- 128 GB of RAM
- 2x 5 TB HDD (RAID 1)
Redis 3 server cluster for metadata, social graph, caching. Each server is:
- Redis 3.2
- 4 core CPUs
- 32GB of RAM
Compute:
40 Web Application servers providing micro-services based APIs and static content.
`"
- Tomcat

Java -
- Nginx
- 4 core CPUs
- 32 GB of RAM
20 Apache Hadoop/Spark servers:
- Data analysis
- Real-time trending calculations
- 8 core CPUs
- 128 GB of RAM
- 4x 5 TB HDD (RAID 1)
3 RabbitMQ servers for messaging, social notifications, and events:
- 8 core CPUs
- 32GB of RAM
Miscellaneous servers:
- Jenkins, monitoring, bastion hosts, security scanners
- 8 core CPUs
- 32GB of RAM
Storage appliances:
iSCSI for VM hosts
Fiber channel SAN `" MySQL databases
- 1 PB total storage; 400 TB available
NAS `" image storage, logs, backups
- 100 TB total storage; 35 TB available

Business Requirements -
Build a reliable and reproducible environment with scaled parity of production.
Improve security by defining and adhering to a set of security and Identity and Access Management (IAM) best practices for cloud.
Improve business agility and speed of innovation through rapid provisioning of new resources.
Analyze and optimize architecture for performance in the cloud.

Technical Requirements -
Easily create non-production environments in the cloud.
Implement an automation framework for provisioning resources in cloud.
Implement a continuous deployment process for deploying applications to the on-premises datacenter or cloud.
Support failover of the production environment to cloud during an emergency.
Encrypt data on the wire and at rest.
Support multiple private connections between the production data center and cloud environment.

Executive Statement -

Our investors are concerned about our ability to scale and contain costs with our current infrastructure. They are also concerned that a competitor could use a public cloud platform to offset their up-front investment and free them to focus on developing better features. Our traffic patterns are highest in the mornings and weekend evenings; during other times, 80% of our capacity is sitting idle.
Our capital expenditure is now exceeding our quarterly projections. Migrating to the cloud will likely cause an initial increase in spending, but we expect to fully transition before our next hardware refresh cycle. Our total cost of ownership (TCO) analysis over the next 5 years for a public cloud strategy achieves a cost reduction between 30% and 50% over our current model.

Question

For this question, refer to the Dress4Win case study. Dress4Win is expected to grow to 10 times its size in 1 year with a corresponding growth in data and traffic that mirrors the existing patterns of usage. The CIO has set the target of migrating production infrastructure to the cloud within the next 6 months. How will you configure the solution to scale for this growth without making major application changes and still maximize the ROI?

A. Migrate the web application layer to App Engine, and MySQL to Cloud Datastore, and NAS to Cloud Storage. Deploy RabbitMQ, and deploy Hadoop servers using Deployment Manager.

B. Migrate RabbitMQ to Cloud Pub/Sub, Hadoop to BigQuery, and NAS to Compute Engine with Persistent Disk storage. Deploy Tomcat, and deploy Nginx using Deployment Manager.

C. Implement managed instance groups for Tomcat and Nginx. Migrate MySQL to Cloud SQL, RabbitMQ to Cloud Pub/Sub, Hadoop to Cloud Dataproc, and NAS to Compute Engine with Persistent Disk storage.

D. Implement managed instance groups for the Tomcat and Nginx. Migrate MySQL to Cloud SQL, RabbitMQ to Cloud Pub/Sub, Hadoop to Cloud Dataproc, and NAS to Cloud Storage.

MeasService Highly Voted 4 years, 8 months ago
Why do we need to put NAS data on persistant disk and not on GCS ? I would go with D!
upvoted 43 times

techalik 3 years, 6 months ago
1. Use Cloud Marketplace to provision Tomcat and Nginx on Google Compute Engine.

2. Replace MySQL with Cloud SQL for MySQL.

3. Use the Deployment Manager to provision Jenkins on Google Compute Engine. is the right answer.

As explained above, you would use Cloud SQL to replace MySQL. For the other requirements, i.e. Nginx/Tomcat and Jenkins, you can dep these through Cloud Deployment Manager by using custom images.

Ref: https://cloud.google.com/compute/docs/images

Using the same custom images every time ensures that your environments are "reliable and reproducible" and you achieve "rapid provisioning".

