Index and Statistics FAQ

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Overview

Below you can find some questions that customers might ask you during support requests and answers to support your communication. Note that the answers below is to support you. **It contains some internal links that will not make sense to the customer**

Indexes

How should I create/design indexes?

Indexes design should reflect the queries that are executed. You can find a guideline here.

Automatic tunning can help the customer by creating and evaluating indexes.

Can I just create missing indexes?

Missing indexes have some limitations. Like so don't blindly create missing indexes. They are a good starting point, but you need to take into account that you might end up with redundant indexes or an non optimal column order. Check Indexing guidelines.

How can I schedule Index maintenance?

Azure SQL Managed Instance allows you to schedule jobs - Automate management tasks using SQL Agent jobs in Azure SQL Managed Instance . In terms of scripts this can be used.

Check also Index maintenance strategy for recommendations related with Index Rebuild.

How can I avoid or reduce fragmentation?

Rebuild / reorganizing indexes reduces Index fragmentation. But in some cases the customer wants to reduce the index fragmentation effect.

This can be achieved in different ways. Check this TSG.

When should I rebuild indexes?

It will depend on each case and workload needs. Check this recommendations

For large tables how can I optimize Index rebuilds?

If the table is large, you can consider table partitioning. This will allow you to rebuild indexes per partition. This will make more sense if only a few partitions receives data (for example, if the table is partitioned by date, only the most recent partitions receives data).

Check Partitioned tables and indexes

Statistics

How can I schedule Statistics update maintenance?

Azure SQL Managed Instance allows you to schedule jobs - Automate management tasks using SQL Agent jobs in Azure SQL Managed Instance. In terms of scripts this can be used.

When should I update statistics?

There is no straight forward answer to this. It will depend on the workload and data changes. In some cases you might find tables that can be updated once a couple of weeks and in some extreme cases, you might find tables that you need to update more than once a day.

It all comes up with write activity / data changes.

For large tables how can I optimize Update statistics?

If the table is large, you can consider table partitioning. This will allow you to update statistics per partition. This will make more sense if only a few partitions receives data (for example, if the table is partitioned by date, only the most recent partitions receives data).

Check Partitioned tables and indexes.

You can also update statistics with a lower sample (for example 50%). Note that requires testing. In some data distributions the sample could be low and lead to suboptimal plans.

How good have you found this content?