docs/firewall-insights/how-to/using-firewall-insights#enabling-fw-rules-logging>

upvoted 10 times
- azureaspirant**

Most Recent

2 weeks, 1 day ago

02/15/21 exam

upvoted 1 times
- haroldbenites**

2 months, 3 weeks ago

Go for B

upvoted 1 times
- vincy2202**

3 months ago

B is the correct answer
<https://cloud.google.com/network-intelligence-center/docs/firewall-insights/how-to/using-firewall-insights>

upvoted 1 times
- pakilodi**

3 months ago

Selected Answer: B

B is the answer here

upvoted 1 times
- nqthien041292**

3 months ago

Selected Answer: B

Vote B

upvoted 2 times
- mudot**

3 months ago

Selected Answer: B

firewall rule logging is not enabeld by default

upvoted 1 times
- AnilKr**

5 months ago

B is correct - you need to enable firewall rule logging while creating it or edit later

upvoted 1 times
- AnilKr**

6 months, 2 weeks ago

Ans - B, To see insights and usage metrics for firewall rules, you must enable Firewall Rules Logging for one or more firewall rules
<https://cloud.google.com/network-intelligence-center/docs/firewall-insights/how-to/using-firewall-insights#enabling-fw-rules-logging>

upvoted 2 times

  **Fighter007** 7 months ago

B

<https://cloud.google.com/network-intelligence-center/docs/firewall-insights/how-to/using-firewall-insights#enabling-fw-rules-logging>

upvoted 2 times

  **VishalB** 7 months ago

Answer B

Enabling Firewall Rules Logging

- To see insights and usage metrics for firewall rules, you must enable Firewall Rules Logging for one or more firewall rules.

- <https://cloud.google.com/network-intelligence-center/docs/firewall-insights/how-to/using-firewall-insights#enabling-fw-rules-logging>

upvoted 3 times

  **XDevX** 8 months ago

B is correct

upvoted 2 times

  **manhmaluc** 8 months ago

B is correct answer

upvoted 3 times

Your company has sensitive data in Cloud Storage buckets. Data analysts have Identity Access Management (IAM) permissions to read the buckets. You want to prevent data analysts from retrieving the data in the buckets from outside the office network. What should you do?

- A. 1. Create a VPC Service Controls perimeter that includes the projects with the buckets. 2. Create an access level with the CIDR of the office network.
- B. 1. Create a firewall rule for all instances in the Virtual Private Cloud (VPC) network for source range. 2. Use the Classless Inter-domain Routing (CIDR) of the office network.
- C. 1. Create a Cloud Function to remove IAM permissions from the buckets, and another Cloud Function to add IAM permissions to the buckets. 2. Schedule the Cloud Functions with Cloud Scheduler to add permissions at the start of business and remove permissions at the end of business.
- D. 1. Create a Cloud VPN to the office network. 2. Configure Private Google Access for on-premises hosts.

Correct Answer: C

Community vote distribution

A (100%)

- TotoroChina

Highly Voted

8 months ago

Should be A.
For all Google Cloud services secured with VPC Service Controls, you can ensure that:
Resources within a perimeter are accessed only from clients within authorized VPC networks using Private Google Access with either Google Cloud or on-premises.
<https://cloud.google.com/vpc-service-controls/docs/overview>
upvoted 37 times
- poseidon24

7 months, 1 week ago

Correct, this is about data exfiltration.
See: <https://youtu.be/EXwJFL24QzY>
upvoted 3 times
- XDevX

Highly Voted

8 months ago

IMHO c is wrong - the question is not to restrict access only for business hours but to restrict access to office network.

In my opinion the only realistic approach seems to be a)

https://cloud.google.com/vpc-service-controls/docs/supported-products#table_storage
upvoted 10 times
- VT001

Most Recent

2 weeks, 5 days ago

Selected Answer: A

I got similar question on my exam. Answered A.
upvoted 2 times
- technodev

1 month, 1 week ago

Got this question in my exam, answered A
upvoted 1 times
- BattleSlim

2 months ago

Selected Answer: A

A, because C only state business hours which is not mentioned in the question.
upvoted 1 times
- Pime13

2 months ago

Selected Answer: A

selected: A
upvoted 1 times
- PhilipKoku

2 months, 3 weeks ago

Selected Answer: A

A) VPC Service Controls improves your ability to mitigate the risk of data exfiltration from Google Cloud services such as Cloud Storage and BigQuery. You can use VPC Service Controls to create perimeters that protect the resources and data of services that you explicitly specify.
upvoted 2 times
- anjuagrawal

2 months, 3 weeks ago

Why not D?

upvoted 1 times

  **RegisFTM** 2 months ago

"You want to prevent data analysts from retrieving the data in the buckets from outside the office network." The perimeter is the "office network" not the "office hours".

upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago

Go for A

upvoted 1 times

  **vincy2202** 3 months ago

A is the correct answer

<https://cloud.google.com/vpc-service-controls/docs/overview>

upvoted 1 times

  **vchrist** 3 months ago

Selected Answer: A

<https://cloud.google.com/vpc-service-controls/docs/service-perimeters#secure-google-managed-resources>

upvoted 1 times

  **pakilodi** 3 months ago

Selected Answer: A

Answer should be A. VPC service Controls check the data exfiltration also based on ip addresses.

upvoted 2 times

  **mudot** 3 months ago

Selected Answer: A

this is common practise to restric data downloads outside office network



upvoted 1 times

  **DMC1163** 3 months, 1 week ago

Selected Answer: A

Should be A. Someone can be in office even after office hours... so C won't work.

upvoted 1 times

  **nileshlg** 3 months, 1 week ago

Selected Answer: A

It should be A, It's about Data Exfiltration and perimeter


upvoted 1 times

  **pakilodi** 3 months, 1 week ago

Selected Answer: A

i've choosed A

upvoted 3 times

  **ravisar** 3 months, 1 week ago

A is correct - <https://cloud.google.com/vpc-service-controls/docs/overview>. You create a service control across your VPC and any cloud bucket or any project resource to restrict access. Anything outside of it can't access the resources within service control perimeter.

upvoted 1 times

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

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

Correct Answer: C

Community vote distribution

D (100%)

  **XDevX** Highly Voted 8 months ago

IMHO the correct answer is d) opportunistic mode, not c) proactive mode.

The requirement is not to update any running instances.

see: <https://cloud.google.com/compute/docs/instance-groups/rolling-out-updates-to-managed-instance-groups>
For automated rolling updates, you must set the mode to proactive.

Alternatively, if an automated update is potentially too disruptive, you can choose to perform an opportunistic update. The MIG applies an opportunistic update only when you manually initiate the update on selected instances or when new instances are created. New instances can be created when you or another service, such as an autoscaler, resizes the MIG.

upvoted 25 times

  **victory108** Highly Voted 7 months, 3 weeks ago

D. Start a new rolling update. Select the Opportunistic update mode.

upvoted 8 times

  **ahsangh** Most Recent 1 week ago

Selected Answer: D

Opportunistic

upvoted 1 times

  **azureaspirant** 2 weeks, 1 day ago


2/15/21 - exam

upvoted 1 times

  **ahsangh** 1 week ago

21 or 22?



upvoted 1 times

  **VT001** 2 weeks, 5 days ago

Selected Answer: D

I got similar question on my exam. Answered D.

upvoted 1 times

  **GARY1119** 1 month ago

It should be D.

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

upvoted 1 times

  **technodev** 1 month, 1 week ago

Got this question in my exam, answered D

upvoted 2 times

  **OrangeTiger** 1 month, 3 weeks ago

Selected Answer: D

Clearly said 'you don't want to update any running instances'.

Vote D.

upvoted 2 times

  **HenkH** 2 months ago

The correct answer C is wrong. There's one possibility C is correct though; if ONLY ProActive update, in contrast to Opportunistic updates, would allow for the maxUnavailable setting of 0. But I can't find proof for that so I still would go for D.

If you do not want any unavailable machines during an update, set the maxUnavailable value to 0 and the maxSurge value to greater than 0. With these settings, Compute Engine removes each old machine only after its replacement new machine is created and running.
<https://cloud.google.com/compute/docs/instance-groups/rolling-out-updates-to-managed-instance-groups>

upvoted 1 times

  **ehgm** 2 months ago



Selected Answer: D

I don't understand that. The question mix both concepts, says "non-critical update" and "want any new instances that are created by the managed instance group to contain the new update".

So, what should you do? :(

In the end, they can say that Proactive or Opportunistic is right. They can do whatever they want and we get screwed.



upvoted 1 times

  **PhilipKoku** 2 months, 3 weeks ago

Selected Answer: D

D) “if an automated update is potentially too disruptive, you can choose to perform an opportunistic update. The MIG applies an opportunistic update only when you manually initiate the update on selected instances or when new instances are created. New instances can be created when you or another service, such as an autoscaler, resizes the MIG. Compute Engine does not actively initiate requests to apply opportunistic updates on existing instances.”

upvoted 1 times

  **Bert_77** 2 months, 3 weeks ago

Selected Answer: D

Should be D, as explained on : <https://cloud.google.com/compute/docs/instance-groups/rolling-out-updates-to-managed-instance-groups>

upvoted 1 times

  **menon_sarath** 2 months, 3 weeks ago

Proactive update will immediately update disrupting the running systems. Hence an opportunistic update is needed in this case as it will only perform the updates when the systems are not in use.

Option D is the correct answer

upvoted 1 times

  **vincy2202** 3 months ago

Selected Answer: D

D is the correct answer

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

upvoted 2 times

  **Craigenator** 3 months ago

Selected Answer: D

Very much D

upvoted 2 times

  **cdcollector** 3 months ago

Selected Answer: D

opportunistic update.

upvoted 1 times

  **vchrist** 3 months ago

Selected Answer: D

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

upvoted 1 times

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

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

Correct Answer: D

Community vote distribution

B (100%)

- TotoroChina

Highly Voted

8 months ago

Answer is B, it only request zonal resiliency.
Regional persistent disk is a storage option that provides synchronous replication of data between two zones in a region. Regional persistent disks can be a good building block to use when you implement HA services in Compute Engine.

<https://cloud.google.com/compute/docs/disks/high-availability-regional-persistent-disk>
upvoted 24 times
- Ssoumya

Highly Voted

8 months ago

Answer is B

upvoted 13 times
- Sunilkg

Most Recent

2 weeks ago

Also instance template has regional scope only. If it has to be used outside of the region, you would have to create other versions of the instance template per region

upvoted 1 times
- azureaspirant

2 weeks, 1 day ago

2/15/21 exam

upvoted 1 times
- VT001

2 weeks, 5 days ago

I got similar question on my exam. Answered B.

upvoted 1 times
- technodev

1 month, 1 week ago

Got this question in my exam, answered B

upvoted 1 times
- OrangeTiger

1 month, 3 weeks ago

Whay D?
Is there a reason .need to use a different region?

upvoted 1 times
- pddddd

1 month, 3 weeks ago

regional disk scope is... wait for it... regional!

upvoted 2 times
- BattleSlim

2 months ago

Selected Answer: B

B is correct, no need to bother with another region. Just switching to another zone should do it as mentioned in the question.


upvoted 1 times
- mardon

2 months, 1 week ago

Selected Answer: B

As quickly as possible so performance is important.



upvoted 1 times

  **ABO_Doma** 2 months, 1 week ago

Selected Answer: B

Regional persistent disks provide synchronous replication of data between two zones in a region.

upvoted 1 times

  **SamGCP** 2 months, 2 weeks ago

Selected Answer: B

Regional persistent disk is not available in another region so option D doesn't work.

upvoted 3 times

  **PhilipKoku** 2 months, 3 weeks ago

Selected Answer: B

B) It is a regional disk, so it needs to be used by Compute Engine instances in a different zone in the same region.



upvoted 2 times

  **haroldbenites** 2 months, 3 weeks ago

Go for B.

Zonal

upvoted 1 times

  **Bert_77** 2 months, 3 weeks ago

The answer should be B. There is no need to spin up a new instance in another region, just another zone should be fine. Application data should be located on a regional persistent disk : <https://cloud.google.com/compute/docs/disks/high-availability-regional-persistent-disk>

upvoted 1 times

  **BSING246** 2 months, 3 weeks ago

B is right. Another zone spin-up in same region for Zonal Outage handling.

upvoted 1 times

  **vincy2202** 3 months ago

Selected Answer: B

B is the correct answer

<https://cloud.google.com/compute/docs/disks/high-availability-regional-persistent-disk>

upvoted 2 times

  **mudot** 3 months ago

Selected Answer: B

only zonal resiliency is required

upvoted 1 times

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

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

Correct Answer: A

Community vote distribution



A (100%)

  **VishalB** Highly Voted 7 months ago

Correct Answer: A
- IP Should not overlap so applying new IP address is the solution
upvoted 25 times

  **TotoroChina** Highly Voted 8 months ago

Answer is C.
<https://cloud.google.com/network-connectivity/docs/router/how-to/advertising-custom-ip>
upvoted 18 times

  **meh009** 4 months, 3 weeks ago

The Q states to establish connectivity. This would merely prevent that. Ans is A
upvoted 4 times

  **RKS_2021** 7 months, 3 weeks ago



ANS is B
<https://cloud.google.com/architecture/best-practices-vpc-design>
upvoted 5 times

  **elenamatay** 1 month, 3 weeks ago

You can't use Cloud NAT according to this documentation: <https://cloud.google.com/nat/docs/troubleshooting#overlapping-ip-addresses>

"Can I use Cloud NAT to connect a VPC network to another network to work around overlapping IP addresses? No, Cloud NAT cannot apply to any custom route whose next hop is not the default internet gateway. For example, Cloud NAT cannot apply to traffic sent to a next hop Cloud VPN tunnel, even if the destination is a publicly routable IP address."



upvoted 2 times

  **imgcp** 7 months, 1 week ago

B is NOT correct. Cloud NAT is specifically used for translating the IP address of the outbound packets destined to the Internet. But this question is about using VPN communication between two private IP address spaces (RFC1918). Cloud NAT cannot achieve the purpose here, you can't use Cloud NAT to translate from one private IP to another private ip. I would vote for C.
upvoted 7 times

  **Bill831231** 4 months, 2 weeks ago

Thanks for the clarification, just one question, without a solution like NAT or reip, the service on the devices with overlapping IP subnet will be unavailable for on-premise devices, not sure if the question also about this
upvoted 1 times

  **imgcp** 7 months, 1 week ago

*you can't use Cloud NAT to translate from one private IP to another private ip to avoid overlapping ip range issue.
upvoted 3 times


  **VT001** Most Recent 2 weeks, 5 days ago

Selected Answer: A


I got similar question on my exam. Answered A.
upvoted 1 times

-  **mshry** 3 weeks ago

Answer is C:
Otherwise, routing conflicts will occur. Assumption is that changing IP address space on either side will need planning and not provide immediate hybrid connectivity so I will not go with A.

upvoted 1 times
-  **DoVale** 1 month, 2 weeks ago


C is correctbecause, With custom route advertisements, you choose whichroutes Cloud Router advertises to your on-premises router through the BorderGateway Protocol (BGP). You can block the overlapping IPs by applyingcustom route advertisements.

upvoted 1 times
-  **elenamatay** 1 month, 3 weeks ago

It's A according to this documentation: <https://cloud.google.com/network-connectivity/docs/router/concepts/overview#overlap>
Learned custom dynamic routes
When a Cloud Router receives multiple next hops for the same destination prefix, Google Cloud uses route metrics and, in some cases, AS path length to create custom dynamic routes in your VPC network. The following sections describe that process:
(...)
- Overlapping IP ranges. In cases where you have a VPC subnet and an on-premises route advertisement with overlapping IP ranges, Google Cloud directs egress traffic depending on their IP ranges.

upvoted 1 times
-  **haroldbenites** 2 months, 3 weeks ago

Go for A

upvoted 1 times
-  **vincy2202** 3 months ago

Selected Answer: A

A seems to be the correct answer


upvoted 1 times
-  **joe2211** 3 months, 1 week ago

Selected Answer: A

vote A

upvoted 2 times
-  **dmc123** 3 months, 1 week ago

Option C is not be correct as it is blocking the IP space

upvoted 1 times
-  **BSING246** 4 months ago


A snd B both will solve it. A is more accurate and good choice for no overlapping of IPs.
B is not preferable here.
C is also incorrect. Its an extra configuration

upvoted 1 times
-  **gingerbeer** 5 months ago


Vote for A

Why not C?
First, custom advertisements should not be used for “blocking”, should use firewall rules for that purpose
<https://cloud.google.com/network-connectivity/docs/router/how-to/advertising-removing-routes>
“To secure your VPC network, use firewall rules to block traffic from reaching unadvertised subnets. Don't rely on hidden routes. Users can still reach unadvertised virtual machine (VM) instances through static routes.”

Second, if "block", connection can be established for those unblocked IPs, but on-prem and GCP VPC cannot communicate effectively


upvoted 5 times
-  **rottzy** 5 months ago

A looks okay,
why bother sticking to same IP's - can't new ones be created?!

upvoted 2 times
-  **PeppaPig** 6 months, 2 weeks ago


Since the primary IP range for the subnet can be expanded, but not replaced or shrunk, after the subnet has been created. You must create new subnets to apply new IP ranges.
<https://cloud.google.com/vpc/docs/using-vpc#subnet-rules>

Technically I would say "A" is ok. You can create a new VPC and apply a new IP range.
But in practice, it means you would have to consider the migration of existing resources in the old VPC to the new VPC, This is not going to be an easy task, and most likely there will be downtime during the migration.
For example, VPC migration is going to be a "cold" one, the VM must be stopped before it can be migrated.
If downtime is not an issue, then answer is "A", otherwise "B" looks like the only option

upvoted 1 times
-  **hello_aws** 7 months, 1 week ago

no doubt A

upvoted 2 times

  **lazybeanbag** 7 months, 2 weeks ago

I think A is more suitable.

Reason:

To connect two networks together we need (1) either VPN or interconnect and (2) peering. When there is peering, you cannot have conflicting IP addresses.

You can use either Cloud VPN or Cloud Interconnect to securely connect your on-premises network to your VPC network.

(<https://cloud.google.com/vpc/docs/vpc-peering#transit-network>)

At the time of peering, Google Cloud checks to see if there are any subnet IP ranges that overlap subnet IP ranges in the other network. If there is any overlap, peering is not established.

(<https://cloud.google.com/vpc/docs/vpc-peering#considerations>)

NAT is used to translate private to public IP and vice versa, however because we are connecting 2 networks together, they become private IPs. So it is not applicable.

upvoted 8 times

  **victory108** 7 months, 3 weeks ago

C. Create a Cloud VPN connection from the new VPC to the data center, create a Cloud Router, and apply a custom route advertisement to block the overlapping IP space.

upvoted 2 times

  **RKS_2021** 7 months, 3 weeks ago

It is B.

upvoted 1 times

You need to migrate Hadoop jobs for your company’s Data Science team without modifying the underlying infrastructure. You want to minimize costs and infrastructure management effort. What should you do?

- A. Create a Dataproc cluster using standard worker instances.
- B. Create a Dataproc cluster using preemptible worker instances.
- C. Manually deploy a Hadoop cluster on Compute Engine using standard instances.
- D. Manually deploy a Hadoop cluster on Compute Engine using preemptible instances.