D
upvoted 11 times

nitinz 3 years, 3 months ago
ans is D
upvoted 4 times

tartar 3 years, 10 months ago
D is ok
upvoted 11 times

Jphix 3 years, 5 months ago
Agreed. Looking to maximize ROI as well according to the question, and even the most expensive cloud storage is still going to be half price of cheapest Persistent Disk storage, and that's without even including your compute costs. D all the way.
upvoted 3 times

KouShikyou Highly Voted 4 years, 8 months ago

I prefer D.
Original NAS is for image, log, backup. GCS fits it perfectly.

upvoted 21 times

exampanic 4 years, 5 months ago

I agree that GCS fits perfectly for storing images, log, backup. However, the question asks to avoid major application changes. GCS is not NAS, meaning it does not provide SMB or NFS shares. Therefore moving the NAS files to Google Cloud Storage would require a major application change in the way they access these files. I believe the correct answer would be C.

upvoted 10 times

poseidon24 2 years, 10 months ago

It can, check on Cloud Storage FUSE. Buckets can be mounted as file systems.

upvoted 4 times

mesodan Most Recent 3 months, 2 weeks ago

Selected Answer: D

Use case suitability:
Cloud Storage: Ideally suited for storing large, unstructured data like images, videos, and backups, which is likely the case for Dress4Win's NA data.
Persistent Disk: More appropriate for frequently accessed data that requires block-level access, such as databases or operating systems for virtual machines.

upvoted 1 times

kampatra 4 months, 1 week ago

Selected Answer: D

Correct Ans: A
NAS `" image storage, logs, backups : for storing images, logs and backups Cloud Storage is best practice and cost effective also.

upvoted 1 times

kampatra 4 months, 1 week ago

Wrongly typed A, it must be D

upvoted 1 times

mbacelar 6 months, 1 week ago

Selected Answer: D

Should be D

upvoted 1 times

MahAli 6 months, 1 week ago

Selected Answer: C

Voting c NAS could have been replaced with file store to minimize any change, moving to GCS is not that easy change in overall architecture

upvoted 1 times

Jannchie 6 months, 1 week ago

Selected Answer: C

C, because we can run some script on NAS. It can
act like a normal server. But GCS cannot.

upvoted 2 times

techtitan 6 months, 2 weeks ago

Selected Answer: C

without making major application changes and still maximize the ROI --> compute engine with persistent disk. without knowing access patter GCS may not be an easy change.

upvoted 1 times

thamaster 1 year, 5 months ago

Selected Answer: D

you don't need NAS to store archive and Image disk

upvoted 1 times

amxexam 2 years ago

Selected Answer: D

D is the correct chand equivalent mapping

upvoted 1 times

[Removed] 2 years, 3 months ago

D is OK

https://cloud.google.com/architecture/filers-on-compute-engine?hl=en#managed_file_storage_solutions

upvoted 2 times

MF2C 2 years, 5 months ago

SAN -> persistent disk, NAS -> Cloud Storage

upvoted 2 times

edilramos 2 years, 5 months ago

Managed Instances With Tomcat and Nginx would bring the minimum necessary tweaking to the new environment.
Migrating from MySql to Cloud SQL does not require any syntax changes.
Moving from Rabbit MQ to Pub/Sub is relatively straightforward and has very complete documentation.
DataProc has Libraries and tools to ensure Apache Hadoop interoperability.
Without many changes in the environment, mainly keeping the original architecture, Datastorage will keep the presentation characteristics of a shared area, mapped to the instances.

upvoted 2 times

phantomsg 2 years, 6 months ago

Selected Answer: C

The answer should be C. 'A' and 'B' are ruled out as they introduce significant architecture changes. or irrelevant. 'D' is fine except proposes replace NAS with Cloud Storage. This will introduce major architectural changes. Instead, if the choice was to move 'NAS' to 'Cloud Filestore' then it would have made sense. Answer 'C' is the closest with the least amount of architectural changes involved in migration.

upvoted 3 times

joe2211 2 years, 6 months ago

Selected Answer: D

vote D

upvoted 3 times

kopper2019 2 years, 11 months ago

hey guys new Qs posted as of July 12th, 2021, All 21 new Qs in Question #152

upvoted 1 times

anku15 2 years, 9 months ago

I dont see the questions now. Did you remove it?

upvoted 1 times

victory108 2 years, 11 months ago

D. Implement managed instance groups for the Tomcat and Nginx. Migrate MySQL to Cloud SQL, RabbitMQ to Cloud Pub/Sub, Hadoop to Cloud Dataproc, and NAS to Cloud Storage.

