Microsoft Azure

Better on Azure

The benefits of using Azure for Windows Server and SQL Server workloads

Contents

Introduction

Why Azure for Windows Server and SQL Server workloads in the cloud?

To many businesses, cloud technology represents an opportunity to meet their needs head-on, especially regarding cost savings, IT support, compliance, and security. It also offers a chance to retire aging hardware and software as end-of-support for those solutions approaches. But that's just the beginning.

For companies looking to differentiate their brands in a competitive market, migrating to the cloud gives them the freedom and flexibility to innovate products and services that delight, engage, and surprise their customers.

Moving your Windows Servers and SQL Server workloads to the cloud provides access to easily integrated cloud-native services that help streamline processes and optimize costs. Armed with these tools and resources, you can use your data to extract valuable insights, optimize workloads, and innovate confidently using the newest cloud and AI technology advancements.

Five key reasons for migrating your Windows Server and SQL Server workloads to Azure:

1 End-to-end security that's easy to implement and manage, including broad compliance capabilities.

2 Improved agility supported by intelligent databases.

3 Connected hybrid solutions designed from the ground up to seamlessly bridge on-premises and cloud environments.

4 Numerous cost advantages help maximize investments, with several benefits available only on Azure.

5 Expanded access to global, regional, and Virtual Machine (VM) networks to support disaster redundancy and compliance.

Chapter 1

Achieve unmatched security and compliance

To protect your data and maintain customer trust, staying at the forefront of security technology and regulations is essential. Enterprises have already chosen Windows Server and SQL Server for their proven security and compliance capabilities. Today, many organizations are discovering that the code-to-cloud approach further simplifies the implementation of a comprehensive, modern security posture. Find the latest support requirements for your legacy workloads and consider migrating to the cloud to take advantage of its many benefits and capabilities.

Azure delivers multiple layers of security, including the secure foundation of physical data centers, operational best practices, and engineering processes that follow industry-standard guidelines. Microsoft employs over 3,500 cybersecurity professionals and invests US $1 billion annually to protect against, detect, and respond to threats anytime, anywhere.

> ## 90+
> compliance certifications, the most comprehensive set of any cloud service provider
> Azure vs. AWS

A unified platform for security best practices

Enterprises are embracing the cloud as a foundational intelligence, agility, and scalable technology. Plus, users who migrate their Windows Server and SQL Server to Azure get all the benefits of a hybrid cloud environment while also receiving three additional years of Extended Security Updates at no cost.

Protecting your assets in the cloud includes using built-in security features and AI tools that increase your visibility of potential threats. To strengthen security across your entire cloud infrastructure, focus on managing compliance and security with Azure Sentinel and Microsoft Defender for Cloud solutions.

Customers who move to Azure have access to Azure Sentinel, a cloud-native security information and event management (SIEM) solution. It requires no on-premises infrastructure, which helps reduce the complexity of running an enterprise SIEM.

Microsoft Defender for Cloud is a unified security management platform that enhances your security posture, providing advanced threat protection across both cloud and on-premises workloads. It provides security recommendations for virtual machines, storage, networking, databases, identity, application services, and IoT—all from a single integrated dashboard.

Designed to support hybrid and multicloud environments, Defender for Cloud helps you manage risk by integrating real-time security insights and incident response capabilities, allowing for robust protection from code to cloud. It also helps prevent, detect, and respond to attacks across multicloud workloads through integrated extended detection and response (XDR) protection. Additionally, it improves application development security by providing centralized insights across multiple pipelines and multicloud DevOps. Built-in security and compliance features further safeguard your entire environment, ensuring comprehensive protection at every level.

> ## 90%
> Early adopters of Azure Sentinel have reported up to 90% reduction in alert fatigue.
>
> ## 57%
> Customers can get mission-critical performance for SQL Server on Azure Virtual Machines up to 57% faster.[1]
>
> ## 54%
> lower cost than AWS EC2 on a price-performance basis, with Azure Hybrid Benefit and a three-year commitment.[1]

[1] GigaOM | SQL Transaction Processing and Analytic Performance Price Performance Testing

Chapter 2

Be agile with intelligent databases

Data-driven businesses must function at the speed of information, and enterprises with the right foundation will find themselves better able to innovate and maintain agility in their fast-moving industries. Nothing will slow down operations more than friction at key points in your infrastructure.