Correct Answer: A

Reference:

<https://cloud.google.com/architecture/hadoop/hadoop-gcp-migration-jobs>

Community vote distribution

B (89%)



11%



  **TotoroChina** Highly Voted 8 months ago



Should be B, you want to minimize costs.
https://cloud.google.com/dataproc/docs/concepts/compute/secondary-vms#preemptible_and_non-preemptible_secondary_workers
upvoted 34 times



  **XDevX** 8 months ago



Hi TotoroChina,
I had the same thought when I first read the question - the problem I see is, in real business I think you would try to mix preemptible instances and on-demand instances... Here you have to choose between only preemptible instances and on-demand instances... Preemptible instances have some downsides - so we would need more details and ideally a mixed approach. That's why both answers might be correct, a) and b)... Do you see that different?
Thanks!
Cheers,
D.
upvoted 3 times



  **kopper2019** 7 months, 4 weeks ago
but you need to reduce management overhead so B
if you create a cluster manually and create and maintain GCE is not the way to go
upvoted 4 times

  **J19G** 4 months, 2 weeks ago
Agree, the migration guide also recommends to think about preemptible worker nodes: https://cloud.google.com/architecture/hadoop/hadoop-gcp-migration-jobs#using_preemptible_worker_nodes
upvoted 2 times

  **firecloud** Highly Voted 7 months, 1 week ago
It's A, the primary workers can only be standard, where secondary workers can be preemptible.-----In addition to using standard Compute Engine VMs as Dataproc workers (called "primary" workers), Dataproc clusters can use "secondary" workers. There are two types of secondary workers: preemptible and non-preemptible. All secondary workers in your cluster must be of the same type, either preemptible or non-preemptible. The default is preemptible.
upvoted 13 times

  **Manh** 5 months, 3 weeks ago
agreed
upvoted 1 times

  **neversaynever** Most Recent 1 month, 1 week ago
Selected Answer: A
reduce costs with minimal changes. - so go with option A
upvoted 1 times

  **Q_Review** 1 month, 1 week ago
Selected Answer: B
"You can gain low-cost processing power for your jobs by adding preemptible worker nodes to your cluster. These nodes use preemptible virtual machines.

Consider the inherent unreliability of preemptible nodes before choosing to use them. Dataproc attempts to smoothly handle preemption, but jobs might fail if they lose too many nodes. Only use preemptible nodes for jobs that are fault-tolerant or that are low enough priority that occasional job failure won't disrupt your business."
upvoted 1 times

- pddddd** 1 month, 3 weeks ago

minimum change of infrastructure - using Preemptible instance is a big change. We do not know whether jobs support interruption...

upvoted 3 times
- GauravLahoti** 2 months ago

Correct Answer is B

upvoted 1 times
- ehgm** 2 months ago

We don't know if the Jobs are able to handle with preemptable VMs. Just using a Dataproc cluster we will reduce cost, when the job is not running (idle) we don't pay for it.
Dataproc is a managed service!

upvoted 1 times
- mardon** 2 months, 1 week ago

Selected Answer: B

B since question says minimum cost

upvoted 1 times
- Mount09** 2 months, 2 weeks ago

Selected Answer: B

Preemptible- reducing costs . Was not specified if workload needed to remain. Vote B.

upvoted 1 times
- haroldbenites** 2 months, 3 weeks ago

Go for B

upvoted 1 times
- BSING246** 3 months ago

Selected Answer: B

Should be B. Due to cost factor.

upvoted 1 times
- pakilodi** 3 months ago

Selected Answer: B

B) minimize costs

upvoted 1 times
- joe2211** 3 months, 1 week ago

Selected Answer: B

vote B

upvoted 3 times
- dmc123** 3 months, 1 week ago

Only the secondary worker has these two types - either preemptible or non-preemptible instance

upvoted 1 times
- ravisar** 3 months, 1 week ago

Answer is B (Reduce cost). Create a cluster with primary-worker shuffle for Spark and HCFS shuffle for MapReduce:

gcloud dataproc clusters create cluster-name \
--region=region \
--properties=dataproc:efm.spark.shuffle=primary-worker \
--properties=dataproc:efm.mapreduce.shuffle=hcfs \
--image-version=1.4 \
--worker-machine-type=n1-highmem-8 \
--num-workers=25 \
--num-worker-local-ssds=2 \
--secondary-worker-type=preemptible \
--secondary-worker-boot-disk-size=500GB \
--num-secondary-workers=25

upvoted 1 times

nehaxlpb 3 months, 1 week ago

Answer A, I will go with A as we don't know if excisting workload can handle shut down

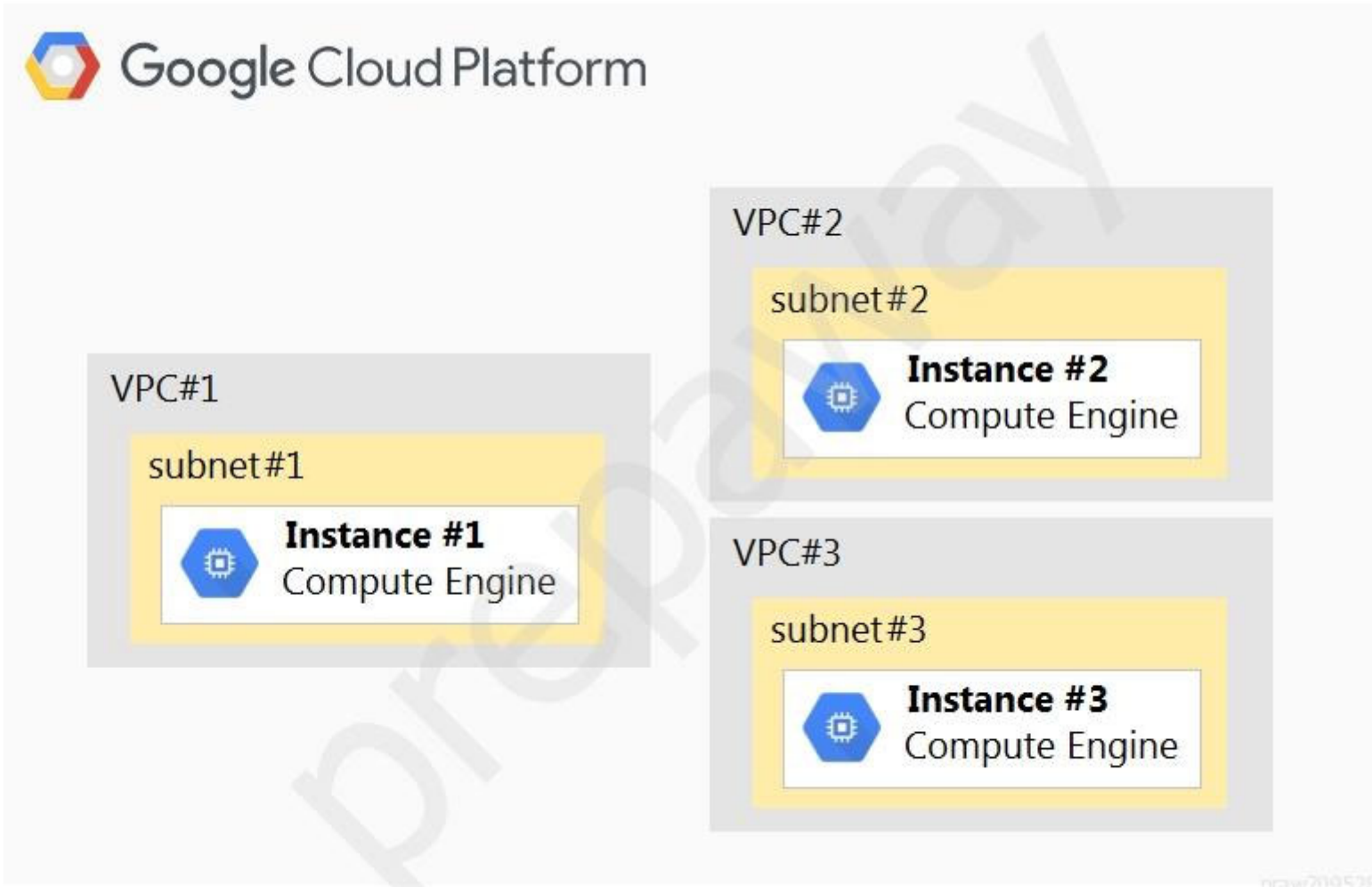
upvoted 1 times

anki_4AA 4 months, 3 weeks ago

by default dataproc adds two primary worker instances,even if we don't specify one,with two primary and a pool of secondary workers we can minimize costs

upvoted 1 times

Your company has a project in Google Cloud with three Virtual Private Clouds (VPCs). There is a Compute Engine instance on each VPC. Network subnets do not overlap and must remain separated. The network configuration is shown below.



Instance #1 is an exception and must communicate directly with both Instance #2 and Instance #3 via internal IPs. How should you accomplish this?

- A. Create a cloud router to advertise subnet #2 and subnet #3 to subnet #1.
- B. Add two additional NICs to Instance #1 with the following configuration: NIC1 -> VPC: VPC #2 -> SUBNETWORK: subnet #2 NIC2 -> VPC: VPC #3 -> SUBNETWORK: subnet #3 Update firewall rules to enable traffic between instances.
- C. Create two VPN tunnels via CloudVPN: 1 between VPC #1 and VPC #2. 1 between VPC #2 and VPC #3. Update firewall rules to enable traffic between the instances.
- D. Peer all three VPCs: Peer VPC #1 with VPC #2. Peer VPC #2 with VPC #3. Update firewall rules to enable traffic between the instances.

Correct Answer: B

Community vote distribution

B (71%)

D (29%)

XDevX Highly Voted 8 months ago

According to my understanding the requirement is that only VM1 shall be able to communicate with VM2 and VM3, but not VM2 with VM3. We can exclude d) as d) would enable VM2 to communicate with VM3 as well - my assumption is, that if the quizzier wanted that d) is the correct answer, he would make just 2 peerings - 1x between VM1 and VM2 and 1x between VM1 and VM3 respectively the VPCs. We can exclude c) as well - there is no connection between VPC1 and VPC3. IMHO a) will not work.

So the only correct answer seems to be b) - what I don't understand is why we have to update the firewall rules as IMHO the default firewall rules enable such communication (maybe some restrictive rules are implemented - not enough details in the question to clarify that part). Please correct me if I am wrong.
upvoted 13 times



lazybeanbag 7 months, 2 weeks ago

I think it is because the instances are in separate VPCs.




"Google Cloud Virtual Private Cloud (VPC) networks are by default isolated private networking domains. Networks have a global scope and contain regional subnets. VM instances within a VPC network can communicate among themselves using internal IP addresses as long as firewall rules permit. However, NO INTERNAL IP ADDRESS COMMUNICATION IS ALLOWED BETWEEN networks, unless you set up mechanisms such as VPC Network Peering or Cloud VPN."



The instructions for setting up multiple interfaces tells you to check your firewall rules as as the firewall rules of the VPC apply to the network interface that it is attached to.



https://cloud.google.com/vpc/docs/multiple-interfaces-concepts#firewall_rules_and_multiple_network_interfaces
upvoted 4 times



  **JeffClarke111** 7 months, 4 weeks ago
Correct, maybe fw on the VM
upvoted 2 times



  **MamthaSJ** Highly Voted  7 months, 4 weeks ago
Answer is B
upvoted 7 times



  **nymets** Most Recent  1 month, 2 weeks ago
Selected Answer: B
The answer is "B".
The following link has this - "Use multiple network interfaces when an individual instance needs access to more than one VPC network, but you don't want to connect both networks directly."
<https://cloud.google.com/vpc/docs/multiple-interfaces-concepts>
upvoted 1 times



  **elenamatay** 1 month, 3 weeks ago
Why not C? VPNs permit transitive communication, as explained in this table: <https://cloud.google.com/architecture/best-practices-vpc-design#choose-method> , so AFAIK connecting VPC#1 to VPC#2 and VPC#2 to VPC#3, you should be able to reach #3 from #1. Please correct me if wrong.
upvoted 1 times



  **PhuocT** 1 month, 4 weeks ago
Selected Answer: D
D more sense to me, Peering then limit the access via firewall, with B, multi NIC only available when re-create the instances.
upvoted 1 times



  **SamGCP** 2 months, 2 weeks ago
C & D don't work since transitive communication is not possible ie VM1 wont be able to communicate with VM3 since there is no direct connection between them
upvoted 1 times



  **mgm7** 2 months, 2 weeks ago
Selected Answer: D
VPC networks are isolated by definition. You can not make connection, routed or not, between any two VM which are not in the same VPC. Peering is a requirement, than you can add nics/routes/firewall rules to regulate flows.
upvoted 1 times



  **vincy2202** 2 months, 4 weeks ago
Selected Answer: B
B seems to be the correct answer
upvoted 1 times



  **joe2211** 3 months, 1 week ago
Selected Answer: B
vote B
upvoted 3 times

  **StanPeng** 3 months, 3 weeks ago
Why a is wrong?
upvoted 1 times

  **robotgeek** 3 months, 3 weeks ago
cloud router is cloud to on-premises, google it pal
upvoted 1 times

  **jask** 5 months, 1 week ago
Answer should be B. https://cloud.google.com/vpc/docs/create-use-multiple-interfaces#i_am_not_able_to_connect_to_secondary_interfaces_internal_ip
upvoted 3 times

  **amxexam** 5 months, 4 weeks ago
VPC peering is the way to go when dealing with multi VPC.
<https://cloud.google.com/vpc/docs/vpc-peering>
The firewall rule will give the permission to communicate.
So D.
upvoted 1 times

  **apclb** 5 months, 3 weeks ago
It's B). Yes Peering VPCs would work, would it not for that answer D says to Peer VPC#2 with VPC#3 which is not the requirement. So Answer D is wrong if you do it in the way the answer is written.

upvoted 2 times

  **JustADudeTakingATest** 6 months ago

B seems to be the best choice, but its worded terribly because you CANT add NICs to a created VM, youd have to create a whole new VM



upvoted 2 times

  **PeppaPig** 6 months, 2 weeks ago

A is definitely wrong, and since VPC does not support transitive peering, you must set up direct peering between VPC1 and VPC3, that rules out C&D.

It leaves B the only correct answer

upvoted 1 times

  **poseidon24** 7 months, 1 week ago

B is correct.

As per GCP documentation: "By default, every instance in a VPC network has a single network interface. Use these instructions to create additional network interfaces. Each interface is attached to a different VPC network, giving that instance access to different VPC networks in Google Cloud. You cannot attach multiple network interfaces to the same VPC network."

Refer to: <https://cloud.google.com/vpc/docs/create-use-multiple-interfaces>


The VPN and VPC Peering could work for other scenarios but the requirement is to keep the connection only between 1-2, and 1-3, not a transitive connection (1-2-3).

upvoted 5 times

  **victory108** 7 months, 1 week ago

B. Add two additional NICs to Instance #1 with the following configuration: $\lambda \leftrightarrow \text{NIC1} \lambda \leftrightarrow \text{VPC: VPC \#2} \lambda \leftrightarrow \text{SUBNETWORK: subnet \#2}$ $\lambda \leftrightarrow \text{NIC2} \lambda \leftrightarrow \text{VPC: VPC \#3} \lambda \leftrightarrow \text{SUBNETWORK: subnet \#3}$ Update firewall rules to enable traffic between instances.

upvoted 2 times

  **kopper2019** 7 months, 4 weeks ago

I just tested I was thinking in Azure mode where a VM cannot have NIC in two vNets but I just tested and google allows that so as long as VMs and VPC are in the same region this works

upvoted 1 times

  **sandipk91** 6 months ago

" as long as VMs and VPC are in the same region " - I guess you mean subnets here as VPC is a global service unlike Azure VNET

upvoted 1 times

  **kopper2019** 7 months, 4 weeks ago

so it B

upvoted 2 times

You need to deploy an application on Google Cloud that must run on a Debian Linux environment. The application requires extensive configuration in order to operate correctly. You want to ensure that you can install Debian distribution updates with minimal manual intervention whenever they become available. What should you do?

- A. Create a Compute Engine instance template using the most recent Debian image. Create an instance from this template, and install and configure the application as part of the startup script. Repeat this process whenever a new Google-managed Debian image becomes available.
- B. Create a Debian-based Compute Engine instance, install and configure the application, and use OS patch management to install available updates.
- C. Create an instance with the latest available Debian image. Connect to the instance via SSH, and install and configure the application on the instance. Repeat this process whenever a new Google-managed Debian image becomes available.
- D. Create a Docker container with Debian as the base image. Install and configure the application as part of the Docker image creation process. Host the container on Google Kubernetes Engine and restart the container whenever a new update is available.

Correct Answer: B

Reference:

<https://cloud.google.com/compute/docs/os-patch-management>

Community vote distribution

B (100%)

- victory108**

Highly Voted

7 months, 3 weeks ago

B. Create a Debian-based Compute Engine instance, install and configure the application, and use OS patch management to install available updates.

upvoted 13 times
- MamthaSJ**

Highly Voted

7 months, 4 weeks ago

Answer is B

upvoted 7 times
- ahsangh**

Most Recent

1 week ago

Selected Answer: B

OS patch management

upvoted 1 times
- azureaspirant**

2 weeks, 1 day ago

2/15/21 exam

upvoted 1 times
- jieaws**

1 month, 1 week ago

The question asks for 'extensive configuration'. My understanding is this is not OS patching, intead the configuration pertaining to the application. B is excluded.

upvoted 1 times
- Narinder**

1 month, 1 week ago

I think, answer must be A.

The ask is to upgrade the OS with the latest patch/update.

Application configuration setup is complex in nature, so required minimum manual intervention. Hence automation is required for setting up the application.

This can be easily done using the instance template which has the latest Google-managed Debian image. Application configuration and setup can be done through start-up scripts. So, there is no manual intervention required here.

With option-B, application installation and configuration has to be done manually which is the pain-point as per the use-case. So, I think it is not the right option for this use-case

upvoted 2 times
- haroldbenites**

2 months, 3 weeks ago

Go for B

upvoted 1 times
- vincy2202**


2 months, 4 weeks ago

Selected Answer: B

B is the correct answer

<https://cloud.google.com/compute/docs/os-patch-management>

upvoted 2 times

  **joe2211** 3 months, 1 week ago

Selected Answer: B

vote B

upvoted 3 times

  **nileshlg** 3 months, 1 week ago

Selected Answer: B



B is correct

upvoted 1 times

  **exam_war** 3 months, 3 weeks ago

B is correct

upvoted 1 times

  **raj1984** 5 months, 2 weeks ago

The answer is D, selecting a docker container with the base image as latest "docker pull debian:latest", will help in getting the latest debian image whenever an update is available.

upvoted 2 times

  **amxexam** 5 months, 3 weeks ago

Lets go with elimination.

C - Is an overkill to update.

B - Will need update although is the GCP recommended way but here is the requirement to reduce disruption and this will need restart after the image is applied. More on update in the URL

<https://stackoverflow.com/questions/54822341/ubuntu-do-release-upgrade-on-google-compute-engine-vm/54833139>

D - is a good solution but there is no need to restart the container when we apply updates as rolling updates by change the docker image. Let's eliminate it as they are asking to restart the whole container.

More on K8s update process <https://stackoverflow.com/questions/40366192/kubernetes-how-to-make-deployment-to-update-image>

A - stands out as you can go a rolling update in MIG, individual instance restart/or new spawn after the update will not completely disturbed hence will select the same.

Hence A.

upvoted 2 times

  **jp2403** 5 months ago

go for B, the question doesn't ask to reduce disruption but to have minimal manual intervention

upvoted 1 times

  **amxexam** 5 months, 3 weeks ago

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

Tells the benefit of MIG read for the point "You can control the speed and scope of deployment as well as the level of disruption to your service."

upvoted 2 times

  **tsiddique** 3 months, 4 weeks ago

I was thinking same as you but as per option B we can use OS patch management, it will help to reduce the manual tasks involved in A.