upvoted 1 times

Question #2 *Topic 12*

Introductory Info

Company Overview -

Dress4Win is a web-based company that helps their users organize and manage their personal wardrobe using a web app and mobile application. The company also cultivates an active social network that connects their users with designers and retailers. They monetize their services through advertising, e-commerce, referrals, and a freemium app model. The application has grown from a few servers in the founder's garage to several hundred servers and appliances in a colocated data center. However, the capacity of their infrastructure is now insufficient for the application's rapid growth. Because of this growth and the company's desire to innovate faster, Dress4Win is committing to a full migration to a public cloud.

Solution Concept -

For the first phase of their migration to the cloud, Dress4Win is moving their development and test environments. They are also building a disaster recovery site, because their current infrastructure is at a single location. They are not sure which components of their architecture they can migrate as is and which components they need to change before migrating them.

Existing Technical Environment -

The Dress4Win application is served out of a single data center location. All servers run Ubuntu LTS v16.04.

Databases:

MySQL. 1 server for user data, inventory, static data:

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Compute:

40 Web Application servers providing micro-services based APIs and static content.

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- Tomcat

Java -

- Nginx
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Executive Statement -
Our investors are concerned about our ability to scale and contain costs with our current infrastructure. They are also concerned that a competitor could use a public cloud platform to offset their up-front investment and free them to focus on developing better features. Our traffic patterns are highest in the mornings and weekend evenings; during other times, 80% of our capacity is sitting idle.
Our capital expenditure is now exceeding our quarterly projections. Migrating to the cloud will likely cause an initial increase in spending, but we expect to fully transition before our next hardware refresh cycle. Our total cost of ownership (TCO) analysis over the next 5 years for a public cloud strategy achieves a cost reduction between 30% and 50% over our current model.

Question
For this question, refer to the Dress4Win case study. Considering the given business requirements, how would you automate the deployment of web and transactional data layers?

A. Deploy Nginx and Tomcat using Cloud Deployment Manager to Compute Engine. Deploy a Cloud SQL server to replace MySQL. Deploy Jenkins using Cloud Deployment Manager.

B. Deploy Nginx and Tomcat using Cloud Launcher. Deploy a MySQL server using Cloud Launcher. Deploy Jenkins to Compute Engine using Cloud Deployment Manager scripts.

C. Migrate Nginx and Tomcat to App Engine. Deploy a Cloud Datastore server to replace the MySQL server in a high-availability configuration. Deploy Jenkins to Compute Engine using Cloud Launcher.

D. Migrate Nginx and Tomcat to App Engine. Deploy a MySQL server using Cloud Launcher. Deploy Jenkins to Compute Engine using Cloud Launcher.

jcmoranp Highly Voted 4 years, 1 month ago
It's A, "Cloud Datastore server" doesn't exist. A fits OK.
upvoted 26 times

nitinz 2 years, 9 months ago
A is the answer
upvoted 2 times

cetanx 3 years, 4 months ago

Also, GAE uses Jetty for http and servlet engine. Therefore Tomcat cannot be run on GAE (unless on flexible env.) - this rules out "C and D

upvoted 2 times

tartar 3 years, 4 months ago

A is ok

upvoted 5 times

Jphix 2 years, 11 months ago

agreed, A. For those saying C, the question is about "automating the deployment" in line with the business requirements. Going fron MySQL to datastore might be a good idea long term, but it won't make automating the deployment to the cloud any easier or smoot Automate the deployment to Cloud SQL because it's a natural fit, and once that's working, re-assess the requirements to decide if it worth the hefty lift of shifting from MySQL to a NoSQL Document DB.

upvoted 1 times

Eroc Highly Voted 4 years, 1 month ago

The requriements also specify:
"Easily create non-production environment in the cloud.
Implement an automation framework for provisioning resources in cloud.
Implement a continuous deployment process for deploying applications to the on-premises datacenter or cloud."
So A is better.

upvoted 11 times

SSQX 3 years, 8 months ago

You can only deploy Jenkins with Cloud Launcher, not with Deployment manager

upvoted 2 times

Ayzen 3 years, 7 months ago

Jenkins is just an app that should be run on a VM. You definitely can use Deployment Manager to set up a VM with needed image.

