



SQL Server 2008 and 2008 R2 End-of-Support Guide

Upgrade paths to modernise your infrastructure and future-proof your technology.



Introduction

SQL Server 2008 and 2008 R2 went out-of-support in July 2019. For users of SQL Server 2008 or 2008 R2, that means the end of regular security updates. It is critical to avoid the challenges and vulnerabilities caused by end-of-support.

End-of-support is like any lifecycle milestone – it offers organisations a chance to reassess directions and set up for the future. With the right strategies, organisations can make sure they are protected, that their infrastructure is secure and that their technology stack is future-driven.

Microsoft has several end-of-support offers for SQL Server 2008 and 2008 R2, as detailed on page 9 of this guide, including saving up to 85% when you migrate your SQL Server 2008 or 2008 R2 to Azure SQL Database Managed Instances, extended security updates for on-premises environments, and free extended security updates in Azure.

This guide will provide you with the information you need to assess your upgrade options and develop a strategic roadmap for upgrading.

This guide covers:

- » What does end-of-support mean?
- » Risks of not upgrading
- » Upgrade benefits and options
- » End-of-support offers

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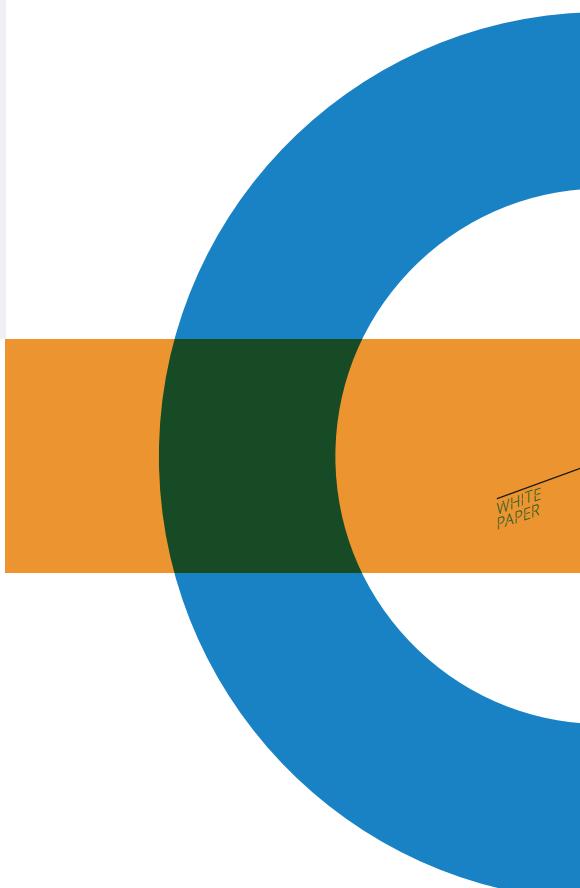
What does end-of-support mean for me?

Extended support for SQL Server 2008 and 2008 R2 ended July 9, 2019.

End-of-support means that there are no further updates for SQL Server 2008 and 2008 R2. While many organisations might get by without the latest application features, no organisation should go without regular security updates. With cyber attacks increasing in both frequency and sophistication, storing data on unsupported versions creates a massive compliance and security risk, with regulations such as the GDPR, leading to business complications and financial penalties.

SQL SERVER VERSION	END OF MAINSTREAM SUPPORT	END OF EXTENDED SUPPORT
SQL 7	Dec 31 2005	Jan 11 2011
SQL 2000	Apr 8 2008	Apr 9 2013
SQL 2005	Apr 12 2011	Apr 12 2016
SQL 2008	Jan 14 2014	Jul 9 2019
SQL 2008 R2	Jan 14 2014	Jul 9 2019
SQL 2012	Jul 11 2017	Jul 12 2022
SQL 2014	Jul 9 2019	Jul 9 2024
SQL 2016	Jul 13 2021	Jul 14 2026
SQL 2017	Oct 11 2022	Oct 12 2027

Versions in **BOLD** are no longer supported.





Risks of not upgrading



The risks of staying on SQL Server 2008 and 2008 R2 are not to be taken lightly. Security and compliance lapses, customer loss, damaged reputation, and missed opportunities are just some of the risks of remaining on unsupported SQL Server versions.