The Microsoft Intelligent Data Platform (MIDP) is an integrated cloud platform spanning data governance, analytics, and databases to help remove this friction. MIDP offers layers of business and data intelligence that make your insights more on-point, giving your organization greater agility to respond to any situation when it happens.

You can also take advantage of AI to monitor and secure your workloads. The intelligent security and performance features in Azure SQL Database mean consistent and predictable workload performance, which means better performance, greater agility, and a comprehensive data solution that connects analytics, apps, and governance.

> "
>
> With all the major improvements to SQL every year that we utilize, and I'm sure there'll be a lot more, we definitely want to stick with Azure SQL Database and with Hyperscale."
>
> **Matt Nisnevich**
> Sr. Developer & DevOps Engineer, RevenueWell
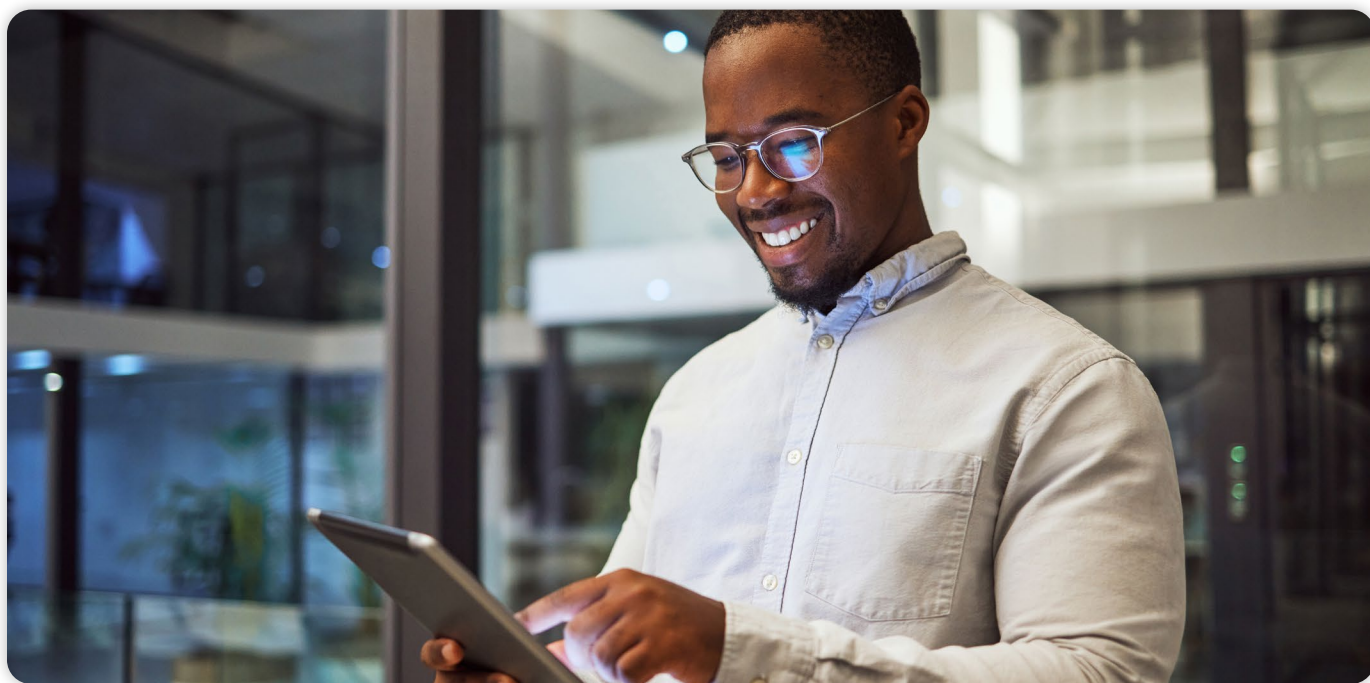
Chapter 2

[RevenueWell](#) drastically increases scalability to fuel innovation

RevenueWell's all-in-one dental marketing platform enables their customers to attract new patients, build better relationships with current patients, and improve productivity by automating time-consuming tasks.