upvoted 3 times

theBestStudent Most Recent 1 week, 2 days ago

Selected Answer: D

For me is D:
- Deploy NGINX and and Tomcat to App Engine, so both can scale up and down automatically
- Deploy MySQL server using Cloud Launcer (nowadays called Marketplace)
- Deploy Jenkins to Compute Engine using Cloud Launcher (nowadays called MarketPlace): Here literally they are choosing an instance (a compute instance to do so through MarketPlace) https://cloud.google.com/architecture/using-jenkins-for-distributed-builds-on-compute-eng

Answer A can not be. it talks about SQL Server, why to bring that? Plus the way they want ton tackle Jenkins installation makes no sense if yo already have MarketPlace. Also I'm ok that compute instances for NGINX and Tomcat could fit, BUT it doesn't talk about MIG or not MIG. It is ensuring right declaration to have MIG and scale them up down through it will be in place.

Answer is D.

upvoted 1 times

tuan072090 3 months, 1 week ago

Selected Answer: A

A is the most sense answer

upvoted 1 times

joe2211 2 years ago

Selected Answer: A

vote A

upvoted 1 times

victory108 2 years, 5 months ago

A. Deploy Nginx and Tomcat using Cloud Deployment Manager to Compute Engine. Deploy a Cloud SQL server to replace MySQL. Deploy Jenkins using Cloud Deployment Manager.

upvoted 2 times

MamthaSJ 2 years, 5 months ago

Answer is A

upvoted 2 times

gosi 2 years, 7 months ago

D. With produciton parity, you cant replace MySQL with 128 GB of memory with Cloud SQL as there is no such image available. I have check
it. MySQL has to go on GCE with PD
I would go for either go for B or D.
D is better because it is scalable better than B as B has no details if it is going to use MIG or just fleet of tomcat servers for web apps.

upvoted 1 times

Ausias18 2 years, 8 months ago

Answer is A

upvoted 1 times

vruizm 2 years, 9 months ago

I think B is a valid response, please check:
https://cloud.google.com/blog/products/it-ops/google-cloud-launcher-simplifies-running-third-party-apps-in-the-cloud
and
https://medium.com/@PeetDenny/automated-provisioning-of-jenkins-on-google-cloud-c297b2e0be2

upvoted 2 times

bnlcnd 2 years, 10 months ago

the question and the answers are so confusing. what is "Cloud Launcher"? Never heard of it.
Only A does not mention that launcher thingy. I can only choose A.

upvoted 2 times

Wira 2 years, 9 months ago

its an old question - its cloud marketplace now

given size of mysql and type of data, the only valid choice is C for me

upvoted 2 times

pawel_ski 2 years, 9 months ago

It's the previous name of GCP Marketplace.

upvoted 1 times

ybe_gcp_cert 2 years, 11 months ago

A or B;
B doesn't tell which automation tool is used to deploy Cloud SQL. Cloud launcher generates Cloud Deployment Manager scripts. I would go
B

upvoted 1 times

ybe_gcp_cert 2 years, 11 months ago

Sorry A doesn't tell which tool is used to deploy Cloud SQL.
I would go with B.

upvoted 1 times

Mndwsk 3 years ago

B.
Only option that automates the deployment of all the tools mentioned.
Cloud Launcher creates a Deployment in Deployment Manager.

upvoted 1 times

SKSKSK 3 years, 1 month ago

After reading the question more and kind of linking back to question one, i think it's asking how to "automate the deployment" of web and transactional data layers". In that case, I think focus on deployment automation of existing technology might be a better than mapping new cl technology in this case? so, A might be a better fit?

upvoted 1 times

homer_simpson 3 years, 1 month ago

the answer is A because datastore is nosql db and in business requirements it is clarly sais that improve bussiness agility and speed innovatic through rapid provisoning of new ressources

upvoted 1 times

brati_sankar 3 years, 2 months ago

I believe this is D. Here is my logic.
In D we are using a MySQL from the Marketplace. Presently, on-prem the amount of data is 600 TB (1 PB SAN for MySQL of which 400 TB is free) . This would not go in Cloud SQL which has a limit of 30 TB. Hence, we must go for MySQL on compute using Launcher/Marketplace.

upvoted 4 times

roastc 3 years, 2 months ago

I don't think there is any automation mentioned while using Cloud Launcher. So the answer should be A

upvoted 2 times

Question #3 *Topic 12*

Introductory Info

Company Overview -

Dress4Win is a web-based company that helps their users organize and manage their personal wardrobe using a web app and mobile application. The company also cultivates an active social network that connects their users with designers and retailers. They monetize their services through advertising, e-commerce, referrals, and a freemium app model. The application has grown from a few servers in the founder's garage to several hundred servers and appliances in a colocated data center. However, the capacity of their infrastructure is now insufficient for the application's rapid growth. Because of this growth and the company's desire to innovate faster, Dress4Win is committing to a full migration to a public cloud.

