





IMPROVE SERVER PERFORMANCE, UPTIME, AND AVAILABILITY WHILE LOWERING COSTS

Being proactive and having the time to be proactive often are two different things. As a database administrator you understand this as well as anyone.

Case in point: you'd love to get ahead of the curve and implement changes that optimize your databases. It's a great idea – and one you should pursue – but there's still the not-so-small matter of finding the time to do it.

Oh, and your organization is growing, and your bosses are asking more of you.

So, what to do?

In this guide we'll take a look at several core optimizations that you can easily implement to improve your SQL Server Performance and make sure that you're getting the most from your servers.

WE'LL COVER THESE TOP WAYS TO OPTIMIZE YOUR RESOURCES:

- **1**| Be Smart About Your Wait Times
- 2 Review Statement Analytics
- **3** Utilize Mobile Monitoring
- **4** Measure & Understand Availability
- **5** | Maximize Server Uptime
- **6** Fix Bad SQL Server Performance
- **7|** Know Your Server's Overall Health Status

BE SMART ABOUT YOUR WAIT TIMES

SQL Server wait times are frustrating and hinder your SQL Server performance. But having accurate wait statistics and understanding them is a key to keeping your servers running smoothly.

How do wait statistics help? They point you in the right direction when analyzing bottlenecks and narrowing down the cause(s) of server performance issues – from common wait issues to surprise wait issues that produce similar, frustrating delays.

A good wait-time resource bank is a comprehensive source of information about SQL Server waits that makes your job as a DBA easier.

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REVIEW STATEMENT ANALYTICS

It's easy to become frustrated when dealing with a sea of raw metrics, whether you're a new DBA or a seasoned one. But **statement analytics** can provide some context and guidance that help you interpret metrics that may have you confused.

Even better, having software that effectively monitors for any statements executing against SQL Server performance, then breaks them down clearly, will ease some of your stress as a DBA.

Knowing the context of these statements also gives you an idea of which ones you may want to optimize.





UTILIZE MOBILE MONITORING

The ability to monitor indicators relating to your system's performance health – including performance health, memory, processes, disk storage, and more – no matter where you are located.

Mobile monitoring lets you observe performance diagnostics any time, wherever you are, from your iPhone or Android device. With just a glance, you'll gain a quick understanding of your company's SQL Server infrastructures, check for any associated alarms, or reference a chart that displays recent historical data.

In short, you'll never miss a beat even if you're away from the office but still able to optimize your server's uptime and availability.



Availability refers to the period when a service is available along with the time the system needs to respond to a user's request. High availability works on a simple concept, but one that typically needs specialized software and configuration.

Obviously, your team wants your servers to have high availability. This minimizes downtime and service interruptions, which should be high priority. A problem could occur that brings down your application or servers, but implementing high availability reduces the impact of these events and saves you a lot of stress.

In short, a highly-available system will recover from server or component failures automatically.



MAXIMIZE SERVER UPTIME

We've already discussed minimizing wait times to optimize your server's performance, but maximizing server uptime is as important.

What are some way of maximizing uptime? Here's a quick look:

PERFORM ROUTINE PREVENTIVE MAINTENANCE

Preventive maintenance is one of the easiest, most pain-free practices you can use to enhance server reliability. A bit of maintenance now will save you from bigger, more expensive fixes in the future.

BEEF UP SECURITY

Hackers and attackers can put a serious dent in your server's overall uptime. The good news is that there are plenty of tools to stop them in their tracks – from anti-malware products to firewalls and independent audits.

PLAN, PLAN, PLAN

Careful planning is another form of preventive medicine that keeps your server in optimal health. Planning means life-cycle management, system configurations, and maintenance schedules. Server upgrades should be scheduled with system availability and overall performance in mind.

BE PRACTICAL

Your parents always told you to use common sense and it's great advice for almost every area of a person's life, including in the role of a DBA. That said, don't waste time and resources trying to squeeze the last bits of life out of a server that's aging and consistently error prone.



MAXIMIZE SERVER UPTIME

Everything we've discussed so far involves strategies that improve your server's performance. Now let's talk a little about some things you can do to fix poor SQL Server performance.

UPGRADE

It's probably time for an upgrade if you're not on a recent version of SQL Server. New versions of SQL Server get the latest versions of SQL query optimizing.

ADD MEMORY

Like a server upgrade, adding memory is a powerful way to optimize server performance.

TAKE A LOOK UNDER THE HOOD

OK, so not an actual hood (as in a car), but your system's task manager. Open up task manager to sort by CPU and by system memory to see if anything is running, such as viruses, of which you were unaware. Get rid of every piece of software that's slowing down your server or gobbling up its memory.

CHECK THE EVENT LOG

The SQL error log and your system's event log contain a wealth of information that you shouldn't ignore. You'll discover all kinds of things, such as why your server is experiencing wait times or any hardware issues.



MAXIMIZE SERVER UPTIME

You should have the ability to monitor your server's health status based on a variety of metrics, such as:

- Database backups
- Guest user access
- Simple recovery models
- Login password policies
- Physical memory
- Wait times
- Missed indexes

It's also helpful to have an "at a glance" function that allows you to monitor your server's performance quickly, with problems areas related to a specific color that relates to the severity of each issue.

TO LEARN MORE ABOUT SPOTLIGHT CLOUD AND ITS MANY FEATURES SIMPLY:

SIGN UP. SIGN IN. RESOLVE.

GET STARTED