<https://cloud.google.com/compute/docs/os-patch-management>

upvoted 1 times

  **rishab86** 6 months, 2 weeks ago



As per link : <https://cloud.google.com/compute/docs/os-patch-management>, answer should be B.

upvoted 3 times

  **amxexam** 5 months, 3 weeks ago

The page is removed

upvoted 1 times

  **AnilKr** 6 months, 3 weeks ago

Ans-B, Question says application must run on Linux and application needs extensive configurations that leads to some auto management which is os-patch management. You can't repeat manual process every time when new patch available.

The OS patch management service has two main components:

Patch compliance reporting, which provides insights on the patch status of your VM instances across Windows and Linux distributions. Along with the insights, you can also view recommendations for your VM instances.

Patch deployment, which automates the operating system and software patch update process. A patch deployment schedules patch jobs. A patch job runs across VM instances and applies patches.

upvoted 5 times

  **HenkH** 2 months ago

E: Create the template AFTER configuring the application! Assumption is that applying OS patches isn't that hard or time costly.

upvoted 1 times

  **HenkH** 2 months ago



B, the correct one is the simplest. B. assumes O/S patches do not impact the application to a level app reinstall or reconfiguration is required.

upvoted 1 times

  **RamanathanPV** 7 months ago

Can someone tell why not D ?

upvoted 1 times

  **seany89** 5 months, 3 weeks ago



restarting a container will not trigger image os updates

upvoted 1 times

  **diluviouniv** 7 months, 2 weeks ago


Why not the A?

upvoted 1 times

  **VishalB** 7 months, 1 week ago



please refer <https://cloud.google.com/compute/docs/os-patch-management>

upvoted 1 times

  **amxexam** 5 months, 3 weeks ago

This link is deleted

upvoted 1 times

  **cugena** 5 months, 2 weeks ago

It is not...

upvoted 2 times

You have an application that runs in Google Kubernetes Engine (GKE). Over the last 2 weeks, customers have reported that a specific part of the application returns errors very frequently. You currently have no logging or monitoring solution enabled on your GKE cluster. You want to diagnose the problem, but you have not been able to replicate the issue. You want to cause minimal disruption to the application. What should you do?

- A. 1. Update your GKE cluster to use Cloud Operations for GKE. 2. Use the GKE Monitoring dashboard to investigate logs from affected Pods.
- B. 1. Create a new GKE cluster with Cloud Operations for GKE enabled. 2. Migrate the affected Pods to the new cluster, and redirect traffic for those Pods to the new cluster. 3. Use the GKE Monitoring dashboard to investigate logs from affected Pods.
- C. 1. Update your GKE cluster to use Cloud Operations for GKE, and deploy Prometheus. 2. Set an alert to trigger whenever the application returns an error.
- D. 1. Create a new GKE cluster with Cloud Operations for GKE enabled, and deploy Prometheus. 2. Migrate the affected Pods to the new cluster, and redirect traffic for those Pods to the new cluster. 3. Set an alert to trigger whenever the application returns an error.

Correct Answer: C

Reference:

<https://cloud.google.com/blog/products/management-tools/using-logging-your-apps-running-kubernetes-engine>



Community vote distribution



A (60%)



C (40%)



  **TotoroChina** Highly Voted 8 months ago



According to the reference, answer should be A.
<https://cloud.google.com/blog/products/management-tools/using-logging-your-apps-running-kubernetes-engine>
upvoted 27 times



  **MF2C** 2 months ago
But updating cluster requires downtime, isn't it?
upvoted 1 times



  **poseidon24** 7 months, 1 week ago
correct, from GCP best practices for GKE we should rely on native logging capabilities. No need for additional solutions like Prometheus. Also it is about reviewing logs, monitoring the service, not receiving alerts each time its happens, that will not provide any insight on the issue.
upvoted 6 times

  **victorlie** 6 months ago
Also, as long you know there is a problem, i think you should investigate immediately the issue, not wait for new errors
upvoted 4 times

  **XDevX** Highly Voted 8 months ago
IMHO a) is the correct answer, not c)
The point is, that we have a scenario in that often errors in GKE happen - within 2 week a lot of people complained about a lot of errors. For the past we have no data at all as we have not monitored anything. That means we will collect data from now on to find out what the problem is. The additional value of an alert is not clear - and it for me not clear why we need additionally to install Prometheus considering that until now we had no GKE monitoring at all. Please correct me if I am wrong.
upvoted 8 times

  **mikael_fasb** Most Recent 2 weeks, 4 days ago
Selected Answer: C
Cloud Monitoring can only monitor what it can see. To get more information out of Cloud Monitoring, you need to put more information in. That's where an open source tool named Prometheus can help.
Prometheus can provide detailed metrics about Kubernetes components, including metrics from within the applications running in your Pods, and then expose those metrics to Cloud Monitoring, providing you with much more granular detail than Cloud Monitoring alone.
upvoted 1 times

  **SamGCP** 2 months, 2 weeks ago
Question states problem cannot be replicated. So alerting is required to review the right logs at right time. Hence A is not adequate solution and C is the right one
upvoted 1 times

  **mgm7** 2 months, 2 weeks ago
Selected Answer: A
I read their reference, and they meant to say A

upvoted 1 times

  **dk2u90fh** 2 months, 1 week ago

who is "they" and why do "they" have so many incorrect answers selected (that differ from the voted answer)?

upvoted 2 times

  **PhilipKoku** 2 months, 2 weeks ago

Selected Answer: A

A) It is the right answer as you don't need to wait for the error to happen or depend deployed.

upvoted 1 times

  **ohmyhat2005** 2 months, 3 weeks ago


to answer this question the key is to use stackdriver for enabling log function. but stackdriver changed name to cloud operation, so answer is C.

upvoted 1 times

  **haroldbenites** 2 months, 3 weeks ago

Go for A.



upvoted 1 times

  **pakilodi** 2 months, 3 weeks ago

Selected Answer: C

to all those that said A. is correct, but the question also states one thing: we cannot replicate the issue. So, logs are useless here. We need an alert when the error happens. and therefore, the only solution is C.

upvoted 2 times

  **qmhao99** 2 months, 3 weeks ago

The question stated that the errors happen very frequently so there is no need for alert.

upvoted 2 times

  **menon_sarath** 2 months, 3 weeks ago

Considering the requirement that there needs to be minimal disruption to the application, the best fir option seems to be option A


upvoted 1 times

  **Arad** 2 months, 3 weeks ago

Selected Answer: A

answer is A

upvoted 1 times

  **vincy2202** 2 months, 4 weeks ago

A is the correct answer

upvoted 1 times

  **jdr75** 3 months ago

<https://cloud.google.com/stackdriver/docs/solutions/gke/prometheus> :

The recommended approach for exporting metrics from GKE to Cloud Monitoring is GKE workload metrics. Only follow the instructions on this page if GKE workload metrics does not support your needs. If you already use the Stackdriver Prometheus sidecar, migrate to GKE workload metrics.

So Prometheus is not a good option, at least in the 1st round.



upvoted 1 times

  **pakilodi** 3 months ago

Selected Answer: C

C. alerting via prometheus is right

upvoted 1 times

  **nqthien041292** 3 months ago

Selected Answer: A



Vote A

upvoted 3 times

  **nqthien041292** 2 months, 3 weeks ago



Ignore A, Vote C

upvoted 1 times

  **Firask** 3 months, 2 weeks ago

GKE includes cloud monitoring and cloud logging by default. If these two services don't help I think you should use advance tools like Prometheus. I think in my opinion Ans. C

upvoted 1 times

  **jask** 5 months ago

Answer is A. Since we are unable to replicate the issue, we do not have any condition on which the alert should be triggered. So C is wrong.

upvoted 2 times

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

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

Correct Answer: D

Reference:

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

Community vote distribution

C (100%)

🗲️ 👤 **TotoroChina** Highly Voted 👍 8 months ago

Answer should be C,

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

upvoted 19 times

🗲️ 👤 **Urban_Life** 2 months, 2 weeks ago

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

upvoted 1 times

🗲️ 👤 **JeffClarke111** 7 months, 4 weeks ago

Agreed - C

upvoted 4 times

🗲️ 👤 **XDevX** Highly Voted 👍 8 months ago

IMHO d) is wrong, the correct answer is c).

The requirement is explicitly POSIX filesystem - using gcsfuse Cloud Storage still remains an object storage - IMHO gcsfuse brings a lot of downsides compared with Filestore and in the question there are no indications that a non-POSIX filesystem shall be used.

upvoted 9 times

🗲️ 👤 **yeahlon** Most Recent ⌚ 1 month ago

Selected Answer: C

<https://cloudplatform.googleblog.com/2018/06/New-Cloud-Filestore-service-brings-GCP-users-high-performance-file-storage.html>

"Cloud Filestore was easy to provision and mount, and reliable for the kind of workload we have. Having a POSIX file system that we can mount and use directly helps us speed-read our files, especially on new machines. We can also use the normal I/O features of any language and don't have to use a specific SDK to use an object store."

- Charlie Rice, Chief Technology Officer, ever.ai

upvoted 1 times

🗲️ 👤 **aubreyhan** 1 month, 1 week ago

NFS is not POSIX filesystem. gcsfuse mount GCS as local ext filesystem to vm. So D is correct.

upvoted 1 times

🗲️ 👤 **bobby8521** 2 months ago

Selected Answer: C

It should be C

<https://cloudplatform.googleblog.com/2018/06/New-Cloud-Filestore-service-brings-GCP-users-high-performance-file-storage.html>

upvoted 1 times

🗲️ 👤 **SamGCP** 2 months, 2 weeks ago

Selected Answer: C

Refer Key differences from a POSIX file system

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

upvoted 1 times

🗲️ 👤 **haroldbenites** 2 months, 3 weeks ago

Go for C.

upvoted 1 times

🗲️ 👤 **vincy2202** 2 months, 4 weeks ago

C is the correct answer

upvoted 1 times

  **BSING246** 3 months ago

Selected Answer: C

Marked D is wrong

upvoted 1 times

  **jdr75** 3 months ago

It' C -- cos' CloudStore (D) under FUSE has not sufficient throughput. In the other hand C (Filestore) have speed, scalability, and security. It's like a NAS.

upvoted 1 times

  **cdcollector** 3 months ago

Selected Answer: C

posix filesystem multihomed

upvoted 1 times

  **pakilodi** 3 months, 1 week ago

Selected Answer: C

Answer should be C

upvoted 3 times

  **exam_war** 3 months, 3 weeks ago

Answer is C . Only filestore is shard file system and can be accessed by multiple instances.

upvoted 1 times

  **rexo** 4 months, 2 weeks ago

Answer should be C

Support GKE workloads with Filestore

For apps running in GKE that require file storage, the fully managed NFS solution supports stateful and stateless applications. With an integrated and managed GKE Container Storage Interface (CSI) driver, multiple pods can have shared file system access to the same data.


upvoted 2 times

  **BrijMohan08** 5 months ago

Ans - C

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

upvoted 2 times

  **MikeB19** 5 months, 1 week ago

Gcs fuse is good for nothing. I would never use this in any real enterprise environment. I'm not even sure why it was mentioned in the study material

upvoted 1 times

  **GianlucaRM** 6 months, 2 weeks ago

D is not correct, because Cloud storage is not a file system

upvoted 5 times

Your company has an application deployed on Anthos clusters (formerly Anthos GKE) that is running multiple microservices. The cluster has both Anthos Service Mesh and Anthos Config Management configured. End users inform you that the application is responding very slowly. You want to identify the microservice that is causing the delay. What should you do?

- A. Use the Service Mesh visualization in the Cloud Console to inspect the telemetry between the microservices.
- B. Use Anthos Config Management to create a ClusterSelector selecting the relevant cluster. On the Google Cloud Console page for Google Kubernetes Engine, view the Workloads and filter on the cluster. Inspect the configurations of the filtered workloads.
- C. Use Anthos Config Management to create a namespaceSelector selecting the relevant cluster namespace. On the Google Cloud Console page for Google Kubernetes Engine, visit the workloads and filter on the namespace. Inspect the configurations of the filtered workloads.
- D. Reinstall istio using the default istio profile in order to collect request latency. Evaluate the telemetry between the microservices in the Cloud Console.

Correct Answer: A

Community vote distribution

A (100%)

- MamthaSJ

Highly Voted

7 months, 4 weeks ago

Answer is A

upvoted 12 times
- AnilKr

Highly Voted

7 months ago

Ans-A

<https://cloud.google.com/service-mesh/docs/observability/explore-dashboard>

upvoted 6 times
- technodev

Most Recent

1 month, 1 week ago

Got this question in my exam, answered A

upvoted 2 times
- haroldbenites

2 months, 3 weeks ago

Go for A

upvoted 1 times
- vincy2202

2 months, 4 weeks ago

A is the correct answer

upvoted 1 times
- joe2211

3 months, 1 week ago

Selected Answer: A

vote A

upvoted 3 times
- AnilKr

7 months ago

The Anthos Service Mesh pages in the Google Cloud Console provide both summary and in-depth metrics, charts, and graphs that enable you to observe service behavior. You can monitor the overall health of your services, or drill down on a specific service to set a service level objective (SLO) or troubleshoot an issue.

<https://cloud.google.com/service-mesh/docs/observability/explore-dashboard>

upvoted 5 times
- VishalB

7 months, 3 weeks ago

Ans : A

Anthos Service Mesh’s robust tracing, monitoring, and logging features give you deep insights into how your services are performing, how that performance affects other processes, and any issues that might exist.

upvoted 6 times
- victory108

7 months, 3 weeks ago

A. Use the Service Mesh visualization in the Cloud Console to inspect the telemetry between the microservices.

upvoted 4 times
- Rom0817

8 months ago

Answer: A, Service Mesh

<https://cloud.google.com/anthos/service-mesh>

upvoted 3 times

You are working at a financial institution that stores mortgage loan approval documents on Cloud Storage. Any change to these approval documents must be uploaded as a separate approval file, so you want to ensure that these documents cannot be deleted or overwritten for the next 5 years. What should you do?

- A. Create a retention policy on the bucket for the duration of 5 years. Create a lock on the retention policy.
- B. Create the bucket with uniform bucket-level access, and grant a service account the role of Object Writer. Use the service account to upload new files.
- C. Use a customer-managed key for the encryption of the bucket. Rotate the key after 5 years.
- D. Create the bucket with fine-grained access control, and grant a service account the role of Object Writer. Use the service account to upload new files.

Correct Answer: A

Reference:

<https://cloud.google.com/storage/docs/using-bucket-lock>

Community vote distribution

A (100%)

- VishalB

Highly Voted

7 months, 3 weeks ago

Answer A

o If a bucket has a retention policy, objects in the bucket can only be deleted or replaced once their age is greater than the retention period.

o Once you lock a retention policy, you cannot remove it or reduce the retention period it has.

upvoted 14 times
- victory108

Highly Voted

7 months, 3 weeks ago

A. Create a retention policy on the bucket for the duration of 5 years. Create a lock on the retention policy.

upvoted 5 times
- azureaspirant

Most Recent

2 weeks, 1 day ago

2/15/21 exam

upvoted 1 times
- technodev

1 month, 1 week ago

Got this question in my exam, answered A

upvoted 1 times
- haroldbenites

2 months, 3 weeks ago

Go for A

upvoted 1 times
- vincy2202

2 months, 4 weeks ago

A is the correct answer

upvoted 1 times
- joe2211

3 months, 1 week ago

Selected Answer: A

vote A

upvoted 3 times
- Chotebhaisahab

4 months, 4 weeks ago

I agree with A

upvoted 1 times
- AnilKr

7 months ago

Locking a retention policy is an irreversible action. Once locked, you must delete the entire bucket in order to "remove" the bucket's retention policy. However, before you can delete the bucket, you must be able to delete all the objects in the bucket, which itself is only possible if the all objects have reached the retention period set by the retention policy.

upvoted 2 times
- MamthaSJ

7 months, 3 weeks ago

Answer is A

upvoted 5 times
- kopper2019

7 months, 4 weeks ago

it is A, retention policy and lock to avoid deletion
upvoted 4 times

  **Rom0817** 8 months ago

A. Retention policy
<https://cloud.google.com/storage/docs/bucket-lock>
upvoted 5 times




Your team will start developing a new application using microservices architecture on Kubernetes Engine. As part of the development lifecycle, any code change that has been pushed to the remote develop branch on your GitHub repository should be built and tested automatically. When the build and test are successful, the relevant microservice will be deployed automatically in the development environment. You want to ensure that all code deployed in the development environment follows this process. What should you do?




- A. Have each developer install a pre-commit hook on their workstation that tests the code and builds the container when committing on the development branch. After a successful commit, have the developer deploy the newly built container image on the development cluster.
- B. Install a post-commit hook on the remote git repository that tests the code and builds the container when code is pushed to the development branch. After a successful commit, have the developer deploy the newly built container image on the development cluster.
- C. Create a Cloud Build trigger based on the development branch that tests the code, builds the container, and stores it in Container Registry. Create a deployment pipeline that watches for new images and deploys the new image on the development cluster. Ensure only the deployment tool has access to deploy new versions.
- D. Create a Cloud Build trigger based on the development branch to build a new container image and store it in Container Registry. Rely on Vulnerability Scanning to ensure the code tests succeed. As the final step of the Cloud Build process, deploy the new container image on the development cluster. Ensure only Cloud Build has access to deploy new versions.




Correct Answer: A



Community vote distribution



C (100%)



  **TotoroChina** Highly Voted  8 months ago
Answer should be C, obviously.
upvoted 33 times



  **AdGlad** Highly Voted  7 months, 2 weeks ago
Questions say "relevant microservice will be deployed automatically in the development environment." Therefore A and B are out. D says "Rely on Vulnerability Scanning to ensure the code tests succeed." Vulnerability Scanning is not test so D is out. The correct Answer is therefore C.
upvoted 14 times



  **azureaspirant** Most Recent  2 weeks, 1 day ago
2/15/21 exam passed
upvoted 1 times



  **VT001** 2 weeks, 5 days ago
Selected Answer: C
I got similar question on my exam. Answered C.
upvoted 1 times



  **sriandy** 1 month, 3 weeks ago
Pipeline is keyword
upvoted 1 times

  **OrangeTiger** 1 month, 3 weeks ago
Can anyone please tell me why D is different?
The test is done with Vulnerability Scanning.
Do other steps with Cloud Build.
upvoted 1 times

  **GauravLahoti** 2 months ago
Correct Answer is C
upvoted 1 times

  **zaxxon** 2 months, 1 week ago
for all those people answering C: how can Cloud build "tested automatically"? Please explain!
upvoted 1 times

  **rajadhav** 2 months, 2 weeks ago
C is correct answer.
upvoted 1 times

  **PhilipKoku** 2 months, 2 weeks ago
Selected Answer: C

C) It is the best answer and it test the changes and automatically build the container and pushes it using CI/CD.

upvoted 1 times

  **vincy2202** 2 months, 4 weeks ago

Selected Answer: C

C is the correct answer

upvoted 1 times

  **jdr75** 3 months ago

It's C -- however a container is not directly "stored" in Container Registry, you upload "images", not "container", I think is a misspelling, because, textually from GCP doc:

You use the Docker build command to build the container.

This builds the container and stores it locally as a runnable image.

You can save and upload the image into a container registry service

upvoted 1 times

  **cdcollector** 3 months ago

Selected Answer: C

Automatically !

upvoted 1 times

  **joe2211** 3 months, 1 week ago

Selected Answer: C

vote C


upvoted 3 times

  **pakilodi** 3 months, 1 week ago

Selected Answer: C

C should be the answer here

upvoted 2 times

  **robotgeek** 3 months, 3 weeks ago



Guys you never "Build a container" C is not right

upvoted 2 times

  **pakilodi** 3 months, 1 week ago

i've used to build Docker container with cloud Build. so it is a Best Practice. A is totally wrong here, based on the context of the answer

upvoted 2 times

  **pakilodi** 3 months, 4 weeks ago

should be C? it says automatic deploy....

upvoted 1 times

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

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

Correct Answer: A

Reference:

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

Community vote distribution

D (78%) B (17%) 6%

  **TotoroChina** Highly Voted 8 months ago

Answer should be D.
I doubt it is intended to provide wrong answer.
upvoted 30 times

  **victorlie** 6 months ago

why almost all answers are wrong?
upvoted 5 times

  **poseidon24** 7 months, 1 week ago

Agree.



