# Stored\_Procedure\_Tuning

Last updated by | Vitor Tomaz | Feb 18, 2021 at 3:29 AM PST

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#### **Stored Procedure Tuning Basics**

#### Issue

This TSG is designed for partners to follow before they engage SQL DB Perf queue for Query tuning issues. You are welcome to contribute to make it better. However, please do not add corner cases or any info related operations that only SQL DB engineering team can do.

### Investigation/Analysis

When you are trying to tune a store procedure the first step is to identify which specific section of the stored procedure is needed to be tuned. If there are multiple SQL statements in the StoredProcedure and it is possible to run that individually work with the customer and identify which particular statement has issues.

Request you to consider below points when tuning the Stored Procedure.

To improve the performance of the MERGE statement, we recommend the following index guidelines

- Create an index on the join columns in the source table that is unique and covering.
- Create a unique clustered index on the join columns in the target table.

These indexes ensure that the join keys are unique and the data in the tables is sorted. Query performance is improved because the query optimizer does not need to perform extra validation processing to locate and update duplicate rows and additional sort operations are not necessary.

- Check if Compression in enabled on the table/index.
- Mention specific column names instead of \* in the select command of the using clause.
- Check the Actual Execution Plan for the Stored Procedure. To do this refer
- Ensure indexes are used appropriately.
- Look at the clustered index scan and seek and ensure index scanning is happening and not index seek.
- Ensure statistics are up to date on target table.
- Remove the ISNULL check in the on the clause.

# **Root Cause Classification**

Root Cause: Azure SQL v3\Performance\Specific Query Slow

## **External Links**

Query Performance 12

## How good have you found this content?