Security and compliance

Without security updates, you may fail to comply with regulations such as the General Data Protection Regulations (GDPR) or The Sarbanes-Oxley Act (SOX). This can seriously hamper your ability to:

- » Protect against hackers and malware
- » Utilise end-to-end data protection across SQL Server and frequently used together services

Customer loss

Many customers will not work with a company that does not keep their systems up to date. Others will be forever lost in the event of a breach. According to a study by Microsoft, 20% of companies lose customers due to security attacks, and 30% lose revenue as a direct result.

Damaged reputation

If a data loss occurs, your company will be accountable to shareholders, investors, customers, the public, and perhaps even the courts. Admitting you did not keep your systems up to date can cause significant reputational damage.

Missed opportunities

Organisations who embrace digital transformation, by moving to supported systems, gain access to new features and the benefits they deliver.



Benefits of upgrading

Upgrading SQL Server 2008 and 2008 R2 should be seen as an opportunity to innovate and future-proof your infrastructure approach.



Mitigate risks with platform security and compliance

Gain the benefit of critical security updates to eliminate business interruptions and loss of data.



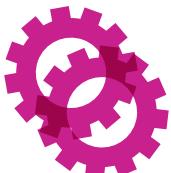
Upgrade to better cost efficiency

Eliminate capital investment with Azure, by utilising Microsoft's security, redundancy and disaster recovery for your IT systems, without the expense of secondary infrastructure.



Modernise to innovate

Grow your environments with data, analytics and the cloud. Innovate quickly and easily while minimising up-front costs.



Never update again

An evergreen solution on Azure means you will always be on a secure and up-to-date solution.

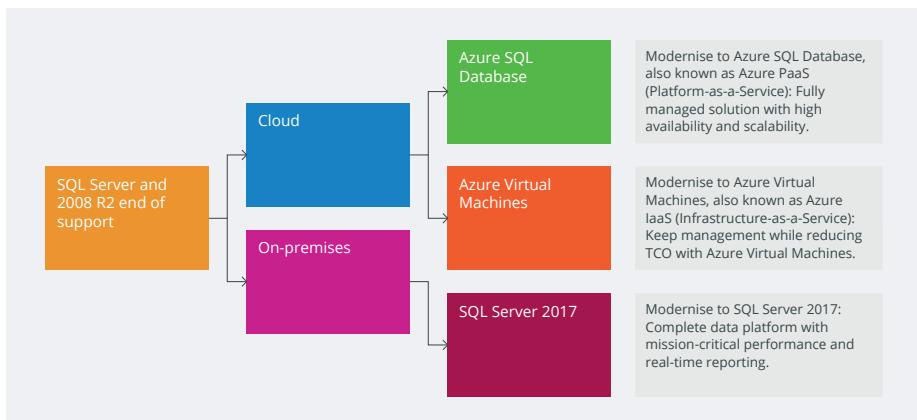




Upgrade options

While it may seem daunting, SQL Server 2008 and 2008 R2 end-of-support is a great business opportunity to upgrade your application. Incremental Group offers three upgrade options:

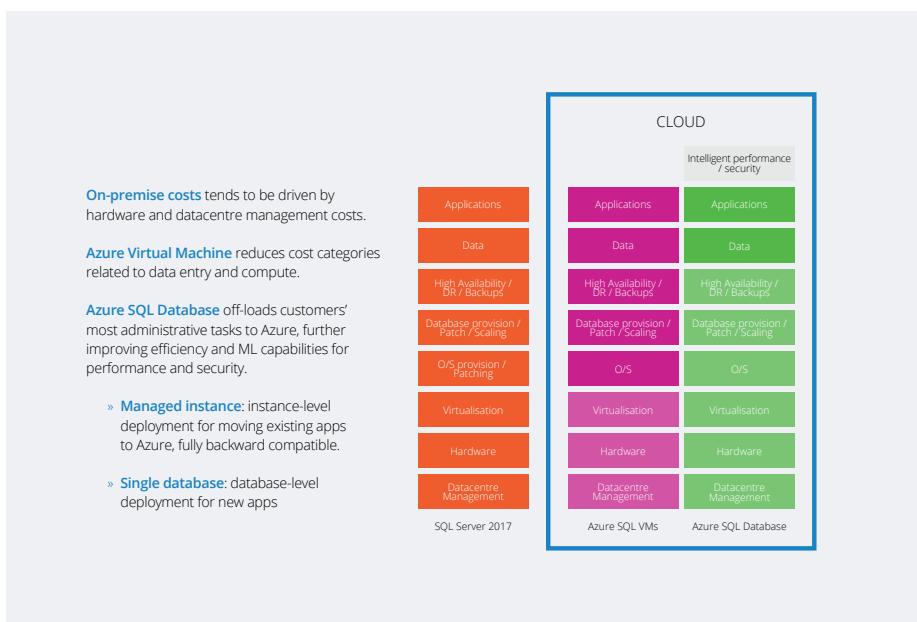
- » Modernise to Azure SQL Database
- » Modernise to Azure Virtual Machine
- » Modernise to SQL Server 2017