Cannot be A), since changing the metric used for autoscaling will not solve the issue, the CPU is already over utilized, hence the unique "workaround" meanwhile the application causing the issue is fixed (connection leaks, infinite loops, etc.) is to allow introducing new nodes/workers/VMs.
upvoted 4 times

  **MamthaSJ** Highly Voted 7 months, 3 weeks ago



Answer is D
upvoted 12 times

  **GARY1119** Most Recent 2 weeks, 3 days ago

The last sentence says: you want to production works as quickly as possible. D makes sense.
upvoted 1 times

  **Pime13** 1 month ago



Selected Answer: D
vote D
upvoted 2 times

  **ks100** 1 month, 1 week ago

Selected Answer: D
d is correct
upvoted 1 times

  **Andre777** 1 month, 2 weeks ago

I think it is C. in D there is already statement autoscaling has reached the upper limit of instances. it will not change anything.
upvoted 1 times

  **nymets** 1 month, 3 weeks ago

Selected Answer: C
[Not A] -> A change to AutoScaling metric will make no difference as the ASG's max size is already reached
[Not B] -> Restarting instances in an ASG will likely cause the ASG to replace those instances (due to healthcheck failures)
[Correct, C] -> We know that the application is hogging all the CPU. Restarting the application on the VMs will allow immediate resumption of production traffic.
[Not D]: Increasing ASG's max size will not help because requests my still end up on affected VMs

upvoted 1 times

  **OrangeTiger** 1 month, 3 weeks ago

I think D is correct.In order to be able to reprocess traffic quickly, it would be correct to launch a new instance.

But perhaps CPU-hungry application issues also occur with new instances.
Need B or C to fundamentally solve your application's problems. It takes time to troubleshoot.
I think it's better to do B or C while earning time with D. The question is a little weird.

A:Changing the metric avoids the problem of eating up the maximum number of instance groups, but it doesn't solve the high CPU load, so traffic can't be resumed.

upvoted 1 times

  **GauravLahoti** 2 months ago

Selected Answer: D

Correct Answer is D

upvoted 1 times

  **BattleSlim** 2 months ago

Selected Answer: D

D is correct, because A could not be correct. It is clearly mentioned that this is a cpu issue not memory issue.



upvoted 2 times

  **sunil55sunil** 2 months, 1 week ago

Selected Answer: B

To restore services asap

upvoted 1 times

  **rajadhav** 2 months, 2 weeks ago

Autoscaling already reached upper limit, adding memory based metrics won` t solve problem. Increasing number of instances will work.
D is correct answer.

upvoted 2 times

  **SergioPitu** 2 months, 2 weeks ago

Selected Answer: D

Ans is D


upvoted 1 times

  **PhilipKoku** 2 months, 2 weeks ago

Selected Answer: B

B) You have to restart the instances with the issue in a staggered way.

upvoted 2 times

  **duhhh** 2 months, 3 weeks ago

Selected Answer: D

vote d as ans

upvoted 1 times

  **BSING246** 2 months, 3 weeks ago

Selected Answer: D

D is answer.

upvoted 1 times

  **vincy2202** 2 months, 4 weeks ago

D is the correct answer

upvoted 1 times

You are implementing the infrastructure for a web service on Google Cloud. The web service needs to receive and store the data from 500,000 requests per second. The data will be queried later in real time, based on exact matches of a known set of attributes. There will be periods where the web service will not receive any requests. The business wants to keep costs low. Which web service platform and database should you use for the application?

- A. Cloud Run and BigQuery
- B. Cloud Run and Cloud Bigtable
- C. A Compute Engine autoscaling managed instance group and BigQuery
- D. A Compute Engine autoscaling managed instance group and Cloud Bigtable

Correct Answer: D

Community vote distribution

D (50%)

B (50%)

Enzian Highly Voted 8 months ago

Any correct answer must involve Cloud Bigtable over BigQuery since Bigtable is optimized for heavy write loads. That leaves B and D. I would suggest B b/c it is lower cost ("The business wants to keep costs low")
upvoted 40 times

pakilodi 2 months, 2 weeks ago

Not only: occasionally there will be no requests. so Cloud Run will scale to zero
upvoted 4 times

MamthaSJ Highly Voted 7 months, 4 weeks ago

B is correct answer.
upvoted 15 times

bhtay Most Recent 1 week ago

Selected Answer: B
Cloud Run can scale down to zero.
upvoted 1 times

muky31dec 3 weeks, 1 day ago

Selected Answer: D
must D
Concurrency values
Concurrency is configurable. By default each Cloud Run container instance can receive up to 80 requests at the same time; you can increase this to a maximum of 1000. Note that in comparison, Functions-as-a-Service (FaaS) solutions like Cloud Functions have a fixed concurrency of 1.

Although you should use the default concurrency value, if needed you can lower the maximum concurrency. For example, if your code cannot process parallel requests, set concurrency to 1.

The specified concurrency value is a maximum and Cloud Run might not send as many requests to a given container instance if the CPU of the instance is already highly utilized.

The following diagram shows how the concurrency setting affects the number of container instances needed to handle incoming concurrent requests:
upvoted 3 times

Pime13 1 month ago

i'd say B
upvoted 1 times

GARY1119 1 month, 1 week ago

B is correct.
<https://qwinix.io/blog/what-is-cloud-run/#:~:text=Powered%20by%20Knative%2C%20Cloud%20Run,a%20stateless%2C%20autoscaling%20HTTP%20service.&text=Cloud%20Run%20is%20a%20fully%20managed%20platform.>

Cloud Run will scale to 0 if no request come and cost effective.
upvoted 1 times

ks100 1 month, 1 week ago

Selected Answer: D
Compute Engine autoscaling will scale down when service not needed



upvoted 1 times

  **santoshindia** 1 month, 3 weeks ago

Selected Answer: D

By default each Cloud Run container instance can receive up to 80 requests at the same time; you can increase this to a maximum of 1000
<https://cloud.google.com/run/docs/about-concurrency>

upvoted 3 times

  **pddddd** 1 month, 3 weeks ago

and quote is 1000 cloud run instances => $1000 * 1000 = 1\,000\,000$ reqs/s

upvoted 2 times

  **santoshindia** 1 month, 3 weeks ago

D. By default each Cloud Run container instance can receive up to 80 requests at the same time; you can increase this to a maximum of 1000
<https://cloud.google.com/run/docs/about-concurrency>



upvoted 2 times

  **Fotofilico** 1 month, 3 weeks ago

Selected Answer: D

Infrastructure is the key!

upvoted 1 times

  **joheri** 1 month, 4 weeks ago

Selected Answer: D

I don't think cloud run would scale upto 500K req per second. When max instance is 1000 and concurrency can't be 500 I suppose. D would be the right choice.

upvoted 2 times

  **GauravLahoti** 2 months ago

Correct Anwer is B


upvoted 1 times

  **ehgm** 2 months ago

Selected Answer: B

The only reason D is the right choice is if "You are implementing the infrastructure for a web service on Google Cloud" means that it must create an infra and not user a truly serverless service.

upvoted 2 times

  **simbu1299** 2 months, 1 week ago

B is the correct answer

upvoted 1 times

  **Andrea67** 2 months, 2 weeks ago

I'm agree with the task "business wants to keep costs low" but also at beginning of the question is required the I'm implementing the infrastructure for the so could be correct D



upvoted 1 times

  **PhilipKoku** 2 months, 2 weeks ago

Selected Answer: B

Cloud Run and Big Table

upvoted 1 times

  **anjuagrawal** 2 months, 3 weeks ago

Should be B because there are times when no request. It would be cost effective to use Cloud Run instead of MIG

upvoted 2 times

You are developing an application using different microservices that should remain internal to the cluster. You want to be able to configure each microservice with a specific number of replicas. You also want to be able to address a specific microservice from any other microservice in a uniform way, regardless of the number of replicas the microservice scales to. You need to implement this solution on Google Kubernetes Engine. What should you do?



- A. Deploy each microservice as a Deployment. Expose the Deployment in the cluster using a Service, and use the Service DNS name to address it from other microservices within the cluster.
- B. Deploy each microservice as a Deployment. Expose the Deployment in the cluster using an Ingress, and use the Ingress IP address to address the Deployment from other microservices within the cluster.
- C. Deploy each microservice as a Pod. Expose the Pod in the cluster using a Service, and use the Service DNS name to address the microservice from other microservices within the cluster.
- D. Deploy each microservice as a Pod. Expose the Pod in the cluster using an Ingress, and use the Ingress IP address name to address the Pod from other microservices within the cluster.



Correct Answer: A



Community vote distribution



A (100%)



  **MamthaSJ** Highly Voted 7 months, 3 weeks ago
Answer is A
upvoted 18 times



  **PeppaPig** Highly Voted 7 months ago
Answer is A 100%
B is incorrect. Ingress comes with a HTTP(S) LB with external IP hence is not needed for communications within the cluster internally.
upvoted 8 times



  **azureaspirant** Most Recent 2 weeks, 1 day ago
2/15/21 exam
upvoted 1 times



  **hantanbl** 1 month ago
this question came out in the exam
upvoted 2 times



  **technodev** 1 month, 1 week ago
Got this question in my exam, answered A
upvoted 2 times

  **simbu1299** 2 months, 1 week ago
A is the correct answer
upvoted 1 times

  **vincy2202** 2 months, 4 weeks ago
Selected Answer: A
A is the correct answer
upvoted 2 times

  **nqthien041292** 3 months ago
Selected Answer: A
Vote A
upvoted 2 times

  **Manh** 5 months, 3 weeks ago
It's A. internal by using cluster IP services type
upvoted 2 times

  **AnilKr** 7 months ago
ClusterIP type for internal communications, A
upvoted 2 times

  **dhamo_555** 7 months, 1 week ago

Answer - A)

Microservice as Deployment - used to create replicas as per this request

DNS name - used as an alias service name for External name which is user for internal requests

upvoted 7 times


  **PeppaPig** 7 months, 2 weeks ago

A is correct 100%.

Ingress is intended for services exposing to external users, it usually works with a single L7 load balancer.

Service type "ClusterIP" is the right solution to facilitate communications within the cluster, with the help of kube-dns and kube-proxy

upvoted 6 times

  **kopper2019** 7 months, 2 weeks ago


hey guys new Qs posted as of July 12th, 2021, All 21 new Qs in Question #152

upvoted 2 times

  **muhasinem** 7 months, 2 weeks ago

A.traffic is internal to cluster .

upvoted 3 times

  **victory108** 7 months, 3 weeks ago



B. Deploy each microservice as a Deployment. Expose the Deployment in the cluster using an Ingress, and use the Ingress IP address to address the Deployment from other microservices within the cluster.

upvoted 2 times

  **victory108** 6 months, 1 week ago

A is correct one. Deploy each microservice as a Deployment. Expose the Deployment in the cluster using a Service, and use the Service DNS name to address it from other microservices within the cluster.

upvoted 1 times

  **milan74** 7 months, 3 weeks ago

I think it is answer A. Answer B and D are opted out bc they do not comply with the requirement of addressing the microservice and replicas in a uniform way. Answer C talks about deploying a specific pod to expose as a service, while the question states you want to scale to multiple replicas.

Documentation link: <https://medium.com/aspnetrun/deploying-microservices-on-kubernetes-35296d369fdb>

look for Deployments paragraph

upvoted 4 times

  **ElvinVarghese** 7 months, 3 weeks ago

I believe it should be A as Ingress is to expose HTTP and HTTPS routes from outside the cluster.

<https://kubernetes.io/docs/concepts/services-networking/ingress/>

upvoted 4 times

Your company has a networking team and a development team. The development team runs applications on Compute Engine instances that contain sensitive data. The development team requires administrative permissions for Compute Engine. Your company requires all network resources to be managed by the networking team. The development team does not want the networking team to have access to the sensitive data on the instances. What should you do?

- A. 1. Create a project with a standalone VPC and assign the Network Admin role to the networking team. 2. Create a second project with a standalone VPC and assign the Compute Admin role to the development team. 3. Use Cloud VPN to join the two VPCs.
- B. 1. Create a project with a standalone Virtual Private Cloud (VPC), assign the Network Admin role to the networking team, and assign the Compute Admin role to the development team.
- C. 1. Create a project with a Shared VPC and assign the Network Admin role to the networking team. 2. Create a second project without a VPC, configure it as a Shared VPC service project, and assign the Compute Admin role to the development team.
- D. 1. Create a project with a standalone VPC and assign the Network Admin role to the networking team. 2. Create a second project with a standalone VPC and assign the Compute Admin role to the development team. 3. Use VPC Peering to join the two VPCs.

Correct Answer: C

Reference:

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

Community vote distribution

B (53%)

C (47%)

  **victory108**  7 months, 3 weeks ago

C. 1. Create a project with a Shared VPC and assign the Network Admin role to the networking team. 2. Create a second project without a VPC, configure it as a Shared VPC service project, and assign the Compute Admin role to the development team.

upvoted 14 times

  **Nalo1**  2 months, 3 weeks ago

Selected Answer: B

For the same project , same VPC, Network Admin role to the networking team, and Compute Admin role to the development team. What is the need for another project?

upvoted 8 times

  **bhtay**  1 week ago

Selected Answer: C



Shared VPC is the key

upvoted 1 times

  **azureaspirant** 2 weeks, 1 day ago

2/15 exam

upvoted 2 times

  **mshry** 2 weeks, 5 days ago

Selected Answer: C

Answer is C:

According to Google Best practices a separate project should be deployed to keep the sensitive data separate. Technically, this totally takes an IAM misconfiguration or any other data exfiltration out of the equation, especially since the VM instance disks will be in the service project.

upvoted 2 times

  **juancambb** 3 weeks, 5 days ago

Selected Answer: C



B and C are correct but the best practice is to create a shared VPC to centralize all network management

upvoted 1 times

  **haroldbenites** 1 month ago

Go for D



upvoted 1 times

  **Pime13** 1 month ago



https://cloud.google.com/iam/docs/job-functions/networking#single_team_manages_security_network_for_organization -> In this scenario, a large organization has a central team that manages security and networking controls for the entire organization. Developers do not have permissions to make changes to any network or security settings defined by the security and networking team but they are granted permission to create resources such as virtual machines in shared subnets.

To facilitate this the organization makes use of a shared VPC (Virtual Private Cloud). A shared VPC allows creation of a VPC network of RFC 1918 IP spaces that associated projects (service projects) can then use. Developers using the associated projects can create VM instances in the shared VPC network spaces. The organization's network and security admins can create subnets, VPNs, and firewall rules usable by all the projects in the VPC network

I say option C
upvoted 1 times

  **arpitvishu** 1 month, 1 week ago



Selected Answer: C
I agree with C.
upvoted 1 times

  **pddddd** 1 month, 3 weeks ago

in order to be able to deploy VM to a shared VPC, Network User role is needed - this is not in C, so C can't work...
upvoted 1 times

  **OrangeTiger** 1 month, 3 weeks ago



Selected Answer: C
I agree with C. thx DiegoMDZ.
upvoted 1 times

  **OrangeTiger** 1 month, 1 week ago

'development team does not want the networking team to have access to the sensitive data on the instances. '
Can B do this?
upvoted 1 times

  **GauravLahoti** 2 months ago



Correct Answer is C
upvoted 1 times

  **g3m1n1** 2 months, 2 weeks ago

wrt C - can you have a project without a VPC? It doesn't seem to be possible
upvoted 1 times

  **PhilipKoku** 2 months, 2 weeks ago

Selected Answer: B
B) Is the right and simplest answer. <https://cloud.google.com/compute/docs/access/iam#predefinedroles>
upvoted 2 times

  **lxgywil** 1 month, 3 weeks ago

"The network admin role allows read-only access to firewall rules, SSL certificates, and INSTANCES (to view their ephemeral IP addresses)."

<https://cloud.google.com/compute/docs/access/iam#compute.networkAdmin>
upvoted 1 times

  **vincy2202** 2 months, 4 weeks ago

C is the correct answer
<https://cloud.google.com/vpc/docs/shared-vpc>
upvoted 1 times

  **Craigenator** 3 months ago

Selected Answer: C
For sure C
upvoted 3 times

  **TheCloudBoy77** 3 months, 1 week ago

C is correct answer - shared VPC
upvoted 1 times

Your company wants you to build a highly reliable web application with a few public APIs as the backend. You don't expect a lot of user traffic, but traffic could spike occasionally. You want to leverage Cloud Load Balancing, and the solution must be cost-effective for users. What should you do?

- A. Store static content such as HTML and images in Cloud CDN. Host the APIs on App Engine and store the user data in Cloud SQL.
- B. Store static content such as HTML and images in a Cloud Storage bucket. Host the APIs on a zonal Google Kubernetes Engine cluster with worker nodes in multiple zones, and save the user data in Cloud Spanner.
- C. Store static content such as HTML and images in Cloud CDN. Use Cloud Run to host the APIs and save the user data in Cloud SQL.
- D. Store static content such as HTML and images in a Cloud Storage bucket. Use Cloud Functions to host the APIs and save the user data in Firestore.

Correct Answer: B

Community vote distribution

D (63%) C (26%) 11%

- TotoroChina**

Highly Voted

8 months ago

Answer should be D,
<https://cloud.google.com/load-balancing/docs/https/setting-up-https-serverless#gcloud:-cloud-functions>
<https://cloud.google.com/blog/products/networking/better-load-balancing-for-app-engine-cloud-run-and-functions>
upvoted 41 times
- BrunoTostes**

4 months, 1 week ago

but is it Cloud Functions used for hosting APIs?
upvoted 2 times
- mikesp**

4 months, 1 week ago

IMHO, i agree with you. Furthermore:
Cloud Storage buckets are a good choice for static web content. Cloud storage buckets behave like a CDN Network:
<https://cloud.google.com/storage/docs/caching>
So it is lower cost than CDN.
upvoted 2 times
- dguillenca**

7 months, 4 weeks ago

D not use CDN, is D correct answer?
upvoted 1 times
- PeppaPig**

7 months, 2 weeks ago

CDN is not needed here. You don't need to service users globally thus latency and locality isn't critical
upvoted 4 times
- letonphat**

4 months ago

IMHO CDN is not storage solution to store static html or image
upvoted 1 times
- Warlock7**

2 weeks, 6 days ago

You should look at this
<https://cloud.google.com/storage/docs/caching>
upvoted 1 times
- diluviouniv**

7 months, 1 week ago

Spanner is expensive
upvoted 6 times
- XDevX**

Highly Voted

8 months ago

IMHO it is d), not b).
Reason is that you don't need Cloud Spanner just to store user data - FireStore is the better solution. Additionally, I see no indications concerning the requirement to use GKE... Please correct me when I am wrong.
upvoted 12 times
- Andrea67**

2 months, 3 weeks ago

agree with u
upvoted 1 times
- mesodan**


Most Recent

1 week, 4 days ago

Selected Answer: D

Pair Cloud Functions with Firebase Hosting to generate and serve your dynamic content or build REST APIs as microservices:
<https://firebase.google.com/docs/hosting/functions>



upvoted 1 times

  **VT001** 2 weeks, 5 days ago

Selected Answer: D

I got similar question on my exam. Answered D.


upvoted 1 times

  **Pime13** 1 month ago

Selected Answer: D



after spending some time i change my mind and i think it D, we can use CF with datastore/firebase to host microservices (<https://firebase.google.com/docs/hosting/functions>) and when we use GCS for static content it behave like CDN (<https://cloud.google.com/storage/docs/static-website#tip-dynamic> -> Cloud Storage behaves like a Content Delivery Network (CDN) because publicly readable objects are cached in the Cloud Storage network by default.)

upvoted 1 times

  **Pime13** 1 month ago

i would say c: <https://cloud.google.com/cdn/docs/caching#static>


upvoted 1 times

  **ks100** 1 month, 1 week ago

Selected Answer: D

too many wrong answers on this site !!!
should definitely be D



upvoted 1 times

  **sjmsummer** 1 month, 2 weeks ago

Selected Answer: D

answer is D. there is a similar question in AWS test with similar answer.

upvoted 1 times

  **lxgywil** 1 month, 3 weeks ago

D is ok

upvoted 1 times

  **OrangeTiger** 1 month, 3 weeks ago

I thought B was absolutely different. Do we need a horizontal scale enough to use Spanner? The necessary effect is poor.