Solution Concept -

For the first phase of their migration to the cloud, Dress4Win is moving their development and test environments. They are also building a disaster recovery site, because their current infrastructure is at a single location. They are not sure which components of their architecture they can migrate as is and which components they need to change before migrating them.

Existing Technical Environment -

The Dress4Win application is served out of a single data center location. All servers run Ubuntu LTS v16.04.

Databases:

MySQL. 1 server for user data, inventory, static data:

- MySQL 5.8
- 8 core CPUs
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- 32GB of RAM

Compute:

40 Web Application servers providing micro-services based APIs and static content.

`"

- Tomcat

Java -

- Nginx
- 4 core CPUs
- 32 GB of RAM

20 Apache Hadoop/Spark servers:

- Data analysis

- Real-time trending calculations
- 8 core CPUs
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NAS `" image storage, logs, backups
- 100 TB total storage; 35 TB available

Business Requirements -
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Analyze and optimize architecture for performance in the cloud.

Technical Requirements -
Easily create non-production environments in the cloud.
Implement an automation framework for provisioning resources in cloud.
Implement a continuous deployment process for deploying applications to the on-premises datacenter or cloud.
Support failover of the production environment to cloud during an emergency.
Encrypt data on the wire and at rest.
Support multiple private connections between the production data center and cloud environment.

Executive Statement -
Our investors are concerned about our ability to scale and contain costs with our current infrastructure. They are also concerned that a competitor could use a public cloud platform to offset their up-front investment and free them to focus on developing better features. Our traffic patterns are highest in the mornings and weekend evenings; during other times, 80% of our capacity is sitting idle.
Our capital expenditure is now exceeding our quarterly projections. Migrating to the cloud will likely cause an initial increase in spending, but we expect to fully transition before our next hardware refresh cycle. Our total cost of ownership (TCO) analysis over the next 5 years for a public cloud strategy achieves a cost reduction between 30% and 50% over our current model.

Question

For this question, refer to the Dress4Win case study. Which of the compute services should be migrated as-is and would still be an optimized architecture for performance in the cloud?

A. Web applications deployed using App Engine standard environment

B. RabbitMQ deployed using an unmanaged instance group

C. Hadoop/Spark deployed using Cloud Dataproc Regional in High Availability mode

D. Jenkins, monitoring, bastion hosts, security scanners services deployed on custom machine types

Hemant_C Highly Voted 3 years ago

Question is about compute services to be migrated as ""is and would still be an optimized architecture for performance - Apache Hadoop/Sp servers underline is compute and Hadoop/Spark deployed using Cloud Dataproc seems to be the correct answer.. Hence C seems correct answer to me

upvoted 29 times

SAMBIT 1 year, 3 months ago

They are not sure which components of their architecture they can migrate as is and which components they need to change before migra them.

upvoted 1 times

jcmoranp Highly Voted 3 years, 7 months ago

It's D. You cannot migrate to APP Engine "as-is"

upvoted 19 times

tartar 2 years, 10 months ago

C is ok

upvoted 11 times

army234 2 years, 2 months ago

C is correct

upvoted 7 times

akhilesh_pundir Most Recent 4 months, 2 weeks ago

Read the previous questions ... they are going to use Managed instance groups with Tomcat &nginx installed on that so app engine is not in picture. Hadoop workloads goes to dataproc as it is.

upvoted 1 times

OrangeTiger 1 year, 5 months ago

Selected Answer: C

I agree with C.
'as-is'

upvoted 4 times

ABO_Doma 1 year, 6 months ago

Google Cloud includes Dataproc, which is a managed Hadoop and Spark environment. You can use Dataproc to run most of your existing job with minimal alteration, so you don't need to move away from all of the Hadoop tools you already know.

upvoted 2 times

ABO_Doma 1 year, 6 months ago

Selected Answer: C

Answer is C

upvoted 2 times

joe2211 1 year, 6 months ago

Selected Answer: C

vote C

upvoted 2 times

victory108 1 year, 11 months ago

C. Hadoop/Spark deployed using Cloud Dataproc Regional in High Availability mode

upvoted 6 times

MamthaSJ 1 year, 11 months ago

Answer is C

upvoted 4 times

Ausias18 2 years, 2 months ago

Answer is C

upvoted 2 times

hkmsn 2 years, 3 months ago

A. Web applications deployed using App Engine standard environment - there are multiple web apps, seems project limit of 1 - and not clear the implications of Standard Env, with Nginx (there seems to be discussions) -- no not clear on this.
B. RabbitMQ - is always replaced by Pub/Sub - So No.
C. Hadoop/Spark - This is a well know Use Case
D. Jenkins, Etc, these duplicate GCP products so it can't be the answer.

