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.

KouShikyou Highly Voted 5 years, 2 months ago
I think B is correct answer.
upvoted 44 times

tartar 4 years, 4 months ago
B is ok
upvoted 8 times

kumarp6 4 years, 1 month ago
Its quite a fun to use Transfer Appliance for DR, I think answer is B
upvoted 6 times

Sur_Nikki 1 year, 7 months ago
Actually, how ca this be given as a option even?
upvoted 1 times

nitinz 3 years, 9 months ago
only B works
upvoted 1 times

MeasService Highly Voted 5 years, 2 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 and B, B seems to be more nearest answer. One would not have direct peering and Dedicated interconnect in a solution
upvoted 27 times

Ekramy_Elnaggar Most Recent 4 weeks, 1 day ago
Selected Answer: B
Dedicated Interconnect as Primary , and Cloud VPN as Backup
upvoted 1 times

nareshthumma 1 month, 3 weeks ago
answer is B
upvoted 1 times

hitmax87 7 months ago
Selected Answer: B
I go to B, because direct peering anyway requires VPN connection if you want to get access to VPC.
upvoted 3 times

MahAli 1 year ago

Selected Answer: A

Why you guys are choosing VPN? the reason to use Dedicated Interconnect is to have the max bandwidth available, does VPN give you that option in the first place? why not thinking about separate direct peering connection which might give a better performance than VPN?

upvoted 2 times

MahAli 1 year ago

BTW with direct peering you are going through the service provider network which makes more sense to get different connectivity option

upvoted 1 times

Diwz 8 months, 1 week ago

Direct peering allows only on premises to connect to Google services in GCP . If needed to connect with Google workspace where all projects hosted they dedicated or partner interconnect is required.
https://cloud.google.com/network-connectivity/docs/direct-peering

B is the best answer

upvoted 2 times

AdityaGupta 1 year, 2 months ago

You need to develop procedures to verify resilience of disaster recovery for remote recovery using GCP. Your production environment is hoste 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 netwo if Dedicated Interconnect fails.

Why Not A, as question asks "to establish a secure, redundant connection between your on-premises network and the GCP network."

Is VPN considered more reliable than Direct Peering?? Both VPN and Direct Peering will provide redundant connection.
I am not concerned about cost Direct Interconnect is already there.

upvoted 1 times

FaizAhmed 1 year, 5 months ago

Selected Answer: B

B is right,

upvoted 1 times

omermahgoub 1 year, 12 months ago

The correct answer is B. Verify that Dedicated Interconnect can replicate files to GCP. Verify that Cloud VPN can establish a secure connectio between your networks if Dedicated Interconnect fails.

Dedicated Interconnect is a connection that provides a private, dedicated connection between your on-premises network and GCP over a Google-owned network. It is a secure and reliable option for connecting your on-premises network to GCP. You can use it to replicate files to GCP as a part of your disaster recovery plan.

If Dedicated Interconnect fails for any reason, it is a good idea to have a backup solution in place to establish a secure connection between y networks. Cloud VPN is a secure and reliable solution for establishing a connection between your on-premises network and GCP. It uses a vir private network (VPN) tunnel to securely connect the networks, and it is a good backup option if Dedicated Interconnect fails.

upvoted 7 times

omermahgoub 1 year, 12 months ago

The Transfer Appliance is a physical storage device that you can use to transfer large amounts of data from your on-premises storage to G It is not a connection option and cannot be used to establish a secure connection between your on-premises network and GCP. Therefore, options C and D are not correct.

upvoted 1 times

stefanop 1 year ago

Why not A? Is Cloud VPN better than Direct Peering in this scenario?

upvoted 2 times

megumin 2 years, 1 month ago

Selected Answer: B

B is ok

upvoted 1 times

zr79 2 years, 2 months ago

For DR with Google Cloud and on-prem use Dedicated Interconnect with HA VPN

upvoted 1 times

AzureDP900 2 years, 2 months ago

B is right without any second thought. Question is straight forward.

upvoted 1 times

Rajeev26 2 years, 2 months ago

Selected Answer: B

Transfer appliance you need to carry to GCP center like water bottle :)

upvoted 1 times

abirroy 2 years, 3 months ago

Selected Answer: B

Verify that Dedicated Interconnect can replicate files to GCP. Verify that direct peering can establish a secure connection between your networ
if Dedicated Interconnect fails.

upvoted 1 times

alexandercamachop 2 years, 3 months ago

It is definitely B
1. Interconnect is the first option so that is right.
2. Eliminates A, since Direct Peering is not supported in GCP, the option is Google Cloud VPN connection to onpremises site.

upvoted 3 times

BeCalm 1 year, 9 months ago

GCP supports direct peering in 100 locations

upvoted 2 times

DrishaS4 2 years, 4 months ago

Selected Answer: B

Transfer appliance is a physical appliance for transferring huge bulk of data. does not fit into disaster recovery testing

upvoted 1 times

Matalf 2 years, 4 months ago

Selected Answer: B

Question #81 *Topic 1*

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.