The type of user data and whether RDB is required cannot be read from the question text.

I think any ACD can be the correct answer.

I hope this question will not be asked.

upvoted 1 times

  **ehgm** 2 months ago

Selected Answer: B

This question no make sense, it's just to be misleading.

A and C has no difference. Technically we can reach the same result using any:

- We can use Load Balance and Cloud CDN with both (App Engine or Cloud Run).
- We can use split traffic with both (App Engine or Cloud Run).
- We can scale to zero with both (App Engine or Cloud Run).
- We can use containers with both (App Engine or Cloud Run).

D. It's not a good idea use Cloud Functions to host the APIs, we will need to use the same endpoint to handle all API's functions or use a dynamic request body to deal with it or use a Cloud Functions to each functionality.

C. They are using GKE (1 Region and Multi zone, reliable just on zone outage) and Cloud Spanner (Multi Region, reliable on region outage). No make sense has a DB Multi Region if your API is Single Region. Technically we can use, yes, but no make sense.

upvoted 2 times

  **Nimeshv** 2 months ago

Selected Answer: D


<https://firebase.google.com/docs/hosting/functions#:~:text=Pair%20Cloud%20Functions%20with%20Firebase%20Hosting%20to%20generate,need%20to%20manage%20and%20scale%20your%20own%20servers.>

upvoted 1 times

  **kaushalajay** 2 months, 1 week ago

When there will be spike , cloud function will create one instance for one job/hit. So if we compare cloud run and function , cloud run is less expensive.cloud function has less timeout than cloud run Also cloud function is not a reliable service to host an app.
So option C.

upvoted 1 times

  **ABO_Doma** 2 months, 2 weeks ago

Selected Answer: C

When VMs do not have external IP addresses they can only be reached by other VMs on the network, Identity-Aware Proxy's TCP forwarding feature, or by using managed VPN gateway. You can provision VMs in your network to act as trusted relays for inbound connections, also known as bastion hosts. Additionally, you can configure a Cloud NAT for network egress, or set up the interactive serial console to maintain or troubleshoot VMs without external IP addresses.

Bastion Hosts have external IP so Correct answer is C.

upvoted 1 times

  **ABO_Doma** 2 months, 2 weeks ago

Selected Answer: D

You don't expect a lot of user traffic, but traffic could spike occasionally+Cost reduction= Cloud Functions

upvoted 1 times

  **Urban_Life** 2 months, 2 weeks ago

cloud firestore (Json, document, web & mobile) vs spanner (Json, RBMS). So the answer is D

upvoted 1 times

  **haroldbenites** 2 months, 2 weeks ago

Go for C

upvoted 1 times

Your company sends all Google Cloud logs to Cloud Logging. Your security team wants to monitor the logs. You want to ensure that the security team can react quickly if an anomaly such as an unwanted firewall change or server breach is detected. You want to follow Google-recommended practices. What should you do?

- A. Schedule a cron job with Cloud Scheduler. The scheduled job queries the logs every minute for the relevant events.
- B. Export logs to BigQuery, and trigger a query in BigQuery to process the log data for the relevant events.
- C. Export logs to a Pub/Sub topic, and trigger Cloud Function with the relevant log events.
- D. Export logs to a Cloud Storage bucket, and trigger Cloud Run with the relevant log events.

Correct Answer: C

Community vote distribution

C (100%)

  **kopper2019** Highly Voted 7 months, 4 weeks ago

I think C using BigQuery can get expensive if you have somehow check the logs for anomalies

<https://cloud.google.com/blog/products/management-tools/automate-your-response-to-a-cloud-logging-event>

check there is a diagram

upvoted 26 times

  **Urban_Life** 2 months, 2 weeks ago

cloud function is also key point



upvoted 1 times

  **poseidon24** 7 months, 1 week ago

Thanks for pointing out the reference. C is the correct one.



Nevertheless the question and all the answers are misleading, even C) sounds like sending all the logs to pub/sub, it should mention about "filtering" prior to send to Pub/Sub.

upvoted 6 times

  **amxexam** 5 months, 3 weeks ago

It may get expensive but GCP recommended way , they not asking for self alternative for cheap solution.

upvoted 3 times

  **PimSou** 7 months, 2 weeks ago

love you :)

upvoted 5 times

  **manmohan15** Highly Voted 8 months ago

c) is correct as quickly action is required for unwanted event/access should be actioned.

upvoted 9 times

  **azureaspirant** Most Recent 2 weeks, 1 day ago


2/15/21 exam

upvoted 2 times

  **ahsangh** 1 week ago

21 or 22 ?



upvoted 1 times

  **VT001** 2 weeks, 5 days ago

Selected Answer: C



I got similar question on my exam. Answered C.

upvoted 1 times

  **DoVale** 1 month, 2 weeks ago









B is correct because exported logs can be analyzed in Bigquery to identity anomalies by executing scheduled queries on the exported data.

upvoted 1 times





  **DoVale** 1 month, 2 weeks ago

B is correct because exported logs can be analyzed in Bigquery to identity anomalies by executing scheduled queries on the exported data.







upvoted 1 times



-   **ehgm** 2 months ago
The logs already on Cloud Logging, we can just create a metric and an alert for it. No need any development.
upvoted 1 times
-   **haroldbenites** 2 months, 2 weeks ago
Go for C
upvoted 1 times
-   **anjuagrawal** 2 months, 3 weeks ago
Vote C
upvoted 1 times
-   **Bobch** 2 months, 3 weeks ago





Selected Answer: C

Pub/Sub
upvoted 1 times
-   **vincy2202** 2 months, 4 weeks ago
C is the correct answer
<https://cloud.google.com/blog/products/management-tools/automate-your-response-to-a-cloud-logging-event>
upvoted 1 times
-   **pakilodi** 3 months ago

Selected Answer: C

C is the answer
upvoted 1 times
-   **danielfootc** 4 months, 1 week ago
I would say it's C.
upvoted 2 times
-   **SuperCloud** 5 months ago
Audit logs with Pub/Sub to reveal "Who did what, where, and when?"
upvoted 2 times
-   **amxexam** 5 months, 3 weeks ago
For those who are thinking there is a better approach than BigQuery. Maybe cloud function looks better we are talking about retrieving logs and the GCP way of doing is logs sync to BigQuery will allow you to analyse quickly

<https://services.google.com/fh/files/misc/google-cloud-security-foundations-guide.pdf>
10.7) Analyzing your security data using BigQuery
upvoted 1 times
-   **mardon** 2 months, 1 week ago
Much Before 10.7 in the below section it mentions pub/sub which shows its of higher preference

10.4) Real-time compliance monitoring of custom policies
To monitor compliance of custom policies in real time, the example.com architecture uses Cloud Asset Inventory real-time notifications. Cloud Asset Inventory can send a Pub/Sub message for each configuration change to a specific asset name or to an asset type. The message triggers a Cloud Function to examine the change
upvoted 1 times
-   **PeppaPig** 6 months, 2 weeks ago
C is correct 100%
You use logging sink to and send filtered log events to a Pub/Sub topic, which triggers a cloud function that runs your business logic
upvoted 3 times
-   **PeppaPig** 6 months, 2 weeks ago
C is correct 100%
upvoted 2 times

You have deployed several instances on Compute Engine. As a security requirement, instances cannot have a public IP address. There is no VPN connection between Google Cloud and your office, and you need to connect via SSH into a specific machine without violating the security requirements. What should you do?

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

Correct Answer: D

Reference:

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



Community vote distribution



C (80%)



D (20%)



  **TotoroChina** Highly Voted 8 months ago



Answer is C.
https://cloud.google.com/iap/docs/using-tcp-forwarding#tunneling_with_ssh
upvoted 36 times



  **meh009** 4 months, 2 weeks ago
100% Agree. I use IAP all the time which allows me to reduce exposure to VM from public internet. Ans is C
upvoted 4 times



  **mikesp** 4 months, 1 week ago
Agee too. Bastion host violates security requirements due to it has public IP :)
upvoted 3 times

  **ank82** Highly Voted 7 months, 3 weeks ago
And D seems correct, bastion host is specifically used for this purpose, using option C user can connect through cloud only.
By using a bastion host, you can connect to an VM that does not have an external IP address. This approach allows you to connect to a development environment or manage the database instance for your external application, for example, without configuring additional firewall rules.
<https://cloud.google.com/solutions/connecting-securely>
upvoted 13 times

  **eascen** 4 months, 3 weeks ago
Except the policy is no machines can have public IP's, how do you connect to the bastion?
upvoted 4 times

  **joheri** Most Recent 1 month, 4 weeks ago
Selected Answer: D
Mostly tunneling is considered as security violation. So D would be the right choice.
upvoted 1 times

  **ABO_Doma** 2 months, 1 week ago
Selected Answer: C
When VMs do not have external IP addresses they can only be reached by other VMs on the network, Identity-Aware Proxy's TCP forwarding feature, or by using managed VPN gateway. You can provision VMs in your network to act as trusted relays for inbound connections, also known as bastion hosts. Additionally, you can configure a Cloud NAT for network egress, or set up the interactive serial console to maintain or troubleshoot VMs without external IP addresses.
Bastion Hosts have external IP so Correct answer is C.
upvoted 2 times

  **aguilorimans** 2 months, 2 weeks ago
My vote is for D) as it is the normal goal of a bastion host
<https://cloud.google.com/solutions/connecting-securely#bastion>
upvoted 1 times

  **ABO_Doma** 2 months, 2 weeks ago

When VMs do not have external IP addresses they can only be reached by other VMs on the network, Identity-Aware Proxy's TCP forwarding feature, or by using managed VPN gateway. You can provision VMs in your network to act as trusted relays for inbound connections, also known as bastion hosts. Additionally, you can configure a Cloud NAT for network egress, or set up the interactive serial console to maintain or troubleshoot VMs without external IP addresses.



Bastion Hosts have external IP so Correct answer is C.

upvoted 1 times

  **haroldbenites** 2 months, 2 weeks ago

Go for D



upvoted 1 times

  **PhilipKoku** 2 months, 2 weeks ago

Selected Answer: C

C) IAP in the correct answer. https://cloud.google.com/iap/docs/using-tcp-forwarding#tunneling_with_ssh



upvoted 2 times

  **mgm7** 2 months, 2 weeks ago

Selected Answer: C

C is possible and bastion host has a public IP which is not permitted

upvoted 1 times

  **Tribilin** 2 months, 3 weeks ago



Selected Answer: C

Answer is C.

As establish in the Secure ways to connect to VM instances: ..."Using SSH with IAP's TCP forwarding feature wraps an SSH connection inside HTTPS. IAP's TCP forwarding feature then sends it to the remote VM."

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

upvoted 1 times

  **Bobch** 2 months, 3 weeks ago

Selected Answer: D

Answer D

upvoted 1 times

  **vincy2202** 2 months, 4 weeks ago

Selected Answer: C

C seems to be the correct answer

upvoted 1 times

  **pakilodi** 3 months ago

Selected Answer: C

Answer is C

upvoted 1 times



  **jdr75** 3 months ago

It's D. Be aware the access is a SSH.

IAP lets you establish a central authorization layer for applications accessed by HTTPS, so not valid C option. 100% secure.

It's D => <https://cloud.google.com/solutions/connecting-securely>

upvoted 1 times

  **ravisar** 3 months, 1 week ago

Tricky question. D is more correct compared to other answers. Bastion hosts provide an external facing point of entry into a network containing private network instances. By using a bastion host, you can connect to a VM that does not have an external IP address. The question talking about external for instances not for bastion hosts.

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

Connecting to VMs without external IP addresses: When VMs do not have external IP addresses (including VMs that are backends for HTTPS and SSL proxy load balancers) they can only be reached by other VMs on the network, Identity-Aware Proxy's TCP forwarding feature, or by using managed VPN gateway. You can provision VMs in your network to act as trusted relays for inbound connections, also known as bastion hosts. Additionally, you can configure a Cloud NAT for network egress, or set up the interactive serial console to maintain or troubleshoot VMs without external IP addresses.

upvoted 2 times

  **jp2403** 5 months ago

seems both C and D are correct

<https://cloud.google.com/compute/docs/instances/connecting-advanced#sshbetweeninstances>

upvoted 2 times

  **AK2020** 5 months ago

Answer is C

gcloud compute firewall-rules create allow-ssh-ingress-from-iap \

--direction=INGRESS \

--action=allow \

--rules=tcp:22 \

--source-ranges=35.235.240.0/20

upvoted 2 times

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

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

Correct Answer: C

Reference:

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

Community vote distribution

C (100%)

🗳️ 👤 **kopper2019** Highly Voted 👍 8 months ago

It is C

upvoted 25 times

🗳️ 👤 **milan74** Highly Voted 👍 7 months, 3 weeks ago

Answer C is correct.

Answer A and B are both overridden by the less-restrictive permission on Organization level.

Answer D permission was already there on Organization level, and does not remove the project owner permission on the other folder

upvoted 6 times

🗳️ 👤 **azureaspirant** Most Recent ⌚ 2 weeks, 1 day ago

2/15/21 exam

upvoted 1 times

🗳️ 👤 **haroldbenites** 2 months, 2 weeks ago

Go for C

upvoted 1 times

🗳️ 👤 **anjuangrawal** 2 months, 3 weeks ago

Vote C. Permissions are inherited and union of from parent. Owner at org level need to be removed to disallow from creating the resources in one of the below folders.

upvoted 2 times

🗳️ 👤 **Bobch** 2 months, 3 weeks ago

Selected Answer: C

Answer C

upvoted 1 times

🗳️ 👤 **vincy2202** 2 months, 4 weeks ago

C is the correct answer

upvoted 1 times

🗳️ 👤 **robotgeek** 3 months, 3 weeks ago

Its B. Guys the cuestion says remove from finance, not from any other folder that may exist in the future, they are saying to limit permissions on Finance only

upvoted 3 times

🗳️ 👤 **kimharsh** 1 week, 3 days ago

Yes I was saying B, because i thought that we have to keep some sort of viewer permission on the Finance folder , but if you read the question again , they don't care what permission is there , they want prevent the Dev team from creating resource

The only Answer to comply wit that is C

upvoted 1 times

🗳️ 👤 **alvjtc** 3 months ago

But permissions are inherited from the org so Project Viewer will not apply. Seems C to me.

upvoted 1 times

  **exam_war** 3 months, 3 weeks ago


C. Since permission is inherited from top, so we must remove the owner role for development group from organization.

upvoted 1 times

  **danielfootc** 4 months, 1 week ago


It is C for me.

upvoted 1 times

  **danielfootc** 4 months, 1 week ago

It's C under the principles of least privilege.

upvoted 3 times

  **JustJack21** 5 months, 3 weeks ago

I understand that you cannot loosen the permissions at a lower layer, but the requirement here is to tighten permissions at a lower later.

It's like saying "allow USB" at the org level and then "deny USB" at the folder level. Is this NOT allowed?



if it is, then A makes more sense.

upvoted 1 times

  **JustJack21** 5 months, 3 weeks ago

Rather B.

upvoted 2 times

  **JustJack21** 5 months, 3 weeks ago

Asked and Answered

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



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

upvoted 3 times

  **AnilKr** 7 months ago

C, you can not restrict permissions in org level from permissions in folders level so you need to remove owner permission from org.

upvoted 4 times

  **victory108** 7 months, 3 weeks ago

C. Assign the development team group the Project Owner role on the Shopping folder, and remove the development team group Project Owner role from the Organization.

upvoted 3 times

  **mbrueck** 7 months, 3 weeks ago

Answer: C

upvoted 2 times

  **MamthaSJ** 7 months, 4 weeks ago

Answer is C

upvoted 3 times

You are developing your microservices application on Google Kubernetes Engine. During testing, you want to validate the behavior of your application in case a specific microservice should suddenly crash. What should you do?

- A. Add a taint to one of the nodes of the Kubernetes cluster. For the specific microservice, configure a pod anti-affinity label that has the name of the tainted node as a value.
- B. Use Istio's fault injection on the particular microservice whose faulty behavior you want to simulate.
- C. Destroy one of the nodes of the Kubernetes cluster to observe the behavior.
- D. Configure Istio's traffic management features to steer the traffic away from a crashing microservice.

Correct Answer: C



Community vote distribution



B (80%)



C (20%)



  **TotoroChina** Highly Voted 8 months ago



Answer is B.
application crash, not node.
upvoted 26 times



  **XDevX** 8 months ago
I see it the same way - it is b)
upvoted 4 times



  **XDevX** Highly Voted 8 months ago
I think that c) is not the correct answer.
I am not a GKE or Kubernetes expert, so maybe I am wrong.
My understanding is, that in Kubernetes a microservice can run on pods on different nodes and one node can contain pods running different microservices - so to kill one node will not kill a microservice but several pods running on that node. Please correct me if I am wrong.
upvoted 10 times



  **azureaspirant** Most Recent 2 weeks, 1 day ago
2/15/21 exam
upvoted 1 times



  **ks100** 1 month, 1 week ago
Selected Answer: C
there is no mention of Istio / service mesh in the question.
upvoted 1 times

  **OrangeTiger** 1 month, 3 weeks ago
B will be wrong Answer.
This question may update.
'Warning: Istio on GKE has been deprecated. New clusters with this feature enabled will no longer be available after December 31, 2021. Istio on GKE will no longer be supported on existing clusters after September 30, 2022.'
upvoted 3 times

  **haroldbenites** 2 months, 2 weeks ago
Go for B
upvoted 1 times

  **PhilipKoku** 2 months, 2 weeks ago
Selected Answer: B
B) Please note that Istio is replicated and replaced by Anthos service mesh: <https://cloud.google.com/anthos/service-mesh>
upvoted 2 times

  **anjuagrawal** 2 months, 3 weeks ago
Voted B
upvoted 1 times

  **Bobch** 2 months, 3 weeks ago
Selected Answer: B
<https://cloud.google.com/istio/docs/istio-on-gke/overview>
upvoted 1 times


  **vincy2202** 2 months, 4 weeks ago

B is the correct answer
<https://istio.io/latest/docs/tasks/traffic-management/fault-injection/>
upvoted 1 times

  **cdcollector** 3 months ago



Selected Answer: B

You cannot force terminate a node in kubernetes, all options are to drain and gracefully shut down a node.
upvoted 1 times

  **joe2211** 3 months, 1 week ago


Selected Answer: B

vote B
upvoted 3 times



  **nileshlg** 3 months, 1 week ago

Selected Answer: C

C is correct, it introduces chaos ...
upvoted 1 times


  **rajibdein** 2 months, 3 weeks ago

It introduces "chaos" between the users, not bw the Microservices. I prefer "B"
upvoted 1 times

  **ravisar** 3 months, 1 week ago

Microservice runs on all nodes. The Micro service runs on Pod, Pod runs on Nodes. Nodes is nothing but Virtual machines. Once deployed the application microservices will get deployed across all Nodes. Destroying one node may not mimic the behaviour of microservice crashing as it may be running in other nodes.

