# StraightPath
## Solutions

# SQL Server Health Checklist

**straightpathsql.com**

# Introduction

SQL Server runs your critical business applications. Is yours reliable, secure and performing as well as it could?

At Straight Path Solutions, we use a tried and trusted 37-point health check process to ensure that your SQL Server installations are set for success. Here in this checklist, we'll let you in on what we feel could be the 8 most critical problem areas we find in SQL Servers needing a little more attention.

Please feel free to use this checklist against all of your instances of SQL Server and be sure your SQL Server is heading in the right direction. While this isn't exhaustive, it's a good start. We find if you get these points right, you'll have a better chance of passing the other 29 points.

# Checklist Items

## 1) Does SQL Server Tell You When It's Not Well?

Have you configured best practice SQL Server alerts? (http://straightpathsql.com/archives/2014/09/set-sql-server-alerts-happier-dba-quick-tip/) If so, do you have operators configured to receive those alerts and job failure notifications?

## 2) Can You Survive a Loss of Data or Crash?

If your database crashed at 2:30PM today, and your business expects you to lose only 5 minutes of data, can you meet that recovery objective?  There are a few things that make up this check:

- Do you have backups?
- Are you in the right recovery model?
- Have you tested your restores?
- Have you talked with the business about their goals?

When it comes to recovery, there is no credit for partial recovery!  If you aren't good here, maybe you've experienced the pain of unexplained transaction log growth? (http://straightpathsql.com/archives/2011/02/can-you-restore-sql-server-sqlu/)

## 3) Are your databases free from corruption?

Would you even know if they were corrupt? If you aren't checking database integrity on a regular basis, you don't even know. If you are checking, but only weekly and only saving transaction log backup files for 3 days, you may still not be protected. (https://straightpathsql.com/archives/2017/01/sql-server-corruption-read/)

## 4) Are your databases self-tuning?

That's a trick question (They aren't). Are you doing regular index and statistics maintenance to keep your performance up to date? If you aren't, maybe things have slowed over time. Work on getting that maintenance happening. Give yourself a checkmark if you do these important updates on a regular basis.

## 5) Is CPU Power Saving Keeping the Brakes on your SQL Server deployment?

This is a simple one. Are your production SQL Servers running on windows installations set in the "Balanced" CPU Power saving mode? If so, you could be paying a 3-10% penalty. (https://straightpathsql.com/archives/2016/12/power-saving-settings-killing-sql-server-performance-quick-tip/)

## 6) Are your SQL servers secure?

While we check many points in our full assessment, you can at least review your SQL Server sysadmin role members here today and give yourself a checkmark if you can justify each member. Our checks look to encryption, SQL Server ports, log file management, and other best practices.

## 7) Did you configure SQL Server after installation?

By default, a SQL Server is not setup optimally. We look for many signs in our 37-point check for that and help you pick the right options for your workload and needs.

But two quick checks you can review right now for this step are:

- Is Max Server Memory set to "unlimited" still (2147483647 MB)? If so, that's not great and could be hurting your performance and reliability.
- What about Optimize for Ad Hoc Workloads? Is that true or false? If it is false, you may be paying for that in performance.

## 8) Do you keep up with SQL Server Versions?

What version of SQL Server are you running? What Service Pack? Is it still in mainstream support? Have there been critical fixes released after your current release? ([https://straightpathsql.com/archives/2017/01/sql-server-version-numbers/](https://straightpathsql.com/archives/2017/01/sql-server-version-numbers/))

# What Next?

So how did you do? Based on the results, click on the links where provided. Start working out the solutions to get these best practices setup properly. While we look at a far wider net than this quick hit checklist, chances are if you have struggles here you may have struggles elsewhere. Also these are the areas we find most problematic to discover when it's too late. If your backups aren't good and you aren't checking for SQL Server corruption, you should stop everything and get on track with those findings.

On our Straight Path SQL blog, we have a series we call "Straight Up SQL Server Tips" discussing these findings, their solutions and more. Check that series out or subscribe to the newsletter for more content like this in the future.

If you think a deeper dive makes sense for your environment(s), Straight Path offers professional health assessment services. Our SQL Server Health Assessment gives you peace of mind that your databases are healthy. We find the problems and we give you an action plan. Our experts can help implement the improvements and teach you along the way.

Learn more about our SQL Server Health Assessments



"We came to Straight Path Solutions for a SQL Server health assessment and we're glad we did. During year-end processing, our teams were experiencing heavy delays running reconciliation reports. Despite our vendors insisting the solution was to buy more hardware and abandon virtualization, we suspected it was a database issue. Straight Path identified a lot of pain points that had inexpensive solutions. In no time, we were running year end reports and viewing invoices faster than we ever had - without the pain of expensive hardware upgrades. They've become trusted database advisors and they worked with us where we were."

- Brian Gibson
  President, Capital City Group

# About Straight Path Solutions

Straight Path Solutions is a team of SQL Server consultants with many years of experience and a drive to help our clients succeed. We come from all walks and our team can flex as our client needs flex, but we are all bound together by a common purpose and a love of all things technology, especially in the Microsoft Data Platform stack.

You name the industry vertical, we've probably been there. From heavily regulated industries like big pharmaceuticals, banks, credit unions, insurance, hospital systems to small Software as a Service start-ups and everything in between, we've worked with their data and our base of industry knowledge is always going up – as is our "sample size" for seeing what companies are doing with SQL Server.

Mike Walsh is the founder of Straight Path Solutions. He started Straight Path in 2010 when he decided that after over a decade working with SQL Server in various roles, it was time to try and take his experience, passion, and knowledge to help clients of all sorts.

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