Cost savings of moving to Azure SQL Database or Azure Virtual Machines

There are significant savings to be made by moving from on-premises data centres to Azure SQL Database or Azure Virtual Machines. On-premises costs are driven by the hardware and management costs of the data centre. When moving to Azure, you remove the need to manage IT assets on-premises, as well as eliminating the need for servers; you also reduce the burden of maintenance on IT teams.

The diagram below illustrates where the cost savings are realised.





1 / Azure SQL Database

For organisations looking for a fully-managed database service hosted in Azure.

In the case of Azure SQL Database (Azure PaaS), Microsoft offers a complete platform on which customers can roll out their applications. No maintenance of the servers or operating systems is required.

Azure SQL Database combines the rich SQL Server surface area with the operational and financial benefits of intelligent, fully-managed service. Customers can migrate their SQL Server databases without rearchitecting their apps. With Azure SQL Database, you are responsible for your applications and data, but Microsoft manages everything else. They will manage the operating systems and availability, and you will only pay for what you use.

WHY MOVE TO AZURE SQL DATABASE?

- Seamless and compatible** - The broadest SQL Server compatibility and VNET support
- Competitive TCO** - Save up to 85% with Azure Hybrid Benefit when moving to Azure SQL Database Managed Instances or to Azure SQL Virtual Machines
- Breakthrough productivity and performance** - Up to 100 TB of on-demand scalable storage per DB
- Industry-leading security** - Layers of security and 99.99 per cent availability SLA
- Built-in intelligence** - Intelligent performance tuning and intelligent protection



2 / Azure Virtual Machines

For enterprises starting cloud modernisation who want to maintain operating system and instance control.

In the case of Azure Virtual Machines (Azure IaaS), Microsoft offers virtual machines to provide you with cloud-based server resources. You decide how many servers you need, as well as their capacity. You control the instance and are responsible for the operating system. With just one click, you can access more servers or change the capacity of existing ones depending on your requirements. These changes can also be automated. For example, making servers smaller at night and bigger during office hours.

However, they remain servers or virtual machines. It is irrelevant to Microsoft which applications will ultimately run on these servers. Microsoft leaves the management of virtual machines to the organisation. Managed services can be provided by Microsoft partners and include regular maintenance of the Windows Server operating system, configuring daily backups, configuring and updating anti-virus solutions, and installing security patches.

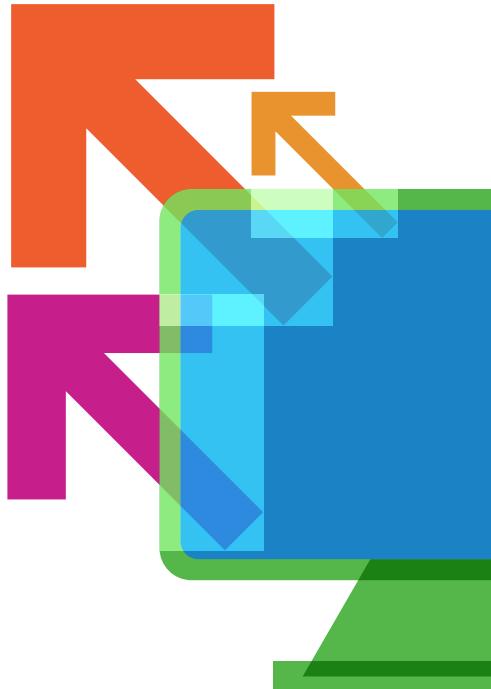


Why move to Azure Virtual Machines?