So B is seems to be correct. istio fault injection is to test the resiliency of your application.
upvoted 3 times

  **pakilodi** 3 months, 1 week ago

Selected Answer: B

Answer shoould be B
upvoted 1 times

  **unnikrisb** 4 months, 3 weeks ago

we use Istio for fault injection so Option B : YAML/ServiceMesh
upvoted 3 times

  **BSING246** 5 months, 1 week ago

Should be B. Destroying a node can remove more sercices. Ask is one microservice.
upvoted 3 times

Your company is developing a new application that will allow globally distributed users to upload pictures and share them with other selected users. The application will support millions of concurrent users. You want to allow developers to focus on just building code without having to create and maintain the underlying infrastructure. Which service should you use to deploy the application?

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

Correct Answer: A

Reference:

<https://cloud.google.com/terms/services>

Community vote distribution

A (100%)

- kopper2019**

Highly Voted

8 months ago

A, App Engine, you just want you people dedicated to the App

upvoted 19 times
- Rzla**

Highly Voted

5 months, 1 week ago

AppEngine is regional. Millions of distributed global users = GkE.

upvoted 11 times
- joe2211**

3 months ago

But "focus on just building code without having to create and maintain the underlying infrastructure" => A right

upvoted 1 times
- azureaspirant**

Most Recent

2 weeks, 1 day ago

2/15/21 exam

upvoted 1 times
- mshry**

2 weeks, 5 days ago

Selected Answer: A

I am seeing some confusion in answers for questions relating to requests or concurrent sessions being served by a solution. I think we ought not to look at API rate limits being synonymous to data handling limits, as these are programming limits to that API. An analogy would be comparing the control plane request limits to the data limits.

upvoted 1 times
- haroldbenites**

3 weeks, 1 day ago

go for A

upvoted 1 times
- anjuagrawal**

2 months, 3 weeks ago

Why not Cloud Endpoint?

upvoted 1 times
- Urban_Life**

2 months, 2 weeks ago

Not to manage infra so it's A

upvoted 1 times
- vincy2202**

2 months, 4 weeks ago

Selected Answer: A

A is the correct answer

upvoted 2 times
- ravisar**

3 months, 1 week ago

In GKE, you have to create underlying infrastructure. It is not PAAS. Only app engine provide capability for developers to focus on code. The GKE, you need to configure many other items Apart from Code. So A seems to be more accurate. Regarding global nature, the app engine application servers users globally. I agree that there may be little latency for regions other than NA, however since the focus of the question is "Code", I would select A.

upvoted 4 times
- XAliX**

3 months, 2 weeks ago

App Engine support limited numbers of languages, they does not mention which interface, so for flexibility i will go for D

upvoted 1 times

  **danielfootc** 4 months, 1 week ago

I would say it's App Engine for developers to focus on code.

upvoted 2 times

  **JasonL_GCP** 4 months, 2 weeks ago

Can anyone tell me why the answer to the following question is D? I am not seeing any difference between this question and the one below.

Your company has announced that they will be outsourcing operations functions. You want to allow developers to easily stage new versions of a cloud-based application in the production environment and allow the outsourced operations team to autonomously promote staged versions to production. You want to minimize the operational overhead of the solution. Which Google Cloud product should you migrate to?

- A. App Engine
- B. GKE On-Prem
- C. Compute Engine
- D. Google Kubernetes Engine

upvoted 1 times

  **BobbyFlash** 2 months ago

Question 110. Answer is A. Please try to review the discussion there and not to hijack this one.

upvoted 1 times

  **JasonL_GCP** 4 months, 2 weeks ago

By considering the number of concurrent requests, D is the appropriate answer.

upvoted 2 times

  **rottzy** 5 months ago

millions of users from a single region? then its App engine!

upvoted 2 times

  **anku15** 5 months, 2 weeks ago

App Engine is like EBS Service in AWS. Its PAAS. Developer can focus on code.

upvoted 1 times

  **AnilKr** 7 months ago

Option A make sense, App engine is fully managed service and developers don't need to worry about infrastructure.

You cannot change the region. Your app will be served from the region you chose when creating the app. Anyone can use the app, but users closer to the selected region will have lower latency.


While the App Engine service itself operates in multiple regions, an App Engine app is served from a single region. The app will, however, scale across multiple zones within that region.

upvoted 3 times

  **thunderpowerpaul** 7 months, 2 weeks ago

App engine is regional only and not global, answer D is more suitable

upvoted 2 times

  **victory108** 7 months, 3 weeks ago

A. App Engine

upvoted 3 times

  **mbrueck** 7 months, 3 weeks ago

A App Engine

upvoted 1 times

Your company provides a recommendation engine for retail customers. You are providing retail customers with an API where they can submit a user ID and the API returns a list of recommendations for that user. You are responsible for the API lifecycle and want to ensure stability for your customers in case the API makes backward-incompatible changes. You want to follow Google-recommended practices. What should you do?

- A. Create a distribution list of all customers to inform them of an upcoming backward-incompatible change at least one month before replacing the old API with the new API.
- B. Create an automated process to generate API documentation, and update the public API documentation as part of the CI/CD process when deploying an update to the API.
- C. Use a versioning strategy for the APIs that increases the version number on every backward-incompatible change.
- D. Use a versioning strategy for the APIs that adds the suffix `DEPRECATED` to the current API version number on every backward-incompatible change. Use the current version number for the new API.

Correct Answer: A

Community vote distribution

C (100%)

🗲️ 👤 **kopper2019** Highly Voted 👍 8 months ago
It is C
upvoted 29 times

🗲️ 👤 **sebafranek** 7 months ago
<https://cloud.google.com/apis/design/versioning>
upvoted 2 times

🗲️ 👤 **VishalB** Highly Voted 👍 7 months, 3 weeks ago
Answer C
All Google API interfaces must provide a major version number, which is encoded at the end of the protobuf package, and included as the first part of the URI path for REST APIs. If an API introduces a breaking change, such as removing or renaming a field, it must increment its API version number to ensure that existing user code does not suddenly break.
upvoted 12 times

🗲️ 👤 **azureaspirant** Most Recent 🕒 2 weeks, 1 day ago
2/15/21 exam
upvoted 2 times

🗲️ 👤 **jpco** 2 weeks, 2 days ago
Users can use a tool called kubemci (a tool to configure Kubernetes ingress to load balance traffic across multiple Kubernetes clusters) to create a LoadBalancer spread across clusters and associate an anycast IP.
This approach is now deprecated and Ingress for Anthos is the recommended way to deploy multi-cluster ingress moving forward.
upvoted 1 times

🗲️ 👤 **haroldbenites** 3 weeks, 1 day ago
Go for C.
Versioning
This topic describes the versioning strategies used by Google APIs. In general, these strategies apply to all Google-managed services.

Sometimes it is necessary to make backwards-incompatible (or "breaking") changes to an API. These kinds of changes can cause issues or breakage for code that has dependencies on the original functionality.

Google APIs use a versioning scheme to prevent breaking changes. Additionally, Google APIs make some functionality only available under certain stability levels, such as alpha and beta components.
upvoted 1 times

🗲️ 👤 **Pime13** 1 month, 1 week ago
Selected Answer: C
it shoud be c
upvoted 1 times

🗲️ 👤 **OrangeTiger** 1 month, 3 weeks ago
I think C is the correct answer for versioning.
But isn't it necessary to inform API users?
upvoted 1 times

🗨️ 👤 **rajadhav** 2 months, 2 weeks ago

Versioning of an API and documentation is implementation part of backward compatibility.
But changes should be inform to the customers well in advance.
A is correct answer.

upvoted 1 times

🗨️ 👤 **Bobch** 2 months, 3 weeks ago

Answer C
<https://cloud.google.com/apis/design/compatibility>

upvoted 1 times

🗨️ 👤 **vincy2202** 2 months, 4 weeks ago

C is the correct answer

upvoted 1 times

🗨️ 👤 **joe2211** 3 months, 1 week ago

Selected Answer: C

vote C

upvoted 4 times

🗨️ 👤 **pakilodi** 3 months, 1 week ago

Selected Answer: C

The answer is C

upvoted 2 times

🗨️ 👤 **BSING246** 3 months, 2 weeks ago

Suggested A is wrong. Correct Answer is C

upvoted 1 times

🗨️ 👤 **AnilKr** 7 months ago

Google APIs use a versioning scheme to prevent breaking changes and hence C

upvoted 2 times

🗨️ 👤 **Dia** 7 months, 2 weeks ago

@kopper 2019, thank you for this. where can i find these questions? All 21 new Qs in Question #152"

upvoted 1 times

🗨️ 👤 **kopper2019** 7 months, 3 weeks ago

hey guys new Qs posted as of July 12th, 2021, All 21 new Qs in Question #152

upvoted 2 times

🗨️ 👤 **kopper2019** 7 months, 3 weeks ago

21 NEw Qs - July 12, 2021

7. For this question, refer to the TerramEarth case study.The application from your private data center to Google Cloud. The TerramEarth Security team sent you several recent Linux vulnerabilities published by common vulnerabilities and exposures (CVE). You need assistance in understanding how these vulnerabilities could impact your migration. What should you do?Choose two answers

- a. Read the CVE's from the Google Cloud status dashboard to understand the impact
- b. Read the CVE's from the Google Cloud platform security bulletins to understand the impact
- c. Open a support case regarding the CVE and chat with the support engineer
- d. Post a question regarding the CVE in stack overflow to get an explanation
- e. Post a question regarding the CVE in a Google Cloud discussion group to get an answer

Answer B, C, please share you answers

upvoted 7 times

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

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

Correct Answer: C

Community vote distribution

C (100%)

- Mitra123

Highly Voted

8 months ago

decoupling, new features, CI/CD, A/B testing, scaling is the advantage so C

upvoted 16 times
- kopper2019

Highly Voted

7 months, 3 weeks ago

hey guys new Qs posted as of July 12th, 2021, All 21 new Qs in Question #152

upvoted 9 times
- bishalsainju

3 months, 3 weeks ago

Hey man do you know if in second attempt as well, we get these same questions?

upvoted 1 times
- VT001

Most Recent

2 weeks, 5 days ago

Selected Answer: C

I got similar question on my exam. Answered C.

upvoted 1 times
- technodev

1 month, 1 week ago

Got this question in my exam, answered C

upvoted 1 times
- pgarg2000

1 month, 1 week ago

do you have the same response to every question

upvoted 4 times
- OrangeTiger

1 month, 3 weeks ago

I vote A.
Management is concerned about costs.
A is the only option that touches on costs.

upvoted 2 times
- anjuagrawal

2 months, 3 weeks ago

The answer should be between A or C. Choice is to be made between cost effective or Scaling respectively. They have to convince leadership on the effort and not cost so I think we can go for C.

upvoted 1 times
- Bobch

2 months, 3 weeks ago

Selected Answer: C

C is OK

upvoted 1 times
- vincy2202

2 months, 4 weeks ago



C is the correct answer



upvoted 1 times
- joe2211



3 months, 1 week ago



Selected Answer: C



vote C
upvoted 4 times



  **nansi** 3 months, 2 weeks ago
CEO and COO do not care about CI/CD
upvoted 3 times



  **MaxNRG** 3 months, 4 weeks ago
Today passed the exam, I choose C
upvoted 3 times



  **bishalsainju** 3 months, 3 weeks ago
Hey man, do you know smu who gave it on the second attempt, and got the same questions?
upvoted 2 times

  **danielfootc** 4 months, 1 week ago
I would choose C as well.
upvoted 2 times



  **JustJack21** 5 months, 3 weeks ago
C - based on how much longer it is compared to the rest.
upvoted 2 times



  **Cloud4us** 5 months, 4 weeks ago
C is OK
upvoted 2 times



  **victory108** 7 months, 3 weeks ago
C. The new approach will make it easier to decouple infrastructure from an application, develop and release new features, manage the underlying infrastructure, manage CI/CD pipelines and perform A/B testing, and scale the solution if necessary.
upvoted 4 times



  **taoj** 7 months, 3 weeks ago
BAD QUESTION!
Does leadership mean the head of the company? the head of the department?the head of the team?
different people concern different stuff.

A or C
A for me
upvoted 6 times

  **RegisFTM** 2 months ago
I was thinking about the same thing. If you are presenting to the CxO team, It would be A, and their focus is to make the company more profitable, and don't really care about technical details.
upvoted 1 times

  **MikeB19** 6 months ago
I agree a or c. Actually both answers are right This question is a matter of opinion
upvoted 1 times

  **pr2web** 6 months, 2 weeks ago
I'm with you on this one. Senior leadership do not know what A/B, CI/CD is in principle.
upvoted 3 times

  **mbrueck** 7 months, 3 weeks ago
Answer: C
upvoted 2 times

Your team is developing a web application that will be deployed on Google Kubernetes Engine (GKE). Your CTO expects a successful launch and you need to ensure your application can handle the expected load of tens of thousands of users. You want to test the current deployment to ensure the latency of your application stays below a certain threshold. What should you do?

- A. Use a load testing tool to simulate the expected number of concurrent users and total requests to your application, and inspect the results.
- B. Enable autoscaling on the GKE cluster and enable horizontal pod autoscaling on your application deployments. Send curl requests to your application, and validate if the auto scaling works.
- C. Replicate the application over multiple GKE clusters in every Google Cloud region. Configure a global HTTP(S) load balancer to expose the different clusters over a single global IP address.
- D. Use Cloud Debugger in the development environment to understand the latency between the different microservices.

Correct Answer: B

Community vote distribution

A (86%) 14%

kopper2019

Highly Voted

7 months, 3 weeks ago

21 NEw Qs - July 12, 2021

15. An application development team has come to you for advice.They are planning to write and deploy an HTTP(S) API using Go 1.12. The API will have a very unpredictable workload and must remain reliable during peaks in traffic. They want to minimize operational overhead for this application. What approach should you recommend?

a. Use a Managed Instance Group when deploying to Compute Engine

b. Develop an application with containers, and deploy to Google Kubernetes Engine (GKE)

c. Develop the application for App Engine standard environment

d. Develop the application for App Engine Flexible environment using a custom runtime

Answer C, , please share you answers

upvoted 17 times

Neo_ACE

3 months, 2 weeks ago

Answer is C

upvoted 2 times

namanp12345

6 months, 1 week ago

Answer A

upvoted 1 times

namanp12345

6 months, 1 week ago

Sorry C

upvoted 1 times

muhasinem

7 months, 2 weeks ago

C is ok.

upvoted 5 times

deep_ROOT

7 months, 1 week ago

C.

<https://cloud.google.com/appengine/docs/the-appengine-environments>

upvoted 6 times

juccjucc

Highly Voted

7 months, 1 week ago

Anyone can tell please if at the new exam there are also questions from the old set(before question 115)?

upvoted 12 times

kopper2019

5 months, 2 weeks ago

old ones are not removed

upvoted 4 times

ale183

5 months ago

really ? the old ones are are still on exam ? from 1-100 ? how about old case study questions ?

upvoted 2 times



VT001



Most Recent



2 weeks, 5 days ago



Selected Answer: A

I got similar question on my exam. Answered A.
upvoted 2 times

  **Jurliqueoil** 1 month, 2 weeks ago
The question asks us what should we do to ensure the latency of your application stays below a certain threshold... B is one of the methods we could act upon to meet the requirement.
upvoted 1 times



  **MF2C** 2 months ago
Selected Answer: A
A is my choice
upvoted 2 times

  **simbu1299** 2 months, 1 week ago
A is the correct answer
upvoted 1 times



  **cloudprospect** 2 months, 2 weeks ago
Selected Answer: B
It's B.



For those pointing at the "load test" requirement, B meets that with the cURL requests, which includes latency data in responses.



A does NOT meet load testing as you won't know how the cluster will react. No latency metrics and no information on what happens when a node hits cap.
upvoted 2 times



  **alexmsith32** 3 weeks, 4 days ago
B only tests if autoscaling works, NOT if the latency stays below the threshold.



So A is correct
upvoted 1 times



  **PhilipKoku** 2 months, 2 weeks ago
Selected Answer: A
A) It describing a right way to conduct a Load test.
upvoted 1 times



  **BSING246** 2 months, 3 weeks ago
Selected Answer: A
A is answer. Marked B is not OK for the load tests
upvoted 2 times



  **vincy2202** 2 months, 4 weeks ago
A is the correct answer
upvoted 1 times



  **jdr75** 3 months ago
It's A => the team is developing a web application ... so they 're still working in the solution ... the Logging feature is what they need to MEASURE the latency; think that when they start with the "testing" phase they'll need to measure.
upvoted 1 times

  **jdr75** 3 months ago
Validate the autoescalating , doesn't ensure the latency, it's a tiered application !, the lantency could be excceded althought the PODs autoscale fine.
upvoted 1 times

  **pakilodi** 3 months ago
Selected Answer: A
Answer should be A. While B is good architecture to handle what the question is referring, A, based on the context on the question, answer to that.
upvoted 3 times

  **joe2211** 3 months, 1 week ago
Selected Answer: A
vote A
upvoted 2 times

  **AsutoshPanda** 3 months, 2 weeks ago
Question #: 139
Ans is B , verified from expert
upvoted 1 times


  **jdr75** 3 months ago
yes... an expert ... and what about the explanation? -- too experts in this world !

upvoted 4 times

  **robotgeek** 3 months, 3 weeks ago

Its A guys, no matter how good kubernetes is, if the app is bad it will fail and the only way to know is load test

upvoted 6 times

  **amxexam** 5 months, 3 weeks ago

For the question for actual discussion going on.

Requirement - current app is on K8s, 10K load, need to test for latency

C - not sure why people are supporting multiple clusters until the requirement calls for the special case we need to use. There is no requirement for multiple region availability or DR. Does not help in any of the requirement. Eliminating it.

D - Covers testing for latency, but until trace is used wont be much useful.

B- Covers first 2 requirements part but not testing.

A - Covers testing, will show if the current cluster setup will handle but not latency related. Hence eliminating.

Between D and B - B is standing out.

Hence B


upvoted 6 times

  **J19G** 4 months, 2 weeks ago

I think B is incorrect "Send curl requests to your application, and validate if the auto scaling works." The question wants to test current deployment can handle the load, therefore the best option is option A that simulates the expected load and can tell how the app reacts.


Therefore the best option should be A

upvoted 6 times

  **amxexam** 5 months, 3 weeks ago

Why people are posting questions and hijacking the discussion? What is the admin doing?

upvoted 4 times

  **kopper2019** 5 months, 2 weeks ago

Adding new Qs not present in the exam, ET takes some time even up to 2 moths to update exams so if someone has New Qs why not share

do not be like and and answer and share

upvoted 9 times

Your company has a Kubernetes application that pulls messages from Pub/Sub and stores them in Filestore. Because the application is simple, it was deployed as a single pod. The infrastructure team has analyzed Pub/Sub metrics and discovered that the application cannot process the messages in real time. Most of them wait for minutes before being processed. You need to scale the elaboration process that is I/O-intensive. What should you do?

- A. Use kubectl autoscale deployment APP_NAME --max 6 --min 2 --cpu-percent 50 to configure Kubernetes autoscaling deployment.
- B. Configure a Kubernetes autoscaling deployment based on the subscription/push_request_latencies metric.
- C. Use the --enable-autoscaling flag when you create the Kubernetes cluster.
- D. Configure a Kubernetes autoscaling deployment based on the subscription/num_undelivered_messages metric.