Faced with rapid business growth, RevenueWell needed a scalable solution that could keep mission-critical workloads online at all times and enable them to adopt the latest technologies easily.

20–30%

Moving to the Hyperscale service tier with premium series hardware delivered 20-30% faster query performance and accelerated RevenueWell's ability to develop, test, and deploy solutions.

After moving to Azure SQL Database and modernizing its infrastructure, RevenueWell saw a dramatic decrease in maintenance, as well as an enhanced ability to scale their workloads as needed. This new flexibility enabled significant business growth, with RevenueWell doubling its customer base in only 18 months.

Chapter 3

Use hybrid scenarios for a competitive advantage

Flexibility, scalability, and speed are the hallmarks of modern cloud infrastructure and applications. The move to hybrid cloud environments has been a paradigm shift in how businesses drive organizational change, and Microsoft Azure is at the forefront of this transformation.

Migrating to the cloud is an essential step on the journey to modernization, but there are additional steps to optimizing resources and achieving higher performance. Compliance, high-performance workloads, and multi-user apps demand different approaches, infrastructures, and investments of time and money.

Microsoft offers a comprehensive set of hybrid solutions to meet the demands of global commerce. With Azure Stack, you can build and run cloud-native applications with Azure services in your local datacenters or disconnected locations.

> "In the past, rolling out a new version of an application across our ships was really painful, but this solution can provide a strong reduction in the time required to roll out new software to multiple ships."
>
> **Stefano Zunino**
> IT Architectures and Solutions Director, Carnival Corporation

Meanwhile, Azure Stack HCI lets you use virtualized applications on-premises in a familiar way and enjoy easy access to off-the-shelf Azure management services such as backup and disaster recovery.

This scalability extends into security and identity management with Microsoft Entra ID. Entra ID is a cloud-based platform that provides users with a single sign-on experience across cloud, mobile, and on-premises applications, securing data from unauthorized access without compromising productivity.

- Available in 92 countries Azure Stack lets you build and run cloud-native applications with Azure services in your local datacenters or in disconnected locations.

- Azure enables you to build extremely fast private connections between Azure and local infrastructure, allowing both to and through access using Azure ExpressRoute at bandwidths up to 100 Gbps.

- Azure Arc is a hybrid and multicloud management solution that allows you to build applications and services and run them across datacenters, at the edge, and in multicloud environments.

Chapter 3

Carnival Corporation migrates Windows Server and SQL Server workloads to Azure for more flexibility at sea

Ships depend on satellite connectivity to operate, making it critical to have resilient, highly available applications. With new advancements in satellite communications, the maritime and environmental compliance team at Carnival Corporation wanted a hybrid solution that could bring cloud-native capabilities on-premises to ships and give them a consistent operations and management platform to manage both workloads in Azure and at the edge.

In the past, rolling out new versions of an application across all of its ships was a painful process. Thanks to its unified hybrid cloud platform with Azure, the team can deploy the same code on shore and at sea using Azure Kubernetes Service (AKS) containers. This change has significantly reduced the time it takes to roll out new software to multiple ships.

With access to flexible cloud-native capabilities, the Carnival Corporation team is focusing less on monitoring and management and more on high-value tasks—like finding new ways to delight passengers.

Chapter 4

Save on costs and maximize IT investments

While innovation has supplanted cost savings as the primary driver of cloud migration for many businesses, moving to the cloud needs to make sense for your bottom line.[i]

When you migrate to Azure, using an existing on-premises Windows Server or SQL Server license helps maximize investments and save costs. The Azure Hybrid Benefit for Windows Server and SQL Server is a pricing benefit for customers with Software Assurance licenses. Eligible customers can save up to 40 percent on Azure Virtual Machines (Iaas), and up to 55 percent on Azure SQL Database (PaaS) and SQL Server on Azure Virtual Machines with Azure Hybrid Benefit.

> **We've calculated an initial savings of 15 percent by migrating to Azure."**
>
> **Paulo Costa**
> Infrastructure Monitoring and
> Collaboration Manager, CTT

Combining these benefits with Azure reservation pricing offers greater visibility into your one-year or three-year resource needs. In return, those savings are passed onto you as discounts of up to 72 percent compared to pay-as-you-go pricing for select Azure services.

