The Performance Features of SQL Server 2016

Why your data is only as good as the performance of your data management system

Insight

Microsoft

Transforming data into valuable insights

In order for your company to outperform the competition, your business needs to be data-driven. A 2016 report by PwC found that only 39% of respondents described their organizations as highly data-driven.[1]

Microsoft® SQL Server® 2016 helps you become more data-driven. Yet it's much more than a data platform. The upgrade has the power to enhance your business, help you gain a competitive edge and empower workers at all levels. Powerful features include:

- PolyBase
- R Services
- Stretch Database
- AlwaysOn Availability
- Online Transaction Processing (OLTP)

Offering both performance and scalability, SQL Server 2016 will deliver game-changing data. And if certain skill sets aren't available in-house, Insight has the expertise to fill in the gaps and help you harness your data's full potential. We also offer extensive end-to-end technical services around Microsoft solutions to help your business run smarter.

How can you use the SQL Server upgrade to transform your business? Read on to find out.

Industry-leading innovations

With faster data processing and optimization, SQL Server 2016 can execute complex queries more efficiently than ever before. Advancements in memory technology are changing the landscape of big data with a sheer increase in speed alone. Here are three ways SQL Server 2016 is leading the way in these innovations:

Instantaneous access

SQL Sever 2016 includes industry-leading in-memory OLTP. This built-in feature enables users to rapidly complete transactions and allows for greater application scaling.

Compare set vs. sample.

Data is critical to decision-making, and without all of the facts, it can be difficult to make informed choices. In-Memory OLTP in SQL Server will give you a competitive advantage: You can analyze data in real time with line-of-business operations.

Faster transactions

We're in an age of instant gratification, and customers expect transactions to occur effortlessly and quickly. With the in-memory optimization in SQL Server, you can deliver on this expectation.

Scalability is a few clicks away.

SQL Server® 2016 gives you the ability to scale on demand with its Stretch Database feature. Your company may not always need large workloads, but certain scenarios may call for more processing power than your typical business day. In those cases, Stretch Database allows you to use your on-premise instance of SQL Server to extend additional data to Microsoft® Azure® SQL Database.

You remain in control and can decide what lives where. You can effortlessly make changes and scale up in just a few clicks.

Free your resources.

The Stretch Database option will transform your business by allowing you to focus on improving operations and creating efficiencies instead of worrying about storing data locally.
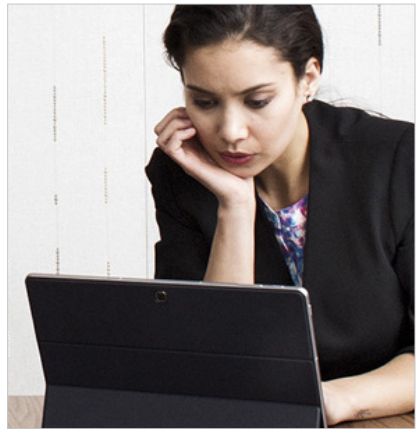
Modifications are seamless and simple.

When you make changes, the adjustments won't impact users. They'll only experience fast, easy data analysis. Additionally, code changes aren't required for making calls to applications, extracting data, transforming or loading.

Facilitate fast backups.

Your company is nothing without its data, which makes backup and restore capabilities just as important as everyday use and storage. Microsoft SQL Server 2016 delivers instantaneous backup and restore functionalities.

File-Snapshot Backup ensures you can view complete database backups, as well as a transaction log of backups. With a snapshot of data and log files, backups won't require a full copy of all of the files in the database. Instead,

Azure creates an overview of the database's contents, which produces lightning-fast backup functionality.

Migration and upgrades are simplified.

Upgrade Advisor, which provides a unified experience for SQL Server upgrades and migrations, helps guide you through the steps with the

following capabilities:

- **Feature compatibility analysis**, to understand what will or won't be compatible when you upgrade to SQL Server® 2016

- **Feature recommendations**, which analyzes your database and features in the new SQL Server and finds examples of instances where you can take advantage of specific benefits

- **Auto-fix compatibility issues**, which automatically resolves certain compatibility issues with scripts and syntaxes

- **Schema and data migration**, which allows your organization to choose between a one-time upgrade or a side-by-side upgrade

Additionally, the SQL Server Migration Assistant helps those who are moving from platforms such as Oracle®,

Sybase®, MySQL® and Access®, and ports over important features. For example, previous DB2®, Sybase and Oracle customers will have access to In-Memory Columnstore, Row Level Security and temporal tables.

With Insight's Hybrid Cloud Assessment and road map discovery service, we can review your entire business, evaluate opportunities and fully integrate SQL Server 2016 into your environment.

Why Insight for Microsoft SQL Server?

Insight is Microsoft's largest global partner and has been providing Microsoft® solutions for more than 25 years. We put Microsoft at the center of our end-to-end strategy to help businesses run smarter. We collaborate to deliver Intelligent Technology Solutions™ that meet your strategic business needs and optimize your technology investments.

- Microsoft Gold Partner — 14 Gold competencies
- Microsoft Excellence in Operations Award
- 1,400+ consulting and service delivery professionals
- Top 1% of all Microsoft partners
- Flexible licensing options

About Insight

From business and government organizations to healthcare and educational institutions, Insight empowers clients with Intelligent Technology Solutions™ to realize their goals. We provide the guidance and expertise needed to select, implement and manage complex technology solutions to drive business outcomes.

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[1] PwC. (2016, June 27). PwC's Global Data and Analytics Survey 2016. Pwc.com.