Correct Answer: C

Reference:

<https://cloud.google.com/kubernetes-engine/docs/how-to/cluster-autoscaler>

Community vote distribution

D (78%)

B (22%)

  **Rzla** Highly Voted 5 months, 4 weeks ago

Answer is D. num_undelivered_messages metric can indicate if subscribers are keeping up with message submissions.
https://cloud.google.com/pubsub/docs/monitoring#monitoring_the_backlog
upvoted 20 times

  **rishab86** 5 months, 1 week ago



D is correct !
upvoted 1 times

  **babuu2021** Highly Voted 6 months, 1 week ago



D is okay
upvoted 6 times

  **user1324567** Most Recent 1 month, 2 weeks ago

D is ok.
upvoted 1 times

  **pddddd** 1 month, 3 weeks ago

<https://cloud.google.com/kubernetes-engine/docs/samples/container-pubsub-horizontal-pod-autoscaler>
upvoted 3 times



  **timotei** 1 month, 4 weeks ago

D is correct.
B is a push_request_latencies metric how does that helps when the app "pulls" messages from Pub/Sub? The issue is It is not pulling fast enough from the pub/sub.
upvoted 1 times

  **ehgm** 2 months ago

Selected Answer: D

C is wrong: Create a Kubernetes cluster with --enable-autoscaling flag don't scale the Pod. We need a Deployment.
upvoted 2 times



  **JaSza80** 2 months, 2 weeks ago

Selected Answer: B

Question is about long processing time, not undelivered messages, hence I vote for B : push_request_latencies



subscription/push_request_latencies:
This metric helps you understand your push endpoint's response latency distribution. Because of the limit on the number of outstanding messages, endpoint latency affects subscription throughput. If it takes 100 milliseconds to process each message, your throughput limit is likely to be 10 messages per second.

https://cloud.google.com/pubsub/docs/monitoring#monitoring_exp
upvoted 2 times

  **rajadhav** 2 months, 2 weeks ago

I am surprise why not option A?
<https://cloud.google.com/kubernetes-engine/docs/how-to/scaling-apps>

upvoted 1 times

  **ehgm** 2 months ago

The question says: "it was deployed as a single pod". You cant scale a Pod using deployment syntax command line.

upvoted 1 times

  **PhilipKoku** 2 months, 2 weeks ago

Selected Answer: D

D) Is the right answer https://cloud.google.com/pubsub/docs/monitoring#monitoring_the_backlog



upvoted 1 times

  **vincy2202** 2 months, 4 weeks ago

D is the correct answer

https://cloud.google.com/pubsub/docs/monitoring#monitoring_the_backlog

upvoted 1 times

  **BSING246** 3 months ago

Selected Answer: D

Marked C is wrong.

upvoted 1 times

  **pakilodi** 3 months ago

Selected Answer: D

vote D

upvoted 3 times

  **TheCloudBoy77** 3 months, 1 week ago

D - pub/sub num_undelivered_messages metric can be used to autoscale cluster HPA

upvoted 1 times

  **Nimbus2021** 3 months ago

but the answer mentions autoscale of deployment not cluster

upvoted 1 times

  **rottzy** 4 months, 3 weeks ago

D

https://cloud.google.com/kubernetes-engine/docs/tutorials/autoscaling-metrics#pubsub_7

upvoted 4 times

  **rottzy** 5 months ago

why not A ?

upvoted 1 times

  **sandipk91** 6 months ago

I think option A is the correct answer as Horizontal Pod Autoscaling is needed here to increase the application capacity

upvoted 2 times

  **KPUSA** 6 months ago

<https://cloud.google.com/kubernetes-engine/docs/tutorials/autoscaling-metrics?hl=en#step4>

upvoted 1 times

Your company is developing a web-based application. You need to make sure that production deployments are linked to source code commits and are fully auditable. What should you do?

- A. Make sure a developer is tagging the code commit with the date and time of commit.
- B. Make sure a developer is adding a comment to the commit that links to the deployment.
- C. Make the container tag match the source code commit hash.
- D. Make sure the developer is tagging the commits with latest.

Correct Answer: A

Community vote distribution

C (100%)

- djosani**

Highly Voted

6 months, 1 week ago

Developer shouldn't tag or comment every commit with some specific data, like timestamps or something else. There might be an app version, but it's not mentioned. I'd go with C as it's an automated, error-less approach that answers the question.

upvoted 19 times
- Urban_Life**

2 months, 2 weeks ago

@Kopper2019- what do you think about ans C?

upvoted 1 times
- victory108**

Highly Voted

6 months ago

C. Make the container tag match the source code commit hash.

upvoted 10 times
- amxexam**

5 months, 3 weeks ago

Not sure how the container tag match with the commit will help to audit, can someone explain?

upvoted 1 times
- ynoot**

3 months ago

if you got the commit hash from the container you can check the corresponding commit in the git repository. So the change, that was made and deployed into your environment can be audited.

upvoted 2 times
- SCVinod**

Most Recent

1 day, 1 hour ago

It's got to be A. Option C talks about containers whereas there is no mention of containers in the question.

upvoted 1 times
- VT001**

2 weeks, 5 days ago

Selected Answer: C

I got similar question on my exam. Answered C.

upvoted 1 times
- Narinder**

1 month, 1 week ago

I think answer is A.

In Git, tag is used to mark release points (v1.0, v2.0 and so on). You can tag the release based on the time stamp and using git show <tag-name> command, you can see the commit detailed history.

Reference: <https://git-scm.com/book/en/v2/Git-Basics-Tagging>

C could be the correct answer for the case if you are going with container based solution which is not mentioned anywhere in the question.

upvoted 2 times
- ks100**

1 month, 1 week ago

Selected Answer: C

should be C.

If A is correct, can the site provide some reference to the reason?

upvoted 1 times
- tmnd91**

1 month, 2 weeks ago

Selected Answer: C

Humans are unreliable

upvoted 3 times

- user1324567**

1 month, 2 weeks ago

A is useless because commits have date and time already. Go for C for best practice.

upvoted 2 times
- lxgywil**

1 month, 3 weeks ago

C is ok

upvoted 1 times
- rajadhav**

2 months, 2 weeks ago

Option D is correct.

upvoted 1 times
- lxgywil**

1 month, 3 weeks ago

You gotta be trolling.

upvoted 1 times
- anjuangrawal**

2 months, 3 weeks ago

think C: Make the container tag match the source code commit hash. tagging is a good way to match production deployments to source code. We can even tag stage or production depending on if we want the code deployment to only stage. So ,C

upvoted 1 times
- Nalo1**

2 months, 3 weeks ago

An anyone give any reference for this?

upvoted 1 times
- vincy2202**

2 months, 4 weeks ago

C is the correct answer

upvoted 1 times
- Minm**

2 months, 4 weeks ago

Selected Answer: C

C is the answer

upvoted 1 times
- pakilodi**

3 months ago

Selected Answer: C

Vote C. A commit is already provided with the timestamp

upvoted 1 times
- cdcollector**

3 months ago

Selected Answer: C

Commits already have date time

upvoted 1 times
- nqthien041292**

3 months ago

Selected Answer: C

Vote C

upvoted 2 times

An application development team has come to you for advice. They are planning to write and deploy an HTTP(S) API using Go 1.12. The API will have a very unpredictable workload and must remain reliable during peaks in traffic. They want to minimize operational overhead for this application. Which approach should you recommend?



- A. Develop the application with containers, and deploy to Google Kubernetes Engine.
- B. Develop the application for App Engine standard environment.
- C. Use a Managed Instance Group when deploying to Compute Engine.
- D. Develop the application for App Engine flexible environment, using a custom runtime.



Correct Answer: C

Community vote distribution



B (100%)



  **vladik820** Highly Voted 6 months, 1 week ago
B is ok
upvoted 16 times



  **SweetieS** Highly Voted 6 months, 1 week ago
B is ok.
<https://cloud.google.com/appengine/docs/the-appengine-environments>
upvoted 8 times



  **cugena** 5 months, 2 weeks ago
Intended to run for free or at very low cost, where you pay only for what you need and when you need it. For example, your application can scale to 0 instances when there is no traffic.



Experiences sudden and extreme spikes of traffic which require immediate scaling.
upvoted 3 times



  **cugena** 5 months, 2 weeks ago
Source code is written in specific versions of the supported programming languages:
Python 2.7, Python 3.7, Python 3.8, Python 3.9
Java 8, Java 11
Node.js 10, Node.js 12, Node.js 14, Node.js 16 (preview)
PHP 5.5, PHP 7.2, PHP 7.3, and PHP 7.4
Ruby 2.5, Ruby 2.6, and Ruby 2.7
Go 1.11, Go 1.12, Go 1.13, Go 1.14, Go 1.15, and Go 1.16 (preview)
upvoted 1 times



  **TitaniumBurger** Most Recent 1 week, 3 days ago
B. Unpredictable traffic & low overhead.
upvoted 1 times

  **tmnd91** 1 month, 2 weeks ago
Selected Answer: B
App Engine standard has autoscaling out of the box, supports Go 1.12 and can scale down to 0 to save money
upvoted 3 times



  **lxgywil** 1 month, 3 weeks ago
B is ok.
upvoted 1 times

  **PhuocT** 2 months, 1 week ago
Selected Answer: B
B is the right answer
upvoted 2 times

  **phantomsg** 2 months, 1 week ago
Selected Answer: B
AppEngine Standard supports Go language now. Fully-managed service - So no operational overhead and pay-only-for-what-you-use model.
upvoted 1 times

  **rajadhav** 2 months, 2 weeks ago
B is correct answer.

upvoted 1 times

  **Bert_77** 2 months, 3 weeks ago

Selected Answer: B

B will be the best option. App engine standard supports Go 1.12, can scale quickly during peaks and even scale to 0 when not used, no management overhead

upvoted 1 times

  **anjuagrawal** 2 months, 3 weeks ago

Vote B. Go is supported by App Engine Std. Also reduces operational overhead with PaaS

upvoted 1 times

  **vincy2202** 2 months, 4 weeks ago

Selected Answer: B

B is the correct answer.

upvoted 1 times

  **daveya** 3 months ago

B -because of operational overhead and GO is supported on App Engine

upvoted 1 times

  **cdcollector** 3 months ago

Selected Answer: B

AES supports Go 1.12 , AEF is also good but this answer combined with custom runtime which is not needed

upvoted 1 times

  **sam1972** 3 months, 1 week ago

B sounds good

upvoted 1 times

  **pakilodi** 3 months, 1 week ago

Selected Answer: B

answer is b

upvoted 3 times

  **TheCloudBoy77** 3 months, 1 week ago

B - App engine standard Unpredictable workload, less management overhead, supports Go.

upvoted 2 times

  **AnilKr** 5 months ago

B is correct, GAE is recommended for sudden spike and specific version of language

upvoted 3 times

Your company is designing its data lake on Google Cloud and wants to develop different ingestion pipelines to collect unstructured data from different sources.

After the data is stored in Google Cloud, it will be processed in several data pipelines to build a recommendation engine for end users on the website. The structure of the data retrieved from the source systems can change at any time. The data must be stored exactly as it was retrieved for reprocessing purposes in case the data structure is incompatible with the current processing pipelines. You need to design an architecture to support the use case after you retrieve the data. What should you do?

- A. Send the data through the processing pipeline, and then store the processed data in a BigQuery table for reprocessing.
- B. Store the data in a BigQuery table. Design the processing pipelines to retrieve the data from the table.
- C. Send the data through the processing pipeline, and then store the processed data in a Cloud Storage bucket for reprocessing.
- D. Store the data in a Cloud Storage bucket. Design the processing pipelines to retrieve the data from the bucket.

Correct Answer: D

Community vote distribution

D (100%)

  **vladik820** Highly Voted 6 months, 1 week ago



D is ok
The data needs to be stored as it is retrieved. This would mean that any processing should be done after it is stored.
upvoted 17 times

  **VT001** Most Recent 2 weeks, 5 days ago

Selected Answer: D
I got similar question on my exam. Answered D.
upvoted 1 times

  **technodev** 1 month, 1 week ago

Got this question in my exam, answered D
upvoted 1 times

  **lxgywil** 1 month, 3 weeks ago

D is ok
upvoted 1 times

  **vincy2202** 2 months, 3 weeks ago

D is the correct answer
upvoted 1 times

  **pakilodi** 3 months ago



Selected Answer: D
D is correct
upvoted 1 times

  **TheCloudBoy77** 3 months, 1 week ago

D - Data must be stored as it is before and after so use Cloud storage and then build pipelines as needed.
upvoted 1 times

  **MaxNRG** 4 months, 1 week ago



D, store RAW unstructured data as-is in Cloud Storage, and then define how to process it.
Classical Data Lake ELT (Extract -> Load -> Transform)
upvoted 2 times

  **danielfootc** 4 months, 1 week ago

I would select D as well.
upvoted 2 times

  **AnilKr** 5 months ago

D is correct.
upvoted 2 times

  **amxexam** 5 months, 3 weeks ago

"After the data is stored in Google Cloud, it will be processed in several data pipelines to build a recommendation engine"

So first store then process in the pipeline.

So we need to store first then process it.
Will eliminate A and C.

The second point big data table needs a fixed schema to work so it won't work.
Will eliminate B

Hence D



upvoted 4 times

  **victory108** 6 months ago



D. Store the data in a Cloud Storage bucket. Design the processing pipelines to retrieve the data from the bucket. (keyword : unstructured)
upvoted 2 times

  **VishalB** 6 months ago

why not C ? it is doing the same thing storing data in cloud storage
upvoted 1 times

  **Bert_77** 2 months, 3 weeks ago

C first processes the data before storing it. Original (unprocessed) data should remain available, so C is not a good solution.
upvoted 1 times

  **GCP_daity** 6 months, 1 week ago

Your company is designing its data lake on Google Cloud and wants to develop different ingestion pipelines (pipelines 1) to collect unstructured data from different sources.

After the data is stored in Google Cloud, it will be processed in several data pipelines (pipelines 2) to build a recommendation engine for end users on the website. The structure of the data retrieved(retrieve 1) from the source systems can change at any time(can be completed by pipelines 1). The data must be stored exactly as it was retrieved (retrieve 2) for reprocessing purposes in case the data structure is incompatible with the current processing pipelines(pipelines 2). You need to design an architecture to support the use case after you retrieve the data. What should you do?

Ingestion data must go through pipelines 1: changing the structure then save to Cloud Storage first. So my answer is "C"
upvoted 2 times

  **Shaileshss** 1 month, 1 week ago

Data must be stored as is without processing. So C would not be right choice.
upvoted 1 times

  **meh_33** 6 months, 1 week ago

D is ok
upvoted 2 times



You are responsible for the Google Cloud environment in your company. Multiple departments need access to their own projects, and the members within each department will have the same project responsibilities. You want to structure your Google Cloud environment for minimal maintenance and maximum overview of IAM permissions as each department's projects start and end. You want to follow Google-recommended practices. What should you do?



- A. Grant all department members the required IAM permissions for their respective projects.
- B. Create a Google Group per department and add all department members to their respective groups. Create a folder per department and grant the respective group the required IAM permissions at the folder level. Add the projects under the respective folders.
- C. Create a folder per department and grant the respective members of the department the required IAM permissions at the folder level. Structure all projects for each department under the respective folders.
- D. Create a Google Group per department and add all department members to their respective groups. Grant each group the required IAM permissions for their respective projects.



Correct Answer: B



Community vote distribution



B (100%)



  **Manh** Highly Voted 5 months, 3 weeks ago
it's B
upvoted 14 times



  **lxgywil** Most Recent 1 month, 3 weeks ago
B is ok
upvoted 1 times



  **edilramos** 2 months, 1 week ago
B is ideal for minimal maintenance and maximum overview of IAM permissions as each department's projects start and end. Manage the users inside Groups will turn it easier.
upvoted 3 times



  **anjuagrawal** 2 months, 3 weeks ago
Voted B
upvoted 1 times



  **vincy2202** 2 months, 3 weeks ago
B is the correct answer
upvoted 1 times



  **nqthien041292** 3 months ago
Selected Answer: B
Vote B
upvoted 2 times



  **danielfootc** 4 months, 1 week ago
I would select B.
upvoted 2 times

  **AnilKr** 5 months ago
B is correct, folder restructure per department and IAM permission for Group is recommended.
upvoted 4 times

  **Sonu_xyz** 5 months, 2 weeks ago
Answer is B
upvoted 2 times



  **diaga2** 6 months ago
Yes, B
upvoted 4 times

  **victory108** 6 months ago
B. Create a Google Group per department and add all department members to their respective groups. Create a folder per department and grant the respective group the required IAM permissions at the folder level. Add the projects under the respective folders.
upvoted 4 times

  **serious_user** 6 months, 1 week ago

B is ok

upvoted 3 times

  **meh_33** 6 months, 1 week ago

B is ok

upvoted 4 times

Your company has an application running as a Deployment in a Google Kubernetes Engine (GKE) cluster. You have separate clusters for development, staging, and production. You have discovered that the team is able to deploy a Docker image to the production cluster without first testing the deployment in development and then staging. You want to allow the team to have autonomy but want to prevent this from happening. You want a Google Cloud solution that can be implemented quickly with minimal effort. What should you do?



- A. Configure a Kubernetes lifecycle hook to prevent the container from starting if it is not approved for usage in the given environment.
- B. Implement a corporate policy to prevent teams from deploying Docker images to an environment unless the Docker image was tested in an earlier environment.
- C. Configure binary authorization policies for the development, staging, and production clusters. Create attestations as part of the continuous integration pipeline.
- D. Create a Kubernetes admissions controller to prevent the container from starting if it is not approved for usage in the given environment.



Correct Answer: C



Community vote distribution



C (100%)



  **diaga2** Highly Voted 6 months ago
C is s fine.
upvoted 11 times



  **VT001** Most Recent 2 weeks, 5 days ago
Selected Answer: C
I got similar question on my exam. Answered C.
upvoted 1 times



  **yogi_508** 2 months, 1 week ago
where the case study questions are available in this website?
upvoted 1 times



  **vincy2202** 2 months, 3 weeks ago
C is the correct answer
<https://cloud.google.com/binary-authorization/docs/overview>
upvoted 3 times



  **Jimjiang** 4 months, 1 week ago
C is fine
upvoted 1 times



  **danielfootc** 4 months, 1 week ago
I think C is the correct answer.
upvoted 1 times

  **AnilKr** 5 months ago
C is correct, binary authorization is the solution.
upvoted 2 times

  **victory108** 6 months ago
C. Configure binary authorization policies for the development, staging, and production clusters. Create attestations as part of the continuous integration pipeline.
upvoted 2 times

  **serious_user** 6 months, 1 week ago
C is ok
upvoted 2 times

  **vladik820** 6 months, 1 week ago
C is ok
upvoted 2 times



  **SweetieS** 6 months, 1 week ago
Sorry, it's C : Configure binary authorization policies for the development, staging, and production clusters. Create attestations as part of the continuous integration pipeline.
upvoted 3 times

  **SweetieS** 6 months, 1 week ago

D is ok.

<https://cloud.google.com/binary-authorization/docs/overview>

upvoted 1 times

  **cugena** 5 months, 2 weeks ago

You meant C I guess

upvoted 1 times

Your company wants to migrate their 10-TB on-premises database export into Cloud Storage. You want to minimize the time it takes to complete this activity, the overall cost, and database load. The bandwidth between the on-premises environment and Google Cloud is 1 Gbps. You want to follow Google-recommended practices. What should you do?

- A. Develop a Dataflow job to read data directly from the database and write it into Cloud Storage.
- B. Use the Data Transfer appliance to perform an offline migration.
- C. Use a commercial partner ETL solution to extract the data from the on-premises database and upload it into Cloud Storage.
- D. Compress the data and upload it with gsutil -m to enable multi-threaded copy.



