

Quick Scan Report – TempDB Slow IO

The Role of TempDB in SQL Server Performance

TempDB is a workhorse in SQL Server. It's used for temporary user objects, internal objects, and version stores. Its performance is vital because it supports sorting, query processing, and many other essential functions. When TempDB experiences slow IO, it's not just a local problem for this database – it ripples across your entire SQL Server environment, affecting query performance, application response times, and ultimately, user satisfaction.

How Slow IO Affects TempDB

The data and log files of TempDB are in constant use. Slow IO in these files can occur due to several factors, such as suboptimal disk configurations, hardware issues, or inadequate maintenance practices. This sluggishness leads to longer read and write times, causing queries and operations that rely on TempDB to execute slower than expected. It's like having a slow foundation in a fast-moving machine – everything above it struggles to keep pace.

Database Health Monitor Reports on slow IO on TempDB.

If the write stall or read stall for TempDB is greater than 30ms you will see this warning.

The numbers shown in the Quick Scan report are the average stalls per read and stalls per write since your SQL Server instance was restarted.

What type of IO response should you see on TempDB?

It depends mostly on your I/O subsystem, but typically anything over 20ms to 30ms should be considered excessive.

If you are seeing numbers greater than 50ms this is a very bad sign.

Things you can do to improve TempDB I/O speed:

- Move TempDB onto a dedicated drive of its own.
- Move TempDB to faster disks (SSD).
- Reduce the usage of TempDB.
- Consider Trace Flag 1118.
- Contact Steve at [Stedman Solutions](#), LLC for help.

Need Help

Stedman Solutions, the provider of the Database Health Monitor Application offers [consulting solutions](#), and can help with getting your backups and restores, or any other database administration issues you may have.



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