Eroc Highly Voted 5 years, 1 month 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 a
D as viable answers. The question says only some are not time-critical which implies others are... this means preemptible VMs are good beca
they will secure a spot for scaling when needed. So I'm also going to choose B.

upvoted 40 times

Musk 4 years, 4 months ago
If others are time-critical, preemtible does not fit. Answer is D.
upvoted 11 times

army234 3 years, 8 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 6 times

AzureDP900 2 years, 2 months ago
agree otherwise answer goes to non-preemtible VM's
upvoted 2 times

Sur_Nikki 1 year, 7 months ago
Ver well said..."In an exam it's important to not being in individual assumptions and focus on the information in question. Key word h is "not time-critical""
upvoted 2 times

Darahaas 4 years, 3 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 3 times

Sur_Nikki 1 year, 7 months ago
Correctly explained
upvoted 1 times

AzureDP900 2 years, 2 months ago
correct
upvoted 1 times

netizens 10 months, 1 week ago
Why you decided to emphasize on key word "not time-critical" but not" "operates nationally"?
upvoted 1 times

Karna Highly Voted 4 years, 5 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 20 times

[Removed] 4 years, 4 months ago
I dont think it means use premtible vms for everything. It says to use preemtible vms to reduce cost
upvoted 10 times

desertlotus1211 Most Recent 2 weeks ago
Selected Answer: A
The answer is A. Though some workloads are critical, the question is really asking about saving costs on the non-critical workloads. it's alread understood that some workloads will incur a cost. So 'how' do we save in general?? Use preemptible VMs.
upvoted 1 times

nareshthumma 1 month, 3 weeks ago
Answer is B
upvoted 1 times

Ponchi14 5 months, 2 weeks ago
D is the correct answer and for the following regions:
1. Deploying a read replica and then manually failing over by stopping the current cloud SQL instance will only impact the authentication layer which is what we're looking to test.
2. Stopping all VM's won't have an impact on the authentication layer testing becasuse Cloud SQL is a PaaS service, you cannot just turn off VM's
upvoted 1 times

Sephethus 6 months ago

What is the difference between A and B other than adding the obvious that you'd disable them if you discontinue using them. This is the most obnoxiously confusing question I've ever read and someone else pointed out that *some* are not time critical which implies others are time critical.

upvoted 1 times

JaimeMS 6 months, 2 weeks ago

Selected Answer: D

If the question would have said: "The batch are not time-critical", then Option B with preentible VMs.

BUT, it clearly points that only SOME are not time-critical". Option D is the only one that satisfies all conditions

upvoted 1 times

thewalker 1 year, 1 month ago

Selected Answer: D

D

As per the requirement, some of the batches are not time critical - which means some are critical. Choosing preemptible VMs may mean time critical batches may be affected. Cost effective solutions should not come at cost of requirements.
Disabling and then discontinuing allows you to see the effects of not using the APIs, so you can gauge (check) alternatives.

upvoted 1 times

Arun_m_123 1 year, 2 months ago

Selected Answer: B

When it is "some" batches are non-critical - when we want to focus on price reduction and if it is batch apps, then we can definitely choose "I emptible VMs". Also non-compliant APIs needs to be disabled for sure (APIs can be enabled if there is a need).

Putting altogether, B is the right answer

upvoted 2 times

Net50 1 year, 4 months ago

Selected Answer: D

I think the answer should be D. some of the batches are not time critical which means some are. Choosing premtible VMs may mean time crit batches may be affected in some cases. Even though the solution needs to be cost effective, it should not come at cost of requirements. Hen D

upvoted 3 times

Diwz 8 months, 1 week ago

Premptible VMs is better for batch workloads which are critical and not critical since it takes bit longer to complete the load when some VM are preempted . It greatly reduces cost with using preempted vms for batch workloads.