My bet is C

upvoted 2 times

ahmedemad3 2 years, 4 months ago

ans: C
compute services should be migrated as is and would still be an optimized architecture for performance in the cloud?

upvoted 1 times

bnlcnd 2 years, 4 months ago

It's C. hardoop == dataproc. pretty much a cloud version.
D is "Jenkins, monitoring, bastion hosts, security scanners". How can you make them as-is to run in cloud? Monitoring? on-prem to cloud no change? security scanner? no change?

upvoted 3 times

BobBui 2 years, 4 months ago

I choose C

upvoted 1 times

okixavi 2 years, 6 months ago

C is the correct answer. The question says: "...as is"

upvoted 1 times

practicioner 2 years, 7 months ago

C and D make sense. However, "would still be an optimized architecture". In this case, I chose C because we can move our services as is and can get significant benefits from GCP

upvoted 1 times

gcparchitect007 2 years, 7 months ago

C is correct answer.

upvoted 1 times

Question #4 *Topic 12*

Introductory Info

Company Overview -

Dress4Win is a web-based company that helps their users organize and manage their personal wardrobe using a web app and mobile application. The company also cultivates an active social network that connects their users with designers and retailers. They monetize their services through advertising, e-commerce, referrals, and a freemium app model. The application has grown from a few servers in the founder's garage to several hundred servers and appliances in a colocated data center. However, the capacity of their infrastructure is now insufficient for the application's rapid growth. Because of this growth and the company's desire to innovate faster, Dress4Win is committing to a full migration to a public cloud.

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Question

For this question, refer to the Dress4Win case study. To be legally compliant during an audit, Dress4Win must be able to give insights in all administrative actions that modify the configuration or metadata of resources on Google Cloud.
What should you do?

A. Use Stackdriver Trace to create a Trace list analysis.

B. Use Stackdriver Monitoring to create a dashboard on the project's activity.

C. Enable Cloud Identity-Aware Proxy in all projects, and add the group of Administrators as a member.

D. Use the Activity page in the GCP Console and Stackdriver Logging to provide the required insight.

MeasService Highly Voted 2 years, 2 months ago
D is the correct answer !
https://cloud.google.com/logging/docs/audit/
upvoted 49 times

nitinz 9 months, 2 weeks ago
ans is D
upvoted 3 times

mikey007 1 year, 6 months ago
Agree,...
upvoted 3 times

newbie2020 1 year, 11 months ago
Agree, Answer is D
upvoted 4 times

Eroc 2 years, 1 month ago
I agree
upvoted 3 times

joe2211 Most Recent 3 weeks ago
Selected Answer: D
vote D
upvoted 2 times

Shahariargcppca 1 month, 3 weeks ago
answer is d
upvoted 1 times

victory108 5 months ago
D. Use the Activity page in the GCP Console and Stackdriver Logging to provide the required insight.
upvoted 1 times

MamthaSJ 5 months, 1 week ago
Answer is D..
upvoted 3 times

Ausias18 8 months, 3 weeks ago
Answer is D
upvoted 1 times

lynx256 8 months, 3 weeks ago
IMO - D is ok
upvoted 2 times

pihuanshu 10 months, 2 weeks ago
D should be
upvoted 2 times

bnlcnd 10 months, 2 weeks ago
D for sure
upvoted 2 times

Chulbul_Pandey 1 year ago
D is the choice
upvoted 1 times

gcparchitect007 1 year, 1 month ago
D is the right answer.
upvoted 1 times

homer_simpson 1 year, 1 month ago
the answer is D

Admin Activity audit logs
Admin Activity audit logs contain log entries for API calls or other administrative actions that modify the configuration or metadata of resource
For example, these logs record when users create VM instances or change Identity and Access Management permissions.