Additionally, Microsoft Cost Management lets you monitor spending in Azure and offers tailored recommendations for cost optimization. AI functionalities provide deeper key insights, forecasting, and reports to help you maximize your cloud investments. These savings help your bottom line and free up your budget to innovate with cloud services, create new business value, and compete more effectively in your industry.

[i]Actual savings may vary based on region, instance type, or usage.

Chapter 4

Correios de Portugal seizes more control of costs and emissions with Azure

As postal services face challenges globally, CTT continues to reinvent itself to remain a trusted service provider for its customers. However, years of growth had saddled the company with a costly patchwork of on-premises digital systems. Eventually, CTT decided to migrate and modernize its workloads in the cloud with Microsoft Azure.

The company migrated Windows Server and Linux workloads to Azure, which runs on Azure Virtual Machines and uses Azure SQL to support its database requirements. By migrating workloads to the cloud, the company can easily scale to support new developments and more efficiently manage peak loads. Meanwhile, effortlessly adding and removing resources helps the company manage costs and emissions.

With a boost from Azure, the company is using automation to turn off servers nightly, reducing its carbon footprint and costs. The company also saves on licensing costs by taking advantage of Azure Hybrid Benefit for its Windows Server and SQL workloads.

> " By migrating to Azure, we're reducing our technical debt and gaining a trusted managed services provider. A bonus of the cloud is that the more you optimize your workloads, the more you stand to gain."
>
> **Rui Pedro Saraiva**
> Chief Information Officer, CTT
> Correios de Portugal

Chapter 5

Lean on a global network

Ideally, your teams would be free to focus on building better applications instead of worrying about performance or compliance. Azure has more global regions than any other cloud provider, offering high availability, disaster recovery, and backup on a global network, giving teams more capacity to create enhanced applications.

Home Trust boosts performance and accelerates time to market with Azure VMWare

The Canadian financial services institution exited its cloud-hosted solution running VMware and is now 100 percent in Microsoft Azure to tap into significant ease of management, seamless scalability, and cost savings. In less than half a year, it exited the existing cloud-hosted solutionmoving more than 750 VMs split between running Windows Server and SUSE Linux to run on Azure infrastructure with Azure VMware Solution.

> "
>
> **Buying a big server and sticking it in a data center doesn't make sense for us anymore. We have incredible opportunities ahead as we move at an accelerated pace with Azure."**
>
> **Doug Caldwell**
> Vice President of IT Infrastructure,
> Home Trust

Let go of the legacy

Home Trust, CTT, Carnival Corporation, and RevenueWell each had their own specific reasons for letting go of their legacy infrastructure. Whether your organization needs enhanced security and compliance in a hybrid environment, improved agility, or global scalability, migrating to the cloud is the first critical step in building a modern AI-ready framework.

By running your Windows Server and SQL Server on Azure, you can shift from a reactionary model—in which innovation is moved to the back burner when hardware issues arise—to a more progressive model in which innovation has an unobstructed (and protected) path to success. Discover how migrating and modernizing on Azure can propel you forward with the proper safeguards for fast and futuristic innovation.

Explore Azure Migrate and Modernize ›

Conclusion

Limitless innovation with Azure

Migrate on your terms and integrate cloud-native services to help streamline costs, easily manage processes, and move your AI innovation strategy forward.

Stronger security and compliance: Intelligent security and broad compliance capabilities help you protect your data and build trust with customers.

Enhanced performance and resiliency to change: Managed services, a global network, and reduced administrative burden help elevate performance and redirect focus to value-building innovation, even in a constantly changing landscape.

End-to-end hybrid efficiency. Only Azure provides a complete solution for hybrid workloads that provides end-to-end scalability and performance.

Maximize IT investments. No other cloud provider offers the kind of cost-saving benefits of Azure, which can make or break your organization's plans for integrating new technology.

Global network availability. The Azure global network provides the fastest connectivity from your datacenter to the cloud, improving performance and letting you quickly deploy applications to users.

Get expert help and guidance on your cloud adoption journey through Azure Migrate and Modernize.
Contact Sales >

Inspire and design using the
Microsoft Cloud Adoption Framework for Azure >