B is the better answer

upvoted 1 times

Sur_Nikki 1 year, 7 months ago

B looks good to me

upvoted 1 times

8d31d36 1 year, 10 months ago

To design a GCP solution that meets Google's best practices for operating nationally with multiple batch workloads, including some that are r time-critical, and using HIPAA-compliant services while managing service costs, you should provision standard VMs in the same region to red cost, and use GCP services that are HIPAA-compliant as needed. Therefore, the correct option is C.

Preemptible VMs can provide cost savings, but they are not recommended for workloads that are not time-critical, as they may be interruptec any time. Provisioning standard VMs in the same region will provide better performance and stability, and can still be cost-effective by using features such as sustained-use discounts and committed use discounts.

upvoted 1 times

megumin 2 years, 1 month ago

Selected Answer: B

B is ok

upvoted 1 times

minmin2020 2 years, 2 months ago

Selected Answer: B

Assumption here is that cost is more important that the time critical batches, therefore use preemptible instances. Disable and discontinue is a better option as it gives you opportunity to see the impact before blasting any APIs or services that are not certified.

upvoted 4 times

Prashant2022 2 years, 2 months ago

ans is B - HAHAHA

upvoted 2 times

DrishaS4 2 years, 4 months ago

Selected Answer: B

https://cloud.google.com/security/compliance/hipaa#unique_features

upvoted 3 times

backhand 2 years, 4 months ago

vote B
it's obviously, keywords "multiple batch workloads" and "not time-critical", preemptible vm first choice.

upvoted 1 times

Question #82 *Topic 1*

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 users' 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.

Kri_2525 Highly Voted 5 years 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 syst
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 60 times

Jack_in_Large 4 years, 6 months ago

Shutting off all VMs in a zone is not good approach for testing of authentication

upvoted 6 times

vartiklis 3 years 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 17 times

elaineshi 2 years, 6 months ago

Agree, Chaos testing is to shutdown random instances.

upvoted 4 times

heretolearnazure 1 year, 3 months ago

yes chaos testing is industry standard

upvoted 2 times

KouShikyou Highly Voted 5 years, 1 month ago

Since the question is asking to do a resilience testing, I prefer C.

upvoted 16 times

Darahaas 4 years, 3 months ago

Resilience testing of the "Authentication Layer", not the "Application". So the answer is B.

upvoted 4 times

Ekramy_Elnaggar Most Recent 4 weeks, 1 day ago

Selected Answer: C

D. is not correct as this tests the resilience of the database (Cloud SQL) but not necessarily the authentication layer. The authentication layer might have separate components or dependencies that need to be tested under failure conditions.

upvoted 1 times

nareshthumma 1 month, 3 weeks ago

Agree with C

upvoted 1 times

wooyourdaddy 2 months, 2 weeks ago

Selected Answer: D

Option C, which involves scheduling a disaster simulation exercise to shut off all VMs in a zone, is indeed a strong choice for resilience testing This approach helps you understand how your application behaves under failure conditions and ensures that your system can handle unexpe disruptions.

However, Option D is also highly relevant. Configuring a read replica for your Cloud SQL instance in a different zone and manually triggering a failover while monitoring KPIs for your REST API directly tests the resilience of your database layer. This can provide valuable insights into the failover process and the impact on your application's performance and availability.

Both options have their merits, but if the primary goal is to test the resilience of the authentication layer specifically, Option D might be more targeted and effective.

upvoted 2 times

hitmax87 7 months ago

Selected Answer: C

C is correct. It is not D because you are not designing system, your goal is testing existed system

upvoted 2 times

666Amitava666 7 months, 4 weeks ago

Selected Answer: C

Chaos testing

upvoted 3 times

activist 8 months, 2 weeks ago

I choose Answer C
https://cloud.google.com/sql/docs/mysql/replication
This URL states "Read replicas are read-only; you cannot write to them. The read replica processes queries, read requests, and analytics traff thus reducing the load on the primary instance."
"Note: Read replicas do not provide failover capability. To provide failover capability for an instance, see Configuring an instance for high availability."
"As a best practice, put read replicas in a different zone than the primary instance when you use HA on your primary instance. This practice ensures that read replicas continue to operate when the zone that contains the primary instance has an outage. See the Overview of high availability for more information."

upvoted 3 times

santoshchauhan 8 months, 3 weeks ago

Selected Answer: D

Testing Database Resilience: By setting up a read replica in a different zone and triggering a manual failover, you simulate a failure of the prima database. This allows you to assess how well your authentication layer and the overall application cope with the loss of the primary database.