To view these logs, you must have the IAM role Logging/Logs Viewer or Project/Viewer.
upvoted 1 times

Kabiliravi 1 year, 3 months ago
D is correct
upvoted 1 times

wiqi 1 year, 3 months ago
D is correct.
upvoted 1 times

mbiy 1 year, 4 months ago
D is the correct option
upvoted 1 times

ry9280087 1 year, 4 months ago
Seriously GCP must have written these answers as poison pills.
upvoted 3 times

mlantonis 1 year, 5 months ago
Yeah D is the correct
upvoted 2 times

Question #5 *Topic 12*

Introductory Info
Company Overview -
Dress4Win is a web-based company that helps their users organize and manage their personal wardrobe using a web app and mobile application. The company also cultivates an active social network that connects their users with designers and retailers. They monetize their services through advertising, e-commerce, referrals, and a freemium app model. The application has grown from a few servers in the founder's garage to several

hundred servers and appliances in a colocated data center. However, the capacity of their infrastructure is now insufficient for the application's rapid growth. Because of this growth and the company's desire to innovate faster, Dress4Win is committing to a full migration to a public cloud.

Solution Concept -
For the first phase of their migration to the cloud, Dress4Win is moving their development and test environments. They are also building a disaster recovery site, because their current infrastructure is at a single location. They are not sure which components of their architecture they can migrate as is and which components they need to change before migrating them.

Existing Technical Environment -
The Dress4Win application is served out of a single data center location. All servers run Ubuntu LTS v16.04.
Databases:
MySQL. 1 server for user data, inventory, static data:
- MySQL 5.8
- 8 core CPUs
- 128 GB of RAM
- 2x 5 TB HDD (RAID 1)
Redis 3 server cluster for metadata, social graph, caching. Each server is:
- Redis 3.2
- 4 core CPUs
- 32GB of RAM
Compute:
40 Web Application servers providing micro-services based APIs and static content.
`"
- Tomcat

Java -
- Nginx
- 4 core CPUs
- 32 GB of RAM
20 Apache Hadoop/Spark servers:
- Data analysis
- Real-time trending calculations
- 8 core CPUs
- 128 GB of RAM
- 4x 5 TB HDD (RAID 1)
3 RabbitMQ servers for messaging, social notifications, and events:
- 8 core CPUs
- 32GB of RAM
Miscellaneous servers:
- Jenkins, monitoring, bastion hosts, security scanners
- 8 core CPUs
- 32GB of RAM
Storage appliances:
iSCSI for VM hosts
Fiber channel SAN `" MySQL databases
- 1 PB total storage; 400 TB available
NAS `" image storage, logs, backups
- 100 TB total storage; 35 TB available

Business Requirements -

Build a reliable and reproducible environment with scaled parity of production.
Improve security by defining and adhering to a set of security and Identity and Access Management (IAM) best practices for cloud.
Improve business agility and speed of innovation through rapid provisioning of new resources.
Analyze and optimize architecture for performance in the cloud.

Technical Requirements -
Easily create non-production environments in the cloud.
Implement an automation framework for provisioning resources in cloud.
Implement a continuous deployment process for deploying applications to the on-premises datacenter or cloud.
Support failover of the production environment to cloud during an emergency.
Encrypt data on the wire and at rest.
Support multiple private connections between the production data center and cloud environment.

Executive Statement -
Our investors are concerned about our ability to scale and contain costs with our current infrastructure. They are also concerned that a competitor could use a public cloud platform to offset their up-front investment and free them to focus on developing better features. Our traffic patterns are highest in the mornings and weekend evenings; during other times, 80% of our capacity is sitting idle.
Our capital expenditure is now exceeding our quarterly projections. Migrating to the cloud will likely cause an initial increase in spending, but we expect to fully transition before our next hardware refresh cycle. Our total cost of ownership (TCO) analysis over the next 5 years for a public cloud strategy achieves a cost reduction between 30% and 50% over our current model.

Question
For this question, refer to the Dress4Win case study. You are responsible for the security of data stored in Cloud Storage for your company, Dress4Win. You have already created a set of Google Groups and assigned the appropriate users to those groups. You should use Google best practices and implement the simplest design to meet the requirements.
Considering Dress4Win's business and technical requirements, what should you do?

A. Assign custom IAM roles to the Google Groups you created in order to enforce security requirements. Encrypt data with a customer-supplied encryption key when storing files in Cloud Storage.

B. Assign custom IAM roles to the Google Groups you created in order to enforce security requirements. Enable default storage encryption before storing files in Cloud Storage.

