

[Google Discussions](#)

Exam Professional Data Engineer All Questions

View all questions & answers for the Professional Data Engineer exam

[Go to Exam](#)

EXAM PROFESSIONAL DATA ENGINEER TOPIC 1 QUESTION 264 DISCUSSION

Actual exam question from Google's Professional Data Engineer

Question #: 264

Topic #: 1

[\[All Professional Data Engineer Questions\]](#)

You are running your BigQuery project in the on-demand billing model and are executing a change data capture (CDC) process that ingests data. The CDC process loads 1 GB of data every 10 minutes into a temporary table, and then performs a merge into a 10 TB target table. This process is very scan intensive and you want to explore options to enable a predictable cost model. You need to create a BigQuery reservation based on utilization information gathered from BigQuery Monitoring and apply the reservation to the CDC process. What should you do?


- A. Create a BigQuery reservation for the dataset.
- B. Create a BigQuery reservation for the job.
- C. Create a BigQuery reservation for the service account running the job.
- D. Create a BigQuery reservation for the project.

[Show Suggested Answer](#)

by  [scaenruy](#) at Jan. 5, 2024, 2:59 a.m.

Comments

[Submit](#)

 **Matt_108** Highly Voted  1 year, 3 months ago

Selected Answer: D


Option D, reservation can't be applied to resources lower than projects (only to Org, folders or projects)

   upvoted 11 times

 **AllenChen123** 1 year, 3 months ago

Seems correct. https://cloud.google.com/bigquery/docs/reservations-intro#understand_workload_management

   upvoted 6 times

 **task_7** Highly Voted  1 year, 3 months ago

Selected Answer: B

Reserve assignments

To use the slot capacity you purchased, assign projects, folders, or organizations to a reservation. When a job in a project runs, it uses slots from the assigned reservation. Resources can inherit roles from their parents in the resource hierarchy. Even if a project is not assigned to a reservation, it inherits the assignment from the parent folder or organization, if any. If a project does not have an assigned or inherited reservation, the job uses on-demand pricing. For more information about the resource hierarchy, see Organizing BigQuery Resources .

   upvoted 7 times

 **Positron75** 5 months, 2 weeks ago

The first sentence of that text already points towards D, not B. You can't assign jobs to a reservation, only projects, folders or organizations.

   upvoted 2 times

 **apoio.certificacoes.closer** 4 months, 1 week ago

Best that could be done is a specify this a batch job, but the slot capacity is still at the project level.

   upvoted 1 times

 **desertlotus1211** Most Recent  1 month, 1 week ago

Selected Answer: C

Answer C provides the granularity you need. Answer D is for the entire project... however the question ONLY wants it for the CDC process - so service account is better.

In BigQuery, reservations are assigned to "assignments", which can be:


Project

Folder

Organization

Service account

   upvoted 1 times

 **m_a_p_s** 4 months, 3 weeks ago

Selected Answer: D


"When you create commitments and reservations, they are associated with a Google Cloud project." - <https://cloud.google.com/bigquery/docs/reservations-intro#admin-project>

   upvoted 1 times

 **Positron75** 5 months, 2 weeks ago

Selected Answer: D

<https://cloud.google.com/bigquery/docs/reservations-intro#assignments>


   upvoted 3 times

 **SamuelTsch** 6 months, 1 week ago

Selected Answer: B

Option B provides a more granularity solution

   upvoted 1 times

 **viciousjpp** 8 months, 3 weeks ago

Selected Answer: B

The correct answer is B. Create a BigQuery reservation at the job level.

Create a BigQuery reservation at the job level: This is the most suitable option. By creating a job-level reservation, you can allocate resources specifically to the CDC process and improve the accuracy of cost forecasting.

Steps to create and apply a BigQuery reservation:

Identify the job: Clearly identify the job that executes the CDC process.

Create a reservation: Use the BigQuery console or API to create a reservation, specifying the job's label, query text, and other details.

Apply the reservation: Assign the created reservation to the job that executes the CDC process.

👍 ↩ 🚩 upvoted 2 times

🗄️ 👤 **Positron75** 5 months, 2 weeks ago

Jobs cannot be assigned to a reservation. You should read the documentation instead of relying on AI answers which are wrong half the time.

https://cloud.google.com/bigquery/docs/reservations-intro#understand_workload_management

👍 ↩ 🚩 upvoted 1 times

🗄️ 👤 **Positron75** 5 months, 2 weeks ago

Sorry, this is the actual link: <https://cloud.google.com/bigquery/docs/reservations-intro#assignments>

👍 ↩ 🚩 upvoted 1 times

🗄️ 👤 **meh_33** 8 months, 4 weeks ago

Are these questions really useful and coming in GDE Exam? Anyone appeared recently and passed ?

👍 ↩ 🚩 upvoted 1 times

🗄️ 👤 **Anudeep58** 11 months, 3 weeks ago

Selected Answer: D

<https://cloud.google.com/blog/products/data-analytics/manage-bigquery-costs-with-custom-quotas>.

Quotas can be applied on Project or User Level

👍 ↩ 🚩 upvoted 3 times

🗄️ 👤 **f74ca0c** 11 months, 3 weeks ago

Selected Answer: D

D- choose the correct project and apply the task type background: <https://cloud.google.com/bigquery/docs/reservations-intro?hl=fr#assignments>

👍 ↩ 🚩 upvoted 3 times

🗄️ 👤 **JyoGCP** 1 year, 2 months ago

Selected Answer: D

Option D

👍 ↩ 🚩 upvoted 1 times

🗄️ 👤 **GCP001** 1 year, 3 months ago

D.

Reservation is on project, folder or organisation level.

👍 ↩ 🚩 upvoted 3 times

🗄️ 👤 **raaad** 1 year, 4 months ago

Selected Answer: D

C or D ??

Option C (service account) allows you to target the reservation specifically to the CDC process or any other jobs run by that service account. This is particularly useful if you have multiple processes running in the project with different performance or cost requirements.

Option D (project) applies the reservation across all jobs in the project, which is a broader approach. If the CDC process is the primary or sole job running in the project and you want all jobs to share the same reservation, then this option might be more straightforward.

👍 ↩ 🚩 upvoted 3 times

🗄️ 👤 **scaenrui** 1 year, 4 months ago

Selected Answer: D

D. Create a BigQuery reservation for the project.

👍 ↩ 🚩 upvoted 1 times

Platform

- > Home
- > Examtopics PRO
- > All Exams
- > Training Courses