Monitoring Performance and Availability: During the failover, monitoring key performance indicators (KPIs) for your REST API will give you insi into how the application's performance and availability are impacted. This helps in identifying potential bottlenecks and areas for improvemen your resilience strategy.

Ensuring Data Continuity: A read replica ensures data continuity and minimizes downtime, which is critical for an authentication system. The replica will take over as the primary database during the failover, ensuring that the authentication service remains functional.

upvoted 1 times

Rehamss 9 months ago

Selected Answer: D

D is okay

upvoted 1 times

Teckexam 10 months, 1 week ago

Selected Answer: C

Authentication layer resiliency can be covered as part of overall application resiliency testing. Option C is asking to use read replica which is n useful in case of testing resiliency in case of failure

upvoted 2 times

practice_sample 10 months, 1 week ago

Selected Answer: C

Read replicas do not provide failover capability.
https://cloud.google.com/sql/docs/mysql/replication#read-replicas

upvoted 3 times

didek1986 11 months ago

Selected Answer: C

It is c

upvoted 2 times

Tamim321 11 months, 4 weeks ago

Selected Answer: C

Read replica do not provide failover capability
https://cloud.google.com/sql/docs/mysql/replication#:~:text=Note%3A%20Read%20replicas%20do%20not,HA%20on%20your%20primary0instance.

upvoted 6 times

Roro_Brother 1 year ago

Selected Answer: C

C is the good choice

upvoted 2 times

juliansierra 1 year, 1 month ago

I choose C.
I don't say D because the REST API read and WRITE in the database, if you create a READ replica in Cloud SQL, the REST API will not have t possibility of write in the database. The answer D doesn't mention anything about promote the read replica to master.

upvoted 6 times

parthkulkarni998 1 year ago

Exactly. Because in GCP a read replica cant be auto upgraded to become a master in case of failover. So basically the database will allow only READ operations and not WRITE operations. Basically leaving it non-functional

upvoted 1 times

RuibinC 1 year, 2 months ago

Selected Answer: C

C is good

upvoted 2 times

Question #83 *Topic 1*

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.

Googler2 Highly Voted 4 years, 8 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 l 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 49 times

GooglecloudArchitect 4 years, 4 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 9 times

heretolearnazure 1 year, 3 months ago

Answer is D

upvoted 1 times

Zarmi Highly Voted 4 years, 7 months ago

Answer is D:
https://cloud.google.com/bigquery/docs/reference/auditlogs#example_query_cost_breakdown_by_identity

upvoted 27 times

BobbyFlash 2 years, 12 months ago

Nailed it

upvoted 2 times

ErenYeager 2 years, 1 month ago

No mention about exporting to bq

upvoted 1 times

alpay Most Recent 3 weeks, 2 days ago

Selected Answer: D

"Audit logs versus INFORMATION_SCHEMA views
Audit logs help you answer the question "Who did what, where, and when?" within your Google Cloud resources. Audit logs are the definitive source of information for system activity by user and access patterns and should be your primary source for audit or security questions."

https://cloud.google.com/bigquery/docs/introduction-audit-workloads

upvoted 1 times

nareshthumma 1 month, 3 weeks ago

Answer is B
In the BigQuery interface, execute a query on the JOBS table to get the required
information.
Explanation:
JOBS Table:BigQuery automatically logs job information, including queries, in a special table called JOBS.
By querying this table, you can retrieve details about each job, including the user who ran it, the query text, and the timestamp.

Why the Other Options Are Less Suitable:

Connect Google Data Studio to BigQuery: While this can visualize data, you still need to execute a query to pull the data first. This option is n directly querying for the information you need.
Use ‘bq show’ and ‘bq ls’: These commands provide metadata about jobs but do not efficiently retrieve the count of queries per user, especia for a large number of jobs over a month.
Use Cloud Audit Logging: This approach could work but would be more complex and less efficient for simply counting queries. The JOBS tab is specifically designed for this purpose, making it easier to extract the necessary data.

upvoted 2 times

awsgcparch 4 months, 3 weeks ago

Selected Answer: B

Using the INFORMATION_SCHEMA.JOBS_BY_USER table within BigQuery is the most efficient and straightforward method to get the require audit information about the number of queries each user ran in the last month. Therefore, option B is the best choice.. D.While Cloud Audit Lo can provide detailed logs of activities, querying them directly for this purpose is less efficient than using the JOBS table in BigQuery. Additiona setting up and querying audit logs involves more steps and may require exporting logs to BigQuery for complex queries.