Correct Answer: A



Community vote distribution



D (63%) B (38%)



  **pr2web** Highly Voted 5 months, 3 weeks ago
This is pretty simple.
Time to transfer using Transfer Appliance: 1-3 weeks (I've used it twice and had a 2-3 week turnaround total)
Time to transfer using 1Gbps : 30 hours (<https://cloud.google.com/architecture/migration-to-google-cloud-transferring-your-large-datasets>)



Answer is D, using gsutil
upvoted 28 times



  **Aiffone** 2 months ago
If I can do it in 30hrs, why choose 1 week? i'd go with B
upvoted 1 times



  **Aiffone** 2 months ago
I mean I'd go with A rather...questions says to spend minimum time and we have 1Gbps to do 10Tb in 30hrs
upvoted 1 times



  **Aiffone** 1 month, 2 weeks ago
Transfer appliance -A
upvoted 1 times

  **cloudguy2** 3 months ago
B) Google recommends gsutil for <1TB; for >1TB, Storage Transfer Service is recommended. Since STS is not in the answers, the next best large transfer option would be offline Storage Appliance.
upvoted 5 times



  **joe2211** 3 months ago
Not about time but "Google-recommended practices"
upvoted 4 times

  **Plee0** 5 months, 2 weeks ago
according to your real case, D definitely is a correct answer. However this is the GCP exam, I would go with B - Use data transfer appliance -> the precise answer
upvoted 6 times

  **mikesp** 4 months, 1 week ago
I agree. "Google-recommended practices" means than if more than 1TB, then Transfer Appliance. The main drawback of option D is that gsutil does not enable to manage bandwidth and corporate connection could be congested by transfer and affect other business activities.
upvoted 3 times

  **gingerbeer** Highly Voted 5 months ago
No perfect answer as B and D both have flaws. B is time latency as transfer appliance usually takes weeks; D gsutil applies for less than 1TB. The answer should be storage transfer service for on-premises data, which is not available here.

If have to choose one I go for B
upvoted 8 times

  **azureaspirant** Most Recent 2 weeks, 1 day ago
2/15/21
upvoted 1 times

  **VT001** 2 weeks, 5 days ago
I go this question in exam. Storage Transfer Service was an option and I selected that.

upvoted 2 times

  **haroldbenites** 3 weeks ago

Go for B

upvoted 1 times

  **ZackW** 3 weeks ago

Is Transfer Appliance suitable for me?

Transfer Appliance is a good fit for your data transfer needs if:

You are an existing Google Cloud Platform (GCP) customer.

Your data size is greater than or equal to 10TB.

Your data resides in locations that Transfer Appliance is available.

It would take more than one week to upload your data over the network.

<https://cloud.google.com/transfer-appliance/docs/4.0/overview#location-availability>

It will take 30 hours, but it is also 10TB. Hard to say what is the best practice.

One bullet point says 10 TB or more, use appliance.

But it also mentions if it would take over a week using the network upload... It would take 30 hours...


Feels like a crap shoot.

upvoted 1 times

  **hantanbl** 1 month ago

I got this question in the exam. Answer is B. This is google exam so you need to wear google hat. In real world i will go with D and do the transfer over a holiday or weekend



upvoted 1 times

  **Pime13** 1 month ago

Selected Answer: D



i would say D, 10TB with 1Gbps takes around 30hours and with paralel upload it would take less time. also transfer appliance is not available everywhere (<https://cloud.google.com/transfer-appliance/docs/4.0/overview#location-availability>)

upvoted 1 times

  **akhil1234567** 1 month ago

Compressing the data and using multithreaded upload in gsutil will take more CPU and database load to the on premises server which they said they do not need that. So, it's better to choose option B though time taking will be higher. I go with Option B



upvoted 1 times

  **Pime13** 1 month, 1 week ago

Selected Answer: D

vote d

upvoted 1 times

  **dhuna** 1 month, 1 week ago

Go with D

upvoted 1 times

  **OrangeTiger** 1 month, 1 week ago

Online to online is best plactis.

upvoted 1 times

  **Narinder** 1 month, 1 week ago

Answer is D.

Please check the constraint in the question - minimize time to copy data, the overall cost, and database load.

If you compress the DB exported dump using gzip utility it can reduce the size to 1~2 TB and using gsutil with composite transfer (for a single large file) or gsutil -m (for multi-threaded transfer) you can transfer the files in few hours (less than 5-6 hours)

I will not opt for B because of the reason that the expected turnaround time for a network appliance to be shipped, loaded with your data, shipped back, and rehydrated on Google Cloud is 20 days. If your online transfer timeframe is calculated to be substantially more than this timeframe than only consider Transfer Appliance.

upvoted 2 times

  **Chandudode** 1 month, 2 weeks ago

D is correct

upvoted 1 times

  **Moss2011** 1 month, 2 weeks ago

Selected Answer: D

Since it takes just 24 hrs, could be D



Yo can check the calc here:

<https://cloud.google.com/architecture/migration-to-google-cloud-transferring-your-large-datasets>

upvoted 2 times

  **SolutionArchitect27** 1 month, 3 weeks ago

The answer is B
as per google documentation the transfer appliance takes around 1 day to transfer 10 TB of with bandwidth of 1 GBPS
<https://cloud.google.com/architecture/migration-to-google-cloud-transferring-your-large-datasets>
upvoted 1 times

  **OrangeTiger** 1 month, 3 weeks ago

Selected Answer: D

I choose D.

upvoted 1 times

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

What should you do?

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

Correct Answer: B

Community vote distribution

C (100%)

🗲️ 👤 **juma_david** Highly Voted 6 months, 1 week ago

Answer C

<https://cloud.google.com/compute/docs/disks/repd-failover>

upvoted 27 times

🗲️ 👤 **BSING246** Highly Voted 4 months, 1 week ago

C is right answer.

C. 1. Attach a regional SSD persistent disk to the first instance. 2. In case of a zone outage, force-attach the disk to the other instance. gcs-fuse is slower than of regional SSD PD.

**** Admin: You need to correct lots of questions. Some of the marked answers are nonsense, these must be revisited based on experts comments.

upvoted 5 times

🗲️ 👤 **bkrish** Most Recent 2 weeks, 2 days ago

Selected Answer: C

In the event that the primary zone fails, you can fail over your regional persistent disk to a VM instance in another zone by using the --force-attach flag with the attach-disk command

upvoted 1 times

🗲️ 👤 **kjindal2003** 2 weeks, 6 days ago

Answer C

upvoted 1 times

🗲️ 👤 **tmnd91** 1 month, 2 weeks ago

Selected Answer: C

B is not correct because GCS mounted as a disk has high latency

upvoted 1 times

🗲️ 👤 **OrangeTiger** 1 month, 3 weeks ago

I agree C.Thx All!

upvoted 2 times

🗲️ 👤 **vincy2202** 2 months, 2 weeks ago

Selected Answer: C

C is the correct answer

<https://cloud.google.com/compute/docs/disks#repds>

upvoted 1 times

🗲️ 👤 **sapsant** 2 months, 4 weeks ago

Selected Answer: C

<https://cloud.google.com/compute/docs/disks/repd-failover>

upvoted 2 times

🗨️ 👤 **pakilodi** 3 months, 1 week ago

Selected Answer: C

Answer should be C
upvoted 4 times

🗨️ 👤 **MaxNRG** 4 months, 1 week ago

Not B - Performance: Cloud Storage FUSE has much higher latency than a local file system.
<https://cloud.google.com/storage/docs/gcs-fuse#notes>
upvoted 1 times

🗨️ 👤 **rottzy** 4 months, 3 weeks ago

C
Regional persistent disk is a storage option that provides synchronous replication of data between two zones in a region. Regional persistent disks can be a good building block to use when you implement HA services in Compute Engine.

The benefit of regional persistent disks is that in the event of a zonal outage, where your virtual machine (VM) instance might become unavailable, you can usually force attach a regional persistent disk to a VM instance in a secondary zone in the same region. To perform this task, you must either start another VM instance in the same zone as the regional persistent disk that you are force attaching, or maintain a hot standby VM instance in that zone. A hot standby is a running VM instance that is identical to the one you are using. The two instances have the same data.

upvoted 3 times

🗨️ 👤 **Ari_GCP** 5 months, 1 week ago

<https://cloud.google.com/compute/docs/disks/high-availability-regional-persistent-disk>
Option C
upvoted 3 times

🗨️ 👤 **MikeB19** 5 months, 1 week ago

Again gcsfuse is good for nothing. C is correct
upvoted 2 times

🗨️ 👤 **ShadowDragon** 5 months, 2 weeks ago

Answer is C. <https://cloud.google.com/compute/docs/disks#repds>
upvoted 2 times

🗨️ 👤 **victory108** 5 months, 4 weeks ago

C. 1. Attach a regional SSD persistent disk to the first instance. 2. In case of a zone outage, force-attach the disk to the other instance.
upvoted 1 times

🗨️ 👤 **diaga2** 6 months ago

It's C
upvoted 1 times

🗨️ 👤 **Nik22** 6 months ago

C is Correct
upvoted 1 times

You are designing a Data Warehouse on Google Cloud and want to store sensitive data in BigQuery. Your company requires you to generate the encryption keys outside of Google Cloud. You need to implement a solution. What should you do?

- A. Generate a new key in Cloud Key Management Service (Cloud KMS). Store all data in Cloud Storage using the customer-managed key option and select the created key. Set up a Dataflow pipeline to decrypt the data and to store it in a new BigQuery dataset.
- B. Generate a new key in Cloud KMS. Create a dataset in BigQuery using the customer-managed key option and select the created key.
- C. Import a key in Cloud KMS. Store all data in Cloud Storage using the customer-managed key option and select the created key. Set up a Dataflow pipeline to decrypt the data and to store it in a new BigQuery dataset.
- D. Import a key in Cloud KMS. Create a dataset in BigQuery using the customer-supplied key option and select the created key.

Correct Answer: D

Community vote distribution



SweetieS Highly Voted 6 months, 1 week ago
D is OK
upvoted 10 times

chirischiris Most Recent 3 days, 9 hours ago
Selected Answer: B
B Generate a new key in Cloud KMS. Create a dataset in BigQuery using the customer-managed key option and select the created key. This is because I can generate a Externally managed key in KMS for CMEK, but it is not explicit in the answer
upvoted 1 times

LoveT 1 week, 5 days ago
Selected Answer: D
Agree with D
upvoted 1 times

VT001 2 weeks, 5 days ago
Selected Answer: D
I got similar question on my exam. Answered D.
upvoted 1 times

haroldbenites 3 weeks ago
Go for D.
upvoted 1 times

technodev 1 month, 1 week ago
Got this question in my exam, answered D
upvoted 2 times

SolutionArchitect27 1 month, 3 weeks ago
B seems to be correct

D : Bigquery does not work with Customer Supplied key (CSEK)
C : Cloud storage does not work with Customer managed key option (CMEK)
upvoted 1 times

wisss 1 month, 3 weeks ago
Customer-supplied keys (CSEK) are only available for GCS and GCE (https://cloud.google.com/security/encryption/default-encryption#additional_encryption_options_for_cloud_customers). What you can use in BQ is CMEK: keys managed by the client, but generated in KMS, so not outside GCP.

Therefore, I would go for option C, more complex but the only possible.
upvoted 1 times

SamGCP 2 months, 2 weeks ago
All answers are wrong. Right solution is to use External Key Manager with Cloud KMS
<https://cloud.google.com/kms/docs/ekm>
upvoted 2 times

vincy2202 2 months, 2 weeks ago
Selected Answer: D

D seems to be the correct option
<https://cloud.google.com/bigquery/docs/customer-managed-encryption>
upvoted 1 times

🗲️ 👤 **joe2211** 3 months, 1 week ago

Selected Answer: D

vote D
upvoted 4 times

🗲️ 👤 **dmc123** 3 months, 1 week ago

BigQuery is using customer-managed key CMEK
upvoted 1 times

🗲️ 👤 **dmc123** 3 months, 1 week ago

Bigquery only support CMEK option, not CSEK, correct?
upvoted 3 times

🗲️ 👤 **Craigenator** 3 months ago

You are correct, with that said none of the other options really seem feasible tho.
upvoted 2 times

🗲️ 👤 **ACE_ASPIRE** 5 months, 1 week ago

But BQ doesnt support CSEK, only GCS and compute engine support it
upvoted 1 times

🗲️ 👤 **J19G** 5 months ago

"If you want to control encryption yourself, you can use customer-managed encryption keys (CMEK) for BigQuery. Instead of Google managing the key encryption keys that protect your data, you control and manage key encryption keys in Cloud KMS. This topic provides details about this technique." - <https://cloud.google.com/bigquery/docs/customer-managed-encryption>.

Therefore D seems correct. toughs ?
upvoted 3 times

🗲️ 👤 **jask** 5 months ago

The question is asking to 'generate' the key outside GCP. So, you can create your own CSEK and upload it in KMS, to be used by BigQuery.
D is correct.
upvoted 4 times

🗲️ 👤 **Sarin** 6 months ago

D looks correct
upvoted 4 times

🗲️ 👤 **XiaobinJiang** 6 months ago

<https://cloud.google.com/security/encryption/default-encryption>
upvoted 1 times

🗲️ 👤 **victory108** 6 months ago

D. Import a key in Cloud KMS. Create a dataset in BigQuery using the customer-supplied key option and select the created key.
upvoted 3 times

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

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

Correct Answer: D

Community vote distribution

B (89%) 11%

- Highly Voted

5 months, 4 weeks ago

B. Create a key with Cloud Key Management Service (KMS). Set the encryption key on the bucket to the Cloud KMS key.

upvoted 20 times
- Highly Voted

6 months, 1 week ago

B is OK

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

upvoted 6 times
- Most Recent

2 weeks, 1 day ago

2/15/21

upvoted 1 times
- 3 weeks ago

Go for B.

upvoted 1 times
- 1 month ago

I think I more leaned towards B, as per the explanation on these pages <https://cloud.google.com/kms/docs/key-rotation>
<https://cloud.google.com/kms/docs/re-encrypt-data>

upvoted 1 times
- 1 month, 3 weeks ago

Envelope encryption is utilised with CMEK and GMEK. Hence, rotating key in KMS does not change the data encryption key (which is what is asked in the question), but the Key encryption key (KEK). Hence, D. This enables the org to rotate the data encryption key by rewriting the object.

upvoted 2 times
- 2 months, 2 weeks ago

Selected Answer: B

B is the correct answer

upvoted 1 times
- 2 months, 3 weeks ago

Selected Answer: B

Answer B

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

upvoted 1 times
- 2 months, 3 weeks ago

Selected Answer: B

A and C not for simple change of keys. D about AES-256, why that specific one? B is better as uses Google tools

upvoted 1 times
- 3 months ago

Selected Answer: D

Letter D is generic, and make sense.

The key is AES-256.

And you can add this key into boto file, not needed into KMS.



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

upvoted 1 times

  **pakilodi** 3 months ago

Selected Answer: B

Guys B is right here. But why most of the answers here are wrong?
upvoted 2 times

  **joe2211** 3 months, 1 week ago



Selected Answer: B

Vote B
upvoted 2 times

  **nileshlg** 3 months, 1 week ago

Selected Answer: B

B is correct
upvoted 1 times

  **dmc123** 3 months, 1 week ago

I think it is encrypting the bucket (B) , rather than the data (D)
upvoted 1 times

  **gingerbeer** 5 months ago



B. Both B and D can do but there is no requirement for customer supplied. Also it is mentioned "Google recommended way" - leaned to be google service, thus B
upvoted 3 times

  **BSING246** 5 months, 1 week ago

D is correct. It is customer supplied not the KMS created key.
upvoted 1 times

  **BSING246** 4 months, 3 weeks ago

Correction: B is correct. No customer supplied keys.
Why so many questions have wrong answer? Can admin explain this? Its too confusing. The answer should be explained otherwise this is not adding any value to learning...
upvoted 7 times

  **rottzy** 4 months, 3 weeks ago

its not specified"customer supplied key"
upvoted 1 times

  **ACE_ASPIRE** 5 months, 3 weeks ago

CSEK is the correct option....Option D
upvoted 1 times

  **ACE_ASPIRE** 5 months, 1 week ago

B is the correct option...mis typed CSEK
upvoted 2 times

Your team needs to create a Google Kubernetes Engine (GKE) cluster to host a newly built application that requires access to third-party services on the internet.

Your company does not allow any Compute Engine instance to have a public IP address on Google Cloud. You need to create a deployment strategy that adheres to these guidelines. What should you do?

- A. Configure the GKE cluster as a private cluster, and configure Cloud NAT Gateway for the cluster subnet.
- B. Configure the GKE cluster as a private cluster. Configure Private Google Access on the Virtual Private Cloud (VPC).
- C. Configure the GKE cluster as a route-based cluster. Configure Private Google Access on the Virtual Private Cloud (VPC).
- D. Create a Compute Engine instance, and install a NAT Proxy on the instance. Configure all workloads on GKE to pass through this proxy to access third-party services on the Internet.



Correct Answer: B



Reference:



<https://cloud.google.com/architecture/prep-kubernetes-engine-for-prod>

Community vote distribution



A (100%)



  **ACE_ASPIRE** Highly Voted 5 months, 3 weeks ago
Cloud NAT is the correct answer
upvoted 17 times



  **BSING246** Highly Voted 4 months, 3 weeks ago
A is correct.
NAT does not expose GKE private IP. B is connection to on.prem option which is not ask here.
upvoted 6 times



  **VT001** Most Recent 2 weeks, 5 days ago
I got similar question on my exam and answered B.
upvoted 2 times



  **kjindal2003** 2 weeks, 6 days ago
Cloud NAT
upvoted 1 times



  **haroldbenites** 3 weeks ago
Go for A.
upvoted 1 times

  **OrangeTiger** 1 month, 3 weeks ago
I vote A.
I was relieved to see the discussion.
'built application that requires access to third-party services on the internet.'
They needs internet access.
So they needs Cloud NAT.
upvoted 1 times

  **simbu1299** 2 months, 1 week ago
A is the correct answer
upvoted 1 times

  **ABO_Doma** 2 months, 1 week ago
Selected Answer: A
how a private cluster can communicate. On-premises clients can connect to the cluster with the kubectl client. Access to Google Services is provided through Private Google Access, and communication to the internet is available only by using Cloud NAT.
upvoted 2 times

  **vincy2202** 2 months, 2 weeks ago
Selected Answer: A
A is the correct answer
<https://cloud.google.com/nat/docs/overview#NATwithGKE>
upvoted 1 times

  **Bobch** 2 months, 3 weeks ago

Selected Answer: A

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

upvoted 1 times

  **pakilodi** 3 months ago

Selected Answer: A

A is correct here

upvoted 1 times

  **cdcollector** 3 months ago

Selected Answer: A

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

upvoted 2 times

  **cdcollector** 3 months ago

Selected Answer: A

PGA is only for google API's

upvoted 1 times

  **nqthien041292** 3 months ago

Selected Answer: A



Vote A

upvoted 2 times

  **alvjtc** 3 months ago

A. Cloud NAT is the correct answer. You need access to third-party IPs so B is not correct, as provides only access to Google APIs. Cloud NAT allow GKE private nodes to access Internet through Cloud NAT.


upvoted 2 times

  **faceits** 3 months, 2 weeks ago

"B" Should be the right answer:

"One of the options is Private Google Access. Private Google Access enabled allows VM instances which only have internal IP addresses (no external IP addresses) to reach the external IP addresses of Google APIs and services."

upvoted 1 times

  **sam1972** 3 months, 1 week ago

B is not the right answer; Private Google Access only allows access to Google APIs not "third party APIs"

upvoted 3 times

  **xaliq** 3 months, 3 weeks ago

<https://cloud.google.com/kubernetes-engine/docs/best-practices/networking>

upvoted 1 times