1. Secure and compliant - The most compliant cloud solution
2. Seamless cloud migration - 100% SQL Server compatibility and the only cloud solution with the pre-configured developer edition
3. Flexibility and control with automation - Easier to maintain than EC2 with automatic security patches and automatic backup

Azure Virtual Machines: End-of-support offers for SQL Server 2008 and 2008 R2

Extended Security Updates for SQL Server 2008 and 2008 R2 are offered on Azure IaaS at no additional charge above the standard pricing for Azure Virtual Machines. For customers that migrate workloads to Azure Virtual Machines, Microsoft offers security updates, and bulletins rated "Critical" for SQL Server 2008 and 2008 R2.



3 / SQL Server 2017

For organisations that need it all on-premises or in Virtual Machines for security, efficiency, and innovation.

With SQL Server 2017, your business does not just receive an updated database. SQL Server 2017 is the industry-leading data platform that provides built-in security, enhanced performance, and analytics to modernise your business. Now available also on Linux, SQL Server 2017 is the first commercial database with AI built-in.

Transform your enterprise applications with a complete and robust mission-critical data platform by upgrading your current SQL Server to SQL Server 2017.

Some of the best new features of SQL Server 2017

[SQL Server on Linux](#)

SQL Server is no longer just a Windows-based relational database management system. It can be run on Linux with applications developed on SQL Server on Linux, Windows, Ubuntu, or Docker and deploy them on these platforms.

[Resumable online index rebuild](#)

This feature resumes an online index rebuild operation from where it stopped after events such as database failovers, running out of disk space, or pauses.

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[SQL Server machine learning services](#)

SQL Server 2016 integrated the R programming language, which can be run within the database server and can be embedded into a Transact-SQL (T-SQL) script, too. In SQL Server 2017, you can execute the Python script within the database server itself.



Query processing improvements

SQL Server 2017 adapts optimisation strategies to your application workload's runtime conditions. It includes adaptive query processing features that you can use to improve query performance in SQL Server and SQL Database.

Distributed transaction support

SQL Server 2017 supports distributed transactions for databases in availability groups. This support includes databases on the same instance of SQL Server and databases on different instances of SQL Server.

Security enhancement

You can now grant, deny, or revoke permissions on database-scoped credentials such as control, alter, references, take ownership, and view definition permissions.

High availability and disaster recovery

Gain mission-critical uptime, fast failover, easy setup, and load balancing of readable secondaries with enhanced 'Always On' functionality in SQL Server 2017.

Extended security updates for on-premises environments

Extended security updates will also be available for workloads running on-premises or in a hosting environment. Customers running Windows Server or SQL Server under licenses with active Software Assurance or Subscription licenses under an Enterprise Agreement enrollment are eligible to purchase Extended Security Updates annually for three years after end-of-support (for 75% of the license cost). Customers can purchase Extended Security Updates for only the servers they need to cover. This offer replaces Premium Assurance.

End-of-support offers for SQL Server 2008 and 2008 R2

Save up to 85% with Azure Hybrid Benefit

Save even more when you migrate your SQL Server 2008 or 2008 R2 to Azure SQL Database Managed Instances, a fully managed, "version-free" database-as-a service, or to Azure Virtual Machines.

Extended Security Updates for on-premises environments

Customers with Software Assurance or subscription licenses may purchase Extended Security Updates for 3 years of security updates for SQL Server 2008 and 2008 R2. Customers can purchase Extended Security Updates for only the servers they need to cover.

Free Extended Security Updates in Azure

Move your SQL Server workloads to Azure with no application code change, right away. This gives you more time to plan your upgrade to newer versions such as SQL Server 2017 running in Azure.



Find out more

Incremental Group is a Microsoft gold partner for Data Centre, Application Development, and Independent Software Vendor (ISV). Our experienced team of consultants have a track record working with Azure and SQL Server and are on-hand to assist you in updating your processes, replacing your existing solutions, and supporting your digital transformation.

As a delivery partner, we ensure maximum impact for our customers by aligning our delivery to positive business outcomes with a methodology that supports business change and drives optimal user adoption.

Next steps

Cloud Readiness Assessment

Our one-day [SQL Server Migration Readiness Assessment](#) helps to determine the best Azure SQL options for on-premises applications and prioritises their SQL migration to the Cloud.

The assessment reviews the current IT infrastructure and supports organisations future business plans while assessing the impact they have on the IT infrastructure.

Visit our [Cloud services](#) page to find out more.