Length of LOB data (NNNNN) to be replicated exceeds configured maximum 65536

Last updated by | Holger Linke | Apr 20, 2022 at 10:42 AM PDT

Contents

- Issue
- Investigation / Analysis
- Mitigation
 - Increasing the configured limit
 - Considerations
- More information
- Public Doc Reference

Issue

The customer is reporting that they are encountering the following error when inserting or updating data in one of their tables:

Error 7139

Length of LOB data (<long integer value>) to be replicated exceeds configured maximum <long integer value>. Use the stored procedure sp_configure to increase the configured maximum value for max text repl size option, A configured value of -1 indicates no limit, other that the limit imposed by the data type.

Investigation / Analysis

Check with the customer if the affected table is part of a Transactional Replication publication, or is enabled for Change Data Capture (CDC).

Transactional Replication and CDC come with a configuration option which controls the size of the LOB data that is replicated to subscribing databases. This option helps with keeping the size of the change metadata under control, especially the distribution..MSrepl_commands and the "*_ct" tracking tables.

The error 7139 occurs if the inserted/updated LOB data is exceeding the configured limit.

Mitigation

Increasing the configured limit

If you are encountering this limitation, you can increase the current setting to a higher value, or change the option to "-1" for removing the limit:

```
EXEC sp_configure 'max text repl size', -1 GO RECONFIGURE GO
```

The setting takes effect immediately without restarting the server.

Considerations

- The max text repl size option is meant to protect the replication performance and change metadata of Transactional Replication and CDC. If this option is set to a very high value or to "-1" unlimited, it might be possible to overflow the system with a huge amount of replicated LOB data. For example, if all text/image columns of a large table get updated with a 2 GB object, either maliciously or by accident, all this data will be copied to the MSrepl_commands table and CDC's "_CT" change tracking tables. The system might never recover from this, forcing you to reinitialize the topology.
- Therefore it might better to assess the maximum possible size of your LOB data, e.g. to see how large an
 inserted document or photo might be. Then adjust the max text repl size option accordingly, with some
 additional buffer added to it.
- If neither Transactional Replication nor CDC require the LOB column to be tracked, you can exclude the LOB column from the replication article definition, or by specifying only the required columns in the captured column list of the CDC-enabled table.

More information

The max text repl size option specifies the maximum size (in bytes) of text, ntext, varchar(max), nvarchar(max), varbinary(max), xml, and image data that can be added to a replicated column or captured column in a single INSERT, UPDATE, WRITETEXT, or UPDATETEXT statement. The default value is 65536 bytes. A value of -1 indicates that there is no size limit, other than the limit imposed by the data type.

This option applies to Transactional Replication and Change Data Capture (CDC). When a server is configured for both Transactional Replication and Change Data Capture, the specified value applies to both features. This option is ignored by snapshot replication and merge replication.

Public Doc Reference

Configure the max text repl size Server Configuration Option 🛚

How good have you found this content?