upvoted 5 times

awsgcparch 4 months, 3 weeks ago

Selected Answer: B

Why B is the Best Answer:

Direct Access to Job Metadata: BigQuery maintains metadata about jobs (including query jobs) in the INFORMATION_SCHEMA views, specifically in the INFORMATION_SCHEMA.JOBS table.
Detailed Information: This table contains information about all jobs, including who ran them, when they were run, and the type of job. This ma it easy to filter and count queries by user.
Querying JOBS Table: You can write a SQL query to count the number of queries executed by each user over the specified period.

upvoted 4 times

eff12c1 6 months, 2 weeks ago

Selected Answer: B

Querying the INFORMATION_SCHEMA.JOBS_BY_USER view in BigQuery is the most efficient and straightforward way to obtain the number queries each user ran in the last month. This method leverages built-in BigQuery capabilities designed specifically for auditing and monitoring query jobs.
Cloud Audit Logs provide detailed logging information but are more complex to query for specific metrics like the number of queries run by ea user. BigQuery's INFORMATION_SCHEMA.JOBS_BY_USER is designed for this purpose and is easier to use for querying job data.

upvoted 4 times

JaimeMS 6 months, 2 weeks ago

Selected Answer: D

Audit logs, Option D

upvoted 1 times

AhmedSami 10 months, 1 week ago

Selected Answer: C

reason:
https://cloud.google.com/logging/docs/audit#data-access

Data Access audit logs—except for BigQuery Data Access audit logs—are disabled by default because audit logs can be quite large. If you w Data Access audit logs to be written for Google Cloud services other than BigQuery, you must explicitly enable them

upvoted 1 times

SSS987 11 months, 1 week ago

I finally decide to go with Option D over B because we or the auditor might not have access to the metadata. In fact, in our project, not all of u had access to query this view.

"To get the permission that you need to query the INFORMATION_SCHEMA.JOBS view, ask your administrator to grant you the BigQuery Resource Viewer"
https://cloud.google.com/bigquery/docs/information-schema-jobs#required_role.

(And not because of the wordings "Table" instead of "view" - don't think an architect exam will try to assess your memory of whether it is a tal or a view or your understanding of the difference between a table and a view).

upvoted 2 times

PhatLau 11 months, 1 week ago

Selected Answer: D

C - bq show: To view job details (https://cloud.google.com/bigquery/docs/managing-jobs#view_job_details_2)
bq ls: To list jobs (https://cloud.google.com/bigquery/docs/managing-jobs#list_jobs)

So D is the correct one.

upvoted 1 times

zaxxon 1 year ago

Selected Answer: C

https://cloud.google.com/bigquery/docs/managing-jobs#list_jobs_in_a_project

upvoted 1 times

muh21 1 year, 3 months ago

I think B is the correct answer

upvoted 1 times

TheCloudGuruu 1 year, 7 months ago

Selected Answer: D

Cloud Logging

upvoted 1 times

VarunGo 1 year, 7 months ago

Selected Answer: B

B is correct. here's the link - https://cloud.google.com/bigquery/docs/information-schema-jobs

upvoted 5 times

medi01 1 year, 8 months ago

Selected Answer: B

JOBS system table does exist and it contains exactly the info we need: one record for each job executed by users (query is one of the type of jobs)

upvoted 2 times

Ric350 4 months, 4 weeks ago

Yes, but this is assuming you have the required role of BigQuery Resource Viewer which is needed and does not clarify in the question! So does that make D the right answer? And with D, you need the logs viewer role. The question is a bad one as it doesn't clarify any roles in tl scenario.

upvoted 1 times

JC0926 1 year, 8 months ago

Selected Answer: D

D. Use Cloud Audit Logging to view Cloud Audit Logs, and create a filter on the query operation to get the required information.

