[Azure Sql Database] - Failed with SQLServerException: Connection timed out (Read failed), Connection reset

Last updated by | Clare qing yu | Oct 14, 2022 at 1:30 AM PDT

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Issue

When customer uses Azure SQL Database/Synapse DW as source or sink in dataflow (preview data, debug/trigger run...). He may find job will fail with following error message:

```
{"StatusCode":"DFExecutorUserError","Message":"Job failed due to reason: "Connection timed out (Read failed)"
{"StatusCode":"DFExecutorUserError","Message":"Job failed due to reason: "Connection reset", "Details": "shad
```

Root Cause

After dataflow application is connected to customer's SQL Databases/Synapse DW, it's waiting to get a response from the customer's SQL Database/Synapse DW through socket read/write operations. When the socket do send()/recv(), it met with an exception from SQL Database/Synapse DW and finally throw this error to customer. The exception could be socket time out or SQL Database/Synapse DW internal error.

Resolution

This error is usually because of 1. transient network issue 2. IO spikes and intermittent issue 3. SQL database/Synapse DW is not in an healthy status during dataflow run. A possible root cause is due to customer's data size is too large.

If you found out this is a transient issue occures only few times, then just tell customer and continue observing.

If you found out this is a data IO spikes and intermittent connectivity issue, increase the Azure SQL Database/Synapse service tier may help to avoid it.

If not, you will have to engage SQL Database/Synapse DW's engineer to help with further investigation.

Frist of all, you need to figure out in what Sink/Sources the error occurred. It usually can be find in 'DatabrickLoggingTest' table. And then you should be able to figure out the SQL Database/Synapse DW configurations from the full error logs. If it cannot be identify, try analysis customer's DSL, and see if customer only uses one SQL Database/Synapse DW, it usually happens.

Then consider open ICM/support cases to SQL Database/Synapse DW team, and provided useful infomation like database configurations, time period, related operations. They should be able to find out the root cause.

In dataflow side, since the error is usually due to data size. If the error happened on Source, we would recommend customer to set more partition numbers in [Source partitioning](#) ↗. If the error happened on Sink, please follow [this doc](#) ↗ to tune the partition number. If the problem continues to happen, please split the souece data, using multiple dataflow jobs to finish the whole activity.

Tips:

1. We used to heard from SQL Database/Synapse DW's PG that they suggest customer to scale up their SQL Database/Synapse DW, and then the error is gone.

2. From dataflow level, if it's Synapse DW, check if it's enable staging. If not, please enable staging.

Additional Information:

- Icm Reference: N/A
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- Keywords: SQL Database, Synapse DW

How good have you found this content?