SQL Database

The intelligent relational cloud database service

Azure SQL Database is the intelligent, fully-managed relational cloud database service built for developers. Accelerate app development and make maintenance easy and productive using the SQL tools you love to use. Take advantage of built-in intelligence that learns app patterns and adapts to maximise performance, reliability and data protection.

Use built-in intelligence to protect and optimise your database

SQL Database uses [built-in intelligence](https://docs.microsoft.com/en-in/azure/sql-database/sql-database-technical-overview) that learns your unique database patterns and automatically tunes the database for improved performance and protection. Threat Detection monitors your database round-the-clock and detects potential malicious activities, alerting you upon detection so you can intervene right away.

*“Using the automatic tuning feature, our team was able to quickly and efficiently fine tune our databases. Since we have over 1,400 databases, traditional methods of tuning would be very labor intensive. However, with automatic tuning we were able to analyze thousands of queries and get them tuned instantly.”*

Shahin Kohan, President of AIMS360

Optimise performance for your workloads

When demand for your app grows from a handful of devices and customers to lakhs, SQL Database [scales, on the fly, with minimal downtime](https://docs.microsoft.com/en-in/azure/sql-database/sql-database-technical-overview). Additionally, SQL Database provides [in-memory OLTP](https://docs.microsoft.com/en-in/azure/sql-database/sql-database-in-memory) that improves throughput and latency on transactional processing workloads up to 30x over traditional table and database engines and delivers faster business insights with up to 100X faster queries and reports over traditional row-oriented storage.1

*“The addition of In-Memory OLTP tables and native-compiled stored procedures to one SQL Database immediately reduced our DTU consumption by 70 percent and allowed us to support rapid growth without investing significant effort to maintain performance. For data-centric services, in-memory support provides instant scale to existing applications with few to no changes outside of the database.”*

Mark Freydll, Solution Architect at Quorum

Build multitenant apps with customer isolation and efficiency

If you’re a software as a service (SaaS) app developer writing a multitenant app that serves many customers, you often have to make tradeoffs in customer performance, efficiencies and security. SQL Database removes the compromise and helps you [maximise your resource utilisation and manage thousands of databases as one](https://docs.microsoft.com/en-in/azure/sql-database/sql-database-technical-overview) while ensuring one-customer-per-database with elastic pools.

*“Elastic pools are a perfect fit for our SaaS offering because we can dial capacity up and down as needed. Provisioning is easy, and with our setup, we can keep utilization at a maximum.”*

Morten Christensen, Technical Lead, Umbraco

Work in your preferred development environment

SQL Database allows you to focus on what you do best: building great apps. Seamlessly enable DevOps by developing in SQL Server containers and deploying in SQL Database with the [easy-to-use tools](https://docs.microsoft.com/en-in/azure/sql-database/sql-database-technical-overview) you already have, such as Visual Studio and SQL Server Management Studio. Or, build your applications with Python, Java, Node.js, PHP, Ruby and .NET on the MacOS, Linux and Windows platforms and deliver with the speed and efficiency your business demands.

*“Most of our applications are written in Microsoft .NET Framework and C#, and we were already a Microsoft Enterprise Agreement customer, so Azure licensing was attractive. But from a technical perspective, Azure really matched up with the way we did things. It was developer-focused, with a great developer ecosystem such as a rich set of APIs, networking that’s very easy to use, and Azure SQL Database, which lets us port our databases to the cloud with no code modifications.”*

Robert Rudduck, Director of Architecture and DevOps, Ambit Energy

Helps protect and secure app data

SQL Database helps you build security-enhanced apps in the cloud by providing [advanced built-in protection and security features](https://docs.microsoft.com/en-in/azure/sql-database/sql-database-technical-overview)that dynamically mask sensitive data and encrypt it at rest and in motion. Ensure high availability with three hot replicas and built-in automatic failover that guarantees a [99.99% availability SLA.](https://azure.microsoft.com/en-in/support/legal/sla/sql-database/v1_1/)2 Accelerate recovery from catastrophic failures and regional outages to an RPO of less than 5 seconds with active-geo replication. With physical and operational security, SQL Database helps you meet the most stringent regulatory compliances, such as ISO/IEC 27001/27002, Fed RAMP/FISMA, SOC, HIPPA and PCI DSS.