Cloud Audit Logging records activities and API calls in Google Cloud services, including BigQuery. You can use Cloud Audit Logging to view l and filter them based on specific operations, such as queries in BigQuery. By filtering on the query operation, you can gather the required information about how many queries each user ran in the last month, which is essential for audit purposes.

upvoted 3 times

Question #84 *Topic 1*

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.

crypt0 Highly Voted 3 years, 8 months ago

Why is it not answer B?

upvoted 42 times

kumarp6 2 years, 7 months ago
B is the answer,
upvoted 6 times

Jos 3 years, 5 months ago
It is.
upvoted 10 times

tartar 2 years, 10 months ago
B is ok
upvoted 11 times

nitinz 2 years, 3 months ago
It is B
upvoted 4 times

JoeShmoe Highly Voted 3 years, 7 months ago
B- minimal start time means a pre-baked golden image
upvoted 21 times

omermahgoub Most Recent 6 months ago
The correct answer is B. Create a custom VM image with all OS package dependencies. Use Deployment Manager to create the managed instance group with the VM image.

Managed instance groups are a way to manage a group of Compute Engine instances as a single entity. If you want to automate the creation managed instance group, you can use tools such as Terraform, Deployment Manager, or Puppet to automate the process.

To minimize the startup time for new VMs in the instance group, you should create a custom VM image with all of the OS package dependenc pre-installed. This will allow you to create new VMs from the custom image, which will significantly reduce the startup time compared to instal the dependencies on each VM individually. You can then use Deployment Manager to create the managed instance group with the custom VM image.
upvoted 11 times

omermahgoub 6 months ago
Option A, using Terraform to create the managed instance group and a startup script to install the OS package dependencies, would not minimize the startup time for new VMs in the instance group.

Option C, using Puppet to create the managed instance group and install the OS package dependencies, would not minimize the startup t for new VMs in the instance group.

Option D, using Deployment Manager to create the managed instance group and Ansible to install the OS package dependencies, would r minimize the startup time for new VMs in the instance group.
upvoted 4 times

megumin 7 months, 1 week ago
Selected Answer: B
B is ok
upvoted 1 times

AzureDP900 8 months ago
B. Create a custom VM image with all OS package dependencies. Use Deployment Manager to create the managed instance group with the V image.
upvoted 1 times

minmin2020 8 months, 1 week ago
Selected Answer: B
B will reduce the startup time
upvoted 1 times

DrishaS4 10 months, 2 weeks ago
Selected Answer: B
B- minimal start time means a pre-baked golden image
upvoted 4 times

BigSteveO 11 months ago

As someone who works on Terraform. It may not be Googles best practice, even though it's built in just need to be initialized. But it is the eas way to build and restructure infrastructure with a simple line of code change and a quick shell command to apply terraform. I mean B would work. But it doesn't include the start-up script for the OS dependencies to be loaded. ?>?>? Any feedback?

upvoted 1 times

Ric350 11 months ago

Start up scripts aren't need here as you're making a custom OS image with all OS package dependencies. Question is not asking for the easiest way, it's asking how to minimize VM startup times. Not having to run the startup scripts because it's baked into the image is how I understand and interpret this, therefore B.

upvoted 2 times

mv2000 11 months, 2 weeks ago

06/30/2022 Exam

upvoted 5 times

rogerlovato 1 year, 5 months ago

Selected Answer: B

B is correct

upvoted 1 times

haroldbenites 1 year, 6 months ago

Go for B

upvoted 1 times

Godlike 1 year, 6 months ago

yes B is right

upvoted 2 times

vincy2202 1 year, 6 months ago

B is the right answer

upvoted 2 times

exam_war 1 year, 7 months ago

go with B. D: it involves so many other third software to configure/manage which makes build more complicated.

upvoted 1 times

MaxNRG 1 year, 7 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 Deploym Manager. Ansible won't make this faster, but just will add 3rd party dependency.

upvoted 3 times

victory108 2 years, 1 month ago

B. Create a custom VM image with all OS package dependencies. Use Deployment Manager to create the managed instance group with the V image.

upvoted 2 times

un 2 years, 1 month ago

B is correct

upvoted 1 times

Question #85 *Topic 1*

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.

Sebatian Highly Voted 5 years 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 61 times

jits1984 1 year, 8 months ago
Should be C.

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

Data viewer role can be applied to a Table and a View.

JobUser can be applied only at a Project level not at a Dataset level

https://cloud.google.com/bigquery/docs/access-control#bigquery.jobUser
upvoted 11 times

jits1984 1 year, 3 months ago
incorrect, should be A, BigQuery Job User
(roles/bigquery.jobUser)

Provides permissions to run jobs, including queries, within the project.
upvoted 3 times

RKS_2021 1 year, 2 months ago
A is wrong
upvoted 1 times

wk Highly Voted 5 years, 2 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 necess to allow the running of jobs.

upvoted 32 times

Jack_in_Large 4 years, 7 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 31 times

BrunoTostes 3 years, 2 months 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 9 times

Cloud_Architect_05 Most Recent 3 weeks, 3 days ago

Should be A. DataViewer: "When applied at the project or organization level, this role can also enumerate all datasets in the project. Additiona roles, however, are necessary to allow the running of jobs."

