

To realize the full benefits of your Microsoft SQL Server data system and ensure its stability, you need support from a team with a deep understanding of its capabilities. Pythian's DBAs have years of technical expertise and experience in all aspects of Microsoft SQL Server. Along with core database administration, Pythian experts have extensive knowledge in all SQL Server related products, such as: SSIS, SSRS and SSAS, as well as high availability and disaster recovery solutions for SQL Server, security, virtualization and many more. Our teams include certified specialists, authors, speakers, college instructors, and community leaders.

SKILLS AND EXPERIENCE

- Microsoft SQL Server (2000, 2005, 2008 R2, 2012, 2014, 2016, 2017)
- Windows Server (2003, 2008, 2008 R2, 2012, 2012 R2, 2016)
- High availability and disaster recovery: clustering, log shipping, mirroring, AlwaysOn Availability Groups
- Data integration: Microsoft SQL Server Integration Services (SSIS/DTS)
- In-Memory OLTP and Columnstore technologies
- Replication: Microsoft SQL Server to Oracle replication, Microsoft SQL Server replication
- Business intelligence: Microsoft SQL Server Analysis Services (SSAS), Microsoft SQL Server Reporting Services (SSRS), and Power BI
- Cloud: Microsoft Azure, Amazon Web Services (AWS)
- Azure SQL Database
- Azure SQL Data Warehouse
- Cosmos Db
- Virtualization: VMware and Microsoft Hyper-V
- Table partitioning
- Resource Governor
- Extended Events
- And more

AREAS OF EXPERTISE

- Architecture design
- Automation
- Backup and recovery
- Best practices review
- Business intelligence
- Cloud architecture, design, and migrations
- Complex technical issue resolution
- Consolidation
- Data analysis
- Database design and development
- Data warehousing

- ETL development
- High availability and disaster recovery solution design and implementation
- New feature review
- Operating system, instance, and database monitoring
- Performance tuning, T-SQL coding, and optimization
- Security and auditing
- Upgrades and migrations
- Platform Migrations (Oracle to SQL)
- And more

**PROGRAMMING
LANGUAGES**

- C, C++, C#
- JavaScript
- Microsoft Visual Basic
- Scheme
- ASP .NET
- Matlab
- Java
- Prolog
- x86-ASM
- Perl
- VBScript
- PowerShell

CERTIFICATIONS

- Microsoft Certified Trainer
- Microsoft Certified Master
- Microsoft Certified Systems Administrator
- Microsoft Certified Solutions Expert
- Microsoft Specialist: Cloud Data Platform
- Microsoft Partner – Gold Data Platform
- Microsoft Partner - Silver Cloud Platform
- Microsoft Most Valuable Professionals (MVPs)

**COMMUNITY
CONTRIBUTIONS**

- International SQLSaturdays speakers
- PASS Summit speakers
- Live360
- SQL Bits
- DevTeach
- Users Groups
- And more

SELECT PROJECTS

- Built an ODS running on SQL Server 2016 Always-On Availability Groups.
- Successfully managed multi-TB SQL Server database on Azure VMs for a client's ERP system.
- Migrated client from Oracle to Azure SQL Database, reducing costs and improving performance at the same time.
- Migrated client from SQL Server 2000 on-premises to SQL Server 2016 with availability groups on an AWS Multi-AZ deployment.
- Upgraded legacy 2005 system to SQL Server 2014 for major Canadian retailer.

- Tuned and re-wrote stored procedures, functions, and triggers that were significantly impacting website performance. Processes that previously took nearly five hours now run in three minutes—a considerable performance gain in the customer environment.
- Developed a T-SQL data consolidation script for 20 TMS (The Museum System) databases for a large museum in New York City. Platform migration for the museum for their TMS and Tessitura environments from SQL 2005 to SQL 2008 R2. Main administrator of the museum's ETL solution GoAnywhere. Worked on migration of data layer integrations for the move from separate TMS databases to one consolidated copy release on July 2013.
- Resolved a very difficult SQL Server 6.5 technical escalation for a clinical lab customer that was experiencing major corruption issues on a legacy SQL Server 6.5 instance that was no longer supported by Microsoft. We supported them until they were stable and developed a custom log shipping set of scripts so they could have a high availability solution in SQL 6.5 (a feature that did not exist in the product until 2 versions later).
- Significantly improved an audit institution's data warehouse performance—from 26 hours to load public bills for all cities in its jurisdiction to just 6 hours.
- Developed a data warehouse solution for the bureau of finance in one of Brazil's states to help load and analyze invoices to identify possible cases of money laundering and tax evasion.
- Developed a data warehouse and analytics solution for a large telecom organization to identify potential customers, customer turnover, advertising conversion rates, service usage, and other key measurements that helped the company increase revenue.
- Migrated a client's main SQL Server environment from on-premises to a hosting site over a very narrow network bandwidth. Both the client and the hosting provider had tried several methods and failed. We customized scripts for the migration using the clients' existing compression tools. The production cutover to the new site took only a few minutes to complete.
- Reduced a client's import window from 12 hours to 3. The client had nearly 50,000 customers, with a database for each one and was planning to grow to more than 100,000. They were importing all of the sales data into a centralized data warehouse for analysis. By re-architecting the imports, we were able to reduce the import window from 12 to three hours.
- Resolved a client's performance issues caused by transaction volume and data doubling over the years. Upgrading to better hardware and the latest SQL Server version was the quickest option; however, keeping scalability, future growth, and budget in mind, we implemented virtualization using Hyper-V and disaster

recovery. The deployment was fast with minimal downtime. The new solution could easily scale for future growth, significantly improved performance, reduced IT costs by ~60%, and reduced power consumption by ~50%.

- Designed and implemented a table partitioning and archiving solution for a customer database that increased by hundreds of GBs of data every week. We designed the databases within that project to ensure fast data insertion and reporting. We also developed their backup strategy.
- Designed and configured a disaster recovery site for a North American natural gas and electricity retailer using Always-On Availability Groups for SQL Server 2012 Enterprise Edition, ensuring zero data loss during a failover.
- Designed a modern and normalized SQL Server reporting database and created import processes for populating it from legacy data sources on a regular basis, allowing users to use modern client tools such as Microsoft Reporting Services and Excel to generate reports directly from the new database.
- Resolved uncommon synchronization issues related to SQL Replication for a major multiple listing property service thereby allowing their clients to query proper data from the secondary database via their website.
- Performed security reviews on SQL server environments of a major US airline to ensure compliance with Microsoft and market security best practices.
- Transferred existing SQL Server Reporting Service (SSRS) system to a new environment; the complexity of this transfer came from the existence of multiple configuration items as well as a database server and encrypted data.
- Assisted in the design of a High Availability/Disaster Recovery solutions portfolio for a major Canadian Internet hosting company. This portfolio was to be used by their hosted clients as a menu from which they could choose their HA/DR solution. Portfolio development included advantages and disadvantages, feature comparisons, RPO (recovery point objective) and RTO (recovery time objective) of hardware, database, and virtual machine mirroring, database log shipping, clustering, replication (SQL and Non-SQL), SQL Server 2012+ AlwaysOn Availability Groups, and cloud solutions (such as Azure).

SELECT CLIENTS

- Sonos
- Giant Tiger
- Just Energy
- MINDGEEK
- JPay
- RockYou
- Web.com