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Exam Professional Data Engineer All Questions

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📄 EXAM PROFESSIONAL DATA ENGINEER TOPIC 1 QUESTION 160 DISCUSSION

Actual exam question from Google's Professional Data Engineer

Question #: 160

Topic #: 1

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You work for a mid-sized enterprise that needs to move its operational system transaction data from an on-premises database to GCP. The database is about 20 TB in size. Which database should you choose?

- A. Cloud SQL
- B. Cloud Bigtable
- C. Cloud Spanner
- D. Cloud Datastore

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by [deleted] at March 22, 2020, 7:43 a.m.

Comments

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🗨️ **jvg637** Highly Voted 5 years, 1 month ago

A. Cloud SQL (30TB)

👍 🗳️ 🗳️ upvoted 22 times

upvoted 33 times

 **Gcpyspark** 4 years, 4 months ago

Sure, however in future if the capacity grows beyond 30 TB then Cloud SQL won't work right then Spanner would be the option?

   upvoted 2 times

 **desertlotus1211** 2 years, 3 months ago

you can always call GCP to add quota.. .Spanner is for global reach, ideally...

   upvoted 3 times

 **vindahake** 4 years, 11 months ago

Up to 30,720 GB, depending on the machine type. This looks like correct choice.
<https://cloud.google.com/sql/docs/quotas#fixed-limits>

   upvoted 7 times

 **Satishjuly18** 8 months, 3 weeks ago

65 TB now in Aug 2024

   upvoted 1 times

 **Satishjuly18** 8 months, 3 weeks ago

*64 TB

   upvoted 1 times

 **odacir** 2 years, 4 months ago

https://cloud.google.com/sql/docs/quotas#storage_limits
64TB

   upvoted 3 times

 **dagoat** 3 years, 7 months ago

65 TB now in Sept 2021

   upvoted 14 times

 **[Removed]** 3 years, 3 months ago

https://cloud.google.com/sql/docs/quotas#storage_limits

   upvoted 1 times

 **Rajuuu** Highly Voted 4 years, 10 months ago

A as limit is now 30 TB for Cloud SQL

   upvoted 6 times

 **SamuelTsch** Most Recent 6 months, 1 week ago

Selected Answer: A

Cloud SQL storage limit: dedicated core up to 64 TB.

   upvoted 1 times

 **drpay** 1 year, 6 months ago

Selected Answer: C

two keywords: Transactional data, 20 TB

   upvoted 2 times

 **barnac1es** 1 year, 7 months ago

Selected Answer: C

Scalability: Cloud Spanner is designed to handle large volumes of data, making it suitable for a 20 TB database. It can scale horizontally and vertically to accommodate growing data needs.

Global Distribution: Cloud Spanner allows you to distribute data globally for low-latency access across regions, which can be advantageous for operational systems.

Strong Consistency: It provides strong transactional consistency, which is important for operational systems that require ACID compliance.

SQL Support: Cloud Spanner supports SQL, which is a familiar query language for developers.



While Cloud SQL, Cloud Bigtable, and Cloud Datastore have their use cases, Cloud Spanner is better suited for larger databases with strong consistency requirements, making it a suitable choice for migrating a 20 TB operational system database to GCP.

   upvoted 2 times

 **ashu381** 1 year, 7 months ago

Cloud SQL, upto 64 TB now, you can always call GCP for increasing the quota though !!



   upvoted 1 times

  **vaga1** 1 year, 10 months ago

Selected Answer: A

Cloud SQL is generally better for OLTP, and Cloud SQL is up to 64 TB now.
https://cloud.google.com/sql/docs/quotas#storage_limits

   upvoted 2 times

  **vaga1** 1 year, 11 months ago


"move its operational system transaction data from an on-premises database to GCP". Cloud SQL may be plug-and-play

   upvoted 2 times

  **musumusu** 2 years, 2 months ago



Not 100% in favour of A, Should i recommend my client Cloud SQL, when they are coming to me with 20TB already 30TB is limit, its transactional data, which i can't compromise. I will propose cloud spanner. There is nothing mentioned that they want to save cost.

   upvoted 1 times

  **AzureDP900** 2 years, 4 months ago

A. Cloud SQL

   upvoted 1 times

  **zelck** 2 years, 5 months ago

Selected Answer: A

A is the answer.

<https://cloud.google.com/sql/docs/features#features>

Up to 64 TB of storage available, with the ability to automatically increase storage size as needed.

   upvoted 5 times

  **Jay_Krish** 2 years, 5 months ago

Selected Answer: A

With the given requirements A. Cloud SQL is more than sufficient. Don't try to overthink scenarios like what if it grows.. what if there's additional requirement in future.. what if this what if that.. just look at the question and see the stated requirement. If there are more than one answer try to see which is simple and doesn't come with extra frills.

   upvoted 3 times

  **Atnafu** 2 years, 5 months ago

A

65 TB now in Nov 2022

   upvoted 2 times

  **WZH** 2 years, 9 months ago

it is already 20 TB at the moment, and you probably want to change the database because the capacity of your current storage solution is not enough. Then you decide to change it to Cloud SQL(up to 30 TB) which may not increase much capacity? I am not sure about the answer but A looks weird imho.

   upvoted 1 times

  **Dan226** 2 years, 9 months ago

Cloud SQL can store 64 Tb, but in the intial set up the operation are 20tb. It will reach the limitation soon if you choose Cloud SQL

   upvoted 1 times

  **gcp_k** 3 years, 6 months ago

Depends.. I mean, C is correct if the exam is not updated. A is correct if the exam is updated. So ... kinda in catch 22 situation ...

   upvoted 4 times

  **KokkiKumar** 3 years, 6 months ago

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