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

upvoted 1 times

nareshthumma 1 month, 3 weeks ago

C.

Explanation:
Each country should have its own group to manage access efficiently. This allows you to easily add or remove analysts from their respective groups.
By adding analysts to their specific country groups, you can manage permissions in a way that aligns with their data access needs.
This group will include all country groups. It simplifies the management of roles for all analysts collectively.
The dataViewer role provides permission to view datasets and tables. This role allows analysts to read data without the ability to modify it, wh is appropriate for your use case.
Granting view access to the respective datasets for each country group ensures that analysts can only access data relevant to their country. T is crucial for maintaining data privacy and compliance.

Why Other Options Are Less Suitable:
Using BigQuery jobUser Role: The BigQuery jobUser role allows users to run jobs (like queries) but does not inherently grant access to view datasets or tables. This option would not effectively limit visibility to data by country.

upvoted 2 times

Diwz 9 months ago

Selected Answer: C

It is C.
Question says analyst should be able to see and query only the data for their respective countries. BigQueryDta viewer permission will allow to read and query the table/view data

upvoted 2 times

awsgcparch 4 months, 3 weeks ago

You cant query with dataviewer. user with the roles/bigquery.dataViewer role has read-only access to datasets and tables but does not inherently have the permissions to run queries (which are considered jobs in BigQuery). The dataViewer role allows users to view dataset metadata and table contents but does not include the ability to create or execute jobs.The dataViewer role alone does not allow users to ru queries. Analysts need the ability to run queries, which requires the jobUser role.

upvoted 2 times

OrangeTiger 10 months, 2 weeks ago

Selected Answer: A

Go with a.

upvoted 1 times

islamfouda 11 months ago

Selected Answer: C

C is right, even if DataViwer is granted on Project level but Dataset is shared with view access to only the country group.

upvoted 1 times

JohnDohertyDoe 11 months, 1 week ago

Selected Answer: A

A is the correct answer. Tested the two scenarios, with `jobUser` permissions it does not allow the user to see a dataset. Whereas with `dataViewer` it has permissions for all the datasets. Note the difference is in the initial permission across the project and not per dataset.

upvoted 6 times

bandegg 11 months, 2 weeks ago

Selected Answer: A

It's A because in order to query, on needs the jobUser role. dataViewer doesn't grant the ability to actually query the datasets one has been g access to.

https://cloud.google.com/bigquery/docs/running-queries#required_permissions

upvoted 1 times

e5019c6 11 months, 3 weeks ago

I'm siding with C on this one.
jobUser role has the bigquery.jobs.create permission, which allow it to load data into BQ, which analyst shouldn't do.
Data Viewer has no permissions to add or edit data (It can create a snapshot of the data, extract it or replicate it at most)

upvoted 1 times

whoosh007 11 months, 4 weeks ago

Selected Answer: C

BigQuery Data Viewer
(roles/bigquery.dataViewer)
When applied to a table or view, this role provides permissions to:
Read data and metadata from the table or view.
This role cannot be applied to individual models or routines.
When applied to a dataset, this role provides permissions to:
Read the dataset's metadata and 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 necess to allow the running of jobs.
Lowest-level resources where you can grant this role:
Table and view

BigQuery Job User
(roles/bigquery.jobUser)
Provides permissions to run jobs, including queries, within the project.
Lowest-level resources where you can grant this role:
Project

Analyst must query data --> BigQuery Data Viewer

upvoted 2 times

steghe 1 year, 2 months ago

Selected Answer: A

A: JobUser to execute queries in general. Data viewer for viewing the country dataset.

upvoted 1 times

TopTalk 1 year, 2 months ago

Selected Answer: C

Lowest-level resources where you can grant this role:
dataViewer: Table, View
jobUser: Project

You don't want to grant access to the entire project, only the dataset which is divided per country. Definitely C.
https://cloud.google.com/bigquery/docs/access-control#bigquery.dataViewer

upvoted 1 times

don_v 11 months, 1 week ago

Correct answer is A.

Note this: "Share the appropriate dataset with *view access* with each respective analyst country-group".

