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Exam Professional Data Engineer All Questions

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EXAM PROFESSIONAL DATA ENGINEER TOPIC 1 QUESTION 261 DISCUSSION

Actual exam question from Google's Professional Data Engineer
Question #: 261
Topic #: 1
[All Professional Data Engineer Questions]

You want to migrate your existing Teradata data warehouse to BigQuery. You want to move the historical data to BigQuery by using the most efficient method that requires the least amount of programming, but local storage space on your existing data warehouse is limited. What should you do?

A. Use BigQuery Data Transfer Service by using the Java Database Connectivity (JDBC) driver with FastExport connection.

B. Create a Teradata Parallel Transporter (TPT) export script to export the historical data, and import to BigQuery by using the bq command-line tool.

C. Use BigQuery Data Transfer Service with the Teradata Parallel Transporter (TPT) tbuild utility.

D. Create a script to export the historical data, and upload in batches to Cloud Storage. Set up a BigQuery Data Transfer Service instance from Cloud Storage to BigQuery.

Show Suggested Answer

by rahulvin at *Dec. 30, 2023, 7:32 p.m.*

Comments

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raaad Highly Voted 1 year, 4 months ago

Selected Answer: A

- Reduced Local Storage: By using FastExport, data is directly streamed from Teradata to BigQuery without the need for local storage, addressing your storage limitations.
- Minimal Programming: BigQuery Data Transfer Service offers a user-friendly interface, eliminating the need for extensive scripting or coding.

upvoted 11 times

AllenChen123 1 year, 3 months ago

Agree. https://cloud.google.com/bigquery/docs/migration/teradata-overview#extraction_method
Extraction using a JDBC driver with FastExport connection. If there are constraints on the local storage space available for extracted files, or if there is some reason you can't use TPT, then use this extraction method.

upvoted 7 times

rahulvin Highly Voted 1 year, 4 months ago

Selected Answer: A

https://cloud.google.com/bigquery/docs/migration/teradata-overview#extraction_method

Lack of local storage pushes this to JDBC driver

upvoted 6 times

desertlotus1211 Most Recent 1 month, 1 week ago

Selected Answer: C

BigQuery Data Transfer Service (DTS) supports Teradata via Teradata Parallel Transporter (TPT) in combination with the tbuild utility, which is designed for high-performance parallel data exports.
This is Google's recommended approach for Teradata migrations when local disk space is constrained and high throughput is desired.

upvoted 2 times

Parandhaman_Margan 1 month, 3 weeks ago

Selected Answer: C

Use BigQuery Data Transfer Service with the Teradata Parallel Transporter (TPT) tbuild utility...minimal coding

upvoted 3 times

Pime13 3 months, 4 weeks ago

Selected Answer: A

https://cloud.google.com/bigquery/docs/migration/teradata-overview#extraction_method
Extraction using a JDBC driver with FastExport connection. If there are constraints on the local storage space available for extracted files, or if there is some reason you can't use TPT, then use this extraction method.

In this mode, the migration agent extracts tables into a collection of AVRO files on the local file system. It then uploads these files to a Cloud Storage bucket, where they are used by the transfer job. Once the files are uploaded to Cloud Storage, the migration agent deletes them from the local file system.

In this mode, you can limit the amount of space used by the AVRO files on the local file system. If this limit is exceeded, extraction is paused until space is freed up by the migration agent uploading and deleting existing AVRO files.

upvoted 1 times

ToiToi 6 months ago

Selected Answer: C

BigQuery Data Transfer Service (DTS): DTS automates data movement from various sources (including Teradata) to BigQuery. It handles schema conversion, data transfer, and scheduling, minimizing manual effort and programming.
Teradata Parallel Transporter (TPT) tbuild: TPT is a powerful utility for high-performance data extraction from Teradata. The tbuild operator specifically creates optimized external data files.
Efficiency: Combining DTS with TPT tbuild allows you to efficiently extract large volumes of data from Teradata and load it into BigQuery with minimal coding.
Limited Local Storage: This approach streams data directly from Teradata to Cloud Storage, minimizing the need for temporary storage on your Teradata system.

upvoted 3 times

kurayish 6 months, 2 weeks ago

Selected Answer: C

Using TPT with the tbuild utility ensures that you can efficiently move large volumes of data directly from Teradata to BigQuery without requiring significant local storage space or extensive custom programming. This method leverages Teradata's optimized export capabilities and integrates with Google Cloud's tools for seamless data transfer.

JDBC driver with FastExport can be used, it typically requires more programming and manual setup compared to the TPT solution, and may not be as optimized for large-scale data transfers

upvoted 3 times

CGS22 1 year ago

Selected Answer: A

Extraction using a JDBC driver with FastExport connection. If there are constraints on the local storage space available for extracted files, or if there is some reason you can't use TPT, then use this extraction method.
https://cloud.google.com/bigquery/docs/migration/teradata-overview#extraction_method

upvoted 1 times

Matt_108 1 year, 3 months ago

Selected Answer: A

Option A, the JDBC driver is the key to solve the limited local storage

upvoted 3 times