Query analysis - performance difference

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Issue

You might have a case where the customer presents one of the following scenarios:

- the query runs better on one database when compared with another - same hardware characteristics
- a query runs better under a specific setting like compatibility level when compared with another - same hardware characteristics

Investigation/Analysis

When presented with this type of scenario we need to know what are the data access patterns used by the two queries and eventual differences between them.

Note: make sure that you are familiar with the concepts presented on the TSG Execution Plans.

After collecting the execution plan for both queries, use the compare execution plan feature on SSMS.

This feature will help you highlight differences like:

- statistics differences.
- operators used for data retrieval
- operators used for JOIN operations
- etc

On the TSG Execution plans you have already listed some common operators and some examples on where one is preferred when compared with another.

Other points to look at:

- maxdop used
- compatibility level
- Memory grant

Mitigation

The solution is dependent of the scenario seen. Some common ones:

- use the right compatibility level.
- update statistics
- maxdop settings
- create an index that is missing

Internal reference

336780554

How good have you found this content?