"view access" is the key.

upvoted 1 times

AdityaGupta 1 year, 2 months ago

Selected Answer: A

A. Create a group per country. Add analysts to their respective country-groups. Create a single group 'all_analysts', and add all country-group 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.

As all analysts need to execute query, they need JobUser role.
They should be restricted to view all datasets (not tables) of respective country.

upvoted 1 times

RKS_2021 1 year, 2 months ago

It is C for Sure, A give Project level permissions, which defied requirement to have access to the Data set level.

upvoted 1 times

jits1984 1 year, 3 months ago

Selected Answer: A

JobUser required to run queries

upvoted 1 times

jits1984 1 year, 3 months ago

Selected Answer: C

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

Data viewer role can be applied to a Table and a View.

JobUser can be applied only at a Project level not at a Dataset level

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

upvoted 2 times

jits1984 1 year, 3 months ago

Incorrect - should be A

upvoted 2 times

Question #86 *Topic 1*

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.

OSNG Highly Voted 4 years 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 off 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 108 times

rsamant 3 years, 6 months ago
Cloud Storage can be used to store image but it can't be used for boot.
upvoted 8 times

Davidik79 2 years, 9 months ago
"If you need to move your Compute Engine boot disk data outside of your Compute Engine project, you can export a boot disk image t Cloud Storage as a tar.gz file"
Doc ref: https://cloud.google.com/compute/docs/images/export-image
upvoted 1 times

Ishu_awsguy 2 years, 4 months ago
Customer is migrating their apps , not only data.
So B is wrong.
App wont work with data volumes in compresses format on cloud storage (obvious)
upvoted 2 times

Chute5118 2 years, 4 months ago
Cloud Volumes Service has the ability to send volumes of the CVS service type to Google Cloud Object Storage for long-term backup a archive. This data-management feature complements volume snapshots, which provide access for development or test use cases that require short-term recovery

https://cloud.google.com/architecture/partners/netapp-cloud-volumes/back-up
upvoted 1 times

Manh 3 years, 3 months ago
it's B. the question is all about storing data. B is right answer
upvoted 2 times

Ishu_awsguy 2 years, 4 months ago

How can u use cloud storage for VM boot/data volumnes ?
B is wrong

upvoted 1 times

Ishu_awsguy 2 years, 4 months ago

All the options are debatable and have some flaw.
But closes answer is B
although it has a flaw mentioned above but is still better than other options

upvoted 3 times

neversaynever 2 years, 11 months ago

Answer is D - boot volumes (not boot images) cannot come from Cloud Storage - so B is not the answer.

upvoted 5 times

Ishu_awsguy 2 years, 4 months ago

Guys I think its a english error.
The last line need to be read carefully
Decouple the line after , and Vm boot/data volumes.
I think they mean to use vm persistent disks for boot and data volumes.
B is the answer

upvoted 2 times

siumk Highly Voted 4 years, 9 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 t
GZIP format. You can then upload the resulting *.tar.gz file to Cloud Storage and register it as an image in Compute Engine.

upvoted 17 times

Ayzen 4 years, 7 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 q
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 10 times

Bijesh 4 years, 1 month ago

@ayzen yes. IS cloud datastore optimized to handle such a data (200GB)

upvoted 1 times

Toothpick Most Recent 4 months, 3 weeks ago

None of these provide an effective method of storing boot/data volumes
The correct approach would be to create persistent disk Drives for boot/data volumes directly and go with B or D for the remainder of
requirements.

upvoted 1 times

otts 11 months, 3 weeks ago

B is correct. the question lays emphasis on a cost-effective storage allocation, and persistent disks are costly than B (that rules out D)

upvoted 1 times

e5019c6 11 months, 3 weeks ago

Selected Answer: D

This is a troublesome question...
IMHO, it's D. I was between C & D, but seeing how they stored the customer session data as files, storing it in SQL would require refactoring,
maybe higher latencies.
I'm against B because of the latency added by booting & loading data off Cloud Storage, since it adds network latency to the equation.
BUT this is assuming the method of using cloud storage is via gcsfuse, that is, using the bucket as a HD.
Now if the way of using it is via image of the disk that is loaded when the instance starts, that would be ok. And that's what I expected of opti
D, that it would load an image of the boot/data volume in it's non-persistent disks. No 'persistent' data would be stored in it, so anything lost
when it's shutdown can be ignored.

upvoted 1 times