C. Assign predefined IAM roles to the Google Groups you created in order to enforce security requirements. Utilize Google's default encryption at rest when storing files in Cloud Storage.

D. Assign predefined IAM roles to the Google Groups you created in order to enforce security requirements. Ensure that the default Cloud KMS key is set before storing files in Cloud Storage.

JoeShmoe Highly Voted 5 years, 1 month ago
C is the simplest
upvoted 34 times

AWS56 4 years, 11 months ago

I am a bit confused "You should use Google best practices and implement the simplest design to meet the requirements." ---> Simplest -- agree with D, but for googles best practice I will go with A

upvoted 3 times

AWS56 4 years, 11 months ago

Ignore my comment, Agree C is the simple -- https://cloud.google.com/compute/docs/disks/customer-supplied-encryption

upvoted 4 times

tartar 4 years, 4 months ago

C is ok

upvoted 5 times

rockstar9622 4 years, 11 months ago

c is correct - going by simplest design whereas google manages the encrytion though by default and thats sufficient

upvoted 2 times

nitinz 3 years, 9 months ago

ans is C

upvoted 3 times

kimharsh 2 years, 8 months ago

how come it's C , and for best practice we need to use Custom Roles

upvoted 1 times

newbie2020 Highly Voted 4 years, 11 months ago

There 2 requirements
1) best practices = least privilege = custom role
2) simplest = default encryption as
: If you use customer-supplied encryption keys or client-side encryption, you must securely manage your keys and ensure that they are not lo
you lose your keys, you are no longer able to read your data, and you continue to be charged for storage of your objects until you delete them

upvoted 12 times

Dannyygcp 4 years, 9 months ago

What about option B..default encryption[which is simple to manage] + Custom role[which is secure compared to predefined and not difficu
create]

upvoted 3 times

sivass 4 years, 7 months ago

I agrre. I will go with B.

upvoted 5 times

GCP_Azure 4 years, 7 months ago

It has to be B

upvoted 4 times

Rafaa 4 years, 6 months ago

there is no option to 'enable default encyption' as such! It is provided by default if you dont do anything.

upvoted 2 times

Vika 3 years, 8 months ago

Check out this link - https://cloud.google.com/iam/docs/using-iam-securely

Basic roles include thousands of permissions across all Google Cloud services. In production environments, do not grant basic roles unles
there is no alternative. Instead, grant the most limited predefined roles or custom roles that meet your needs.

upvoted 1 times

tlopsm Most Recent 6 months, 1 week ago

Selected Answer: C

C is answer

upvoted 1 times

Ahmed_Safwat 1 year, 1 month ago

Selected Answer: D

Encrypt Cloud Storage data with Cloud KMS

upvoted 1 times

SAMBIT 2 years, 9 months ago

B custom IAM & out of box encryption

upvoted 1 times

joe2211 3 years ago

Selected Answer: C

vote C

upvoted 2 times

kopper2019 3 years, 5 months ago

hey guys new Qs posted as of July 12th, 2021, All 21 new Qs in Question #152

upvoted 1 times

kopper2019 3 years, 5 months ago

hey guys new Qs posted as of July 12th, 2021, All 21 new Qs in Question #152

upvoted 1 times

victory108 3 years, 5 months ago

C. Assign predefined IAM roles to the Google Groups you created in order to enforce security requirements. Utilize Google‰€™s default encryption at rest when storing files in Cloud Storage.

upvoted 2 times

MamthaSJ 3 years, 5 months ago

Answer is B

upvoted 1 times

wilwong 3 years, 5 months ago

C is correct

upvoted 1 times

Pb55 3 years, 7 months ago

C. Best practice is predefined not custom. Only use custom when predefined to broard.

upvoted 1 times

ansh0692 3 years, 8 months ago

From "Google's best practices and simplest design" Answer should be C

upvoted 1 times

Skeeter 3 years, 8 months ago

Cloud storage encryption is enabled by default. Why would you need to enable it as stated in B? Answer is A, use CSEK and specify a .boto f during upload with gsutil, simple!

upvoted 2 times

Ausias18 3 years, 8 months ago

it says simple, what you say is not as easy as possible... default encryption is easier

upvoted 1 times

Ausias18 3 years, 8 months ago

Answer is B

upvoted 1 times

lynx256 3 years, 8 months ago

IMO - C is ok

Question #6 *Topic 12*

Introductory Info

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