

Run Windows Server and SQL Server workloads seamlessly across your hybrid environments

Many companies are seeing a need to accelerate their move to the cloud in order to keep costs under control, be more agile, and adapt to rapidly changing circumstances.

Another critical decision point is how to make the most of existing IT investments while taking advantage of the efficiencies offered by the cloud. How easy is it to combine new cloud resources with what you already have on-premises? Many Windows Server and SQL Server customers choose Azure for its industry leading hybrid capabilities.¹

¹In a 2019 Microsoft survey of 500 enterprise customers, when those customers were asked about their migration plans for Windows Server, they were 30 percent more likely to choose Azure.

Designing for a hybrid environment from the start

Microsoft is committed to enabling a hybrid approach to cloud adoption. Our commitment and passion stems from a deep understanding of our customers and their businesses over the past several decades. We understand that customers have business imperatives to keep certain workloads and data on premises, and our goal is to meet them where they are and prepare them for the future by providing the right technologies for every step along the way. Enabling a hybrid approach also gives businesses the freedom to move to the cloud at their own pace.

That's why we designed and built Azure to be hybrid from the beginning and have been delivering continuous innovation to help customers operate their hybrid environments seamlessly across on-premises, cloud and edge.

Customers save time, money and resources with a hybrid cloud strategy

Take [Komatsu](#) as an example. Komatsu achieved 49 percent cost reduction and nearly 30 percent performance gains by moving on-premises applications to Azure SQL Database Managed Instance and building a holistic data management and analytics solutions across their hybrid infrastructure.

Operating a \$15 billion enterprise, [Smithfield Foods](#) slashed datacenter costs by 60 percent and accelerated application delivery from two months to one day using a hybrid cloud model built on Azure.

Smithfield has factories and warehouses often in rural areas that have less than ideal internet bandwidth. The company relies on Azure ExpressRoute to connect its major office locations globally to Azure to gain the flexibility and speed it needs.

The [government of Malta](#) built a complete hybrid cloud ecosystem powered by Azure and Azure Stack to modernize its infrastructure. This hybrid architecture, combined with a robust billing platform and integrated self-service backup, brings a new level of flexibility and agility to the Maltese government's operations, while also providing citizens and businesses more efficient services that they can access whenever they want.

Bringing the cloud to local datacenters with Azure Stack

[Azure Stack](#), our unparalleled hybrid offering, lets customers build and run cloud-native applications with Azure services in their local datacenters or in disconnected locations. It's available in 92 countries and customers like [Airbus Defense & Space](#), [iMOKO](#), and [KPMG Norway](#) are using Azure Stack to bring cloud benefits on-premises.

We introduced [Azure Stack HCI solutions](#) so customers can run 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.

With Azure, Azure Stack, and Azure Stack HCI, Microsoft is the only cloud provider in the market that offers a comprehensive set of hybrid solutions.

Easily migrating on-premises SQL Server to Azure

Azure SQL Database is a fully managed and intelligent database service. SQL Database is evergreen, so it's always up to date: no more worry about patching, upgrades, or end of support. [Azure SQL Database Managed Instance](#) has the full surface area of the SQL Server database engine in Azure. Customers use Managed Instance to migrate SQL Server to Azure without changing the application code. Because the service is consistent with on-premises SQL Server, customers can continue using familiar features, tools and resources in Azure.

With SQL Database Managed Instance, customers like [Komatsu](#), [Carlsberg Group](#), and [AllScripts](#) were able to quickly migrate SQL databases to Azure with minimal downtime, and also benefitting from built-in PaaS capabilities such as automatic patching, backup, and high availability.

Connecting hybrid environments with fast and secure networking services

Customers 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 Virtual WAN](#) makes it possible to add and connect thousands of branch sites quickly by automating configuration and connectivity to Azure and for global transit across customer sites, using the Microsoft global network.

Customers are also taking full advantage of services like [Azure Firewall](#), [Azure DDoS Protection](#), and [Azure Front Door Service](#) to secure virtual networks and deliver the best application performance experience to users.

Managing anywhere access with a single identity platform

Over 90 percent of enterprise customers use Active Directory on-premises. With Azure, customers can easily connect on-premises Active Directory with [Azure Active Directory](#) to provide seamless directory services for all Office 365 and Azure services. Azure Active Directory gives users a single sign-on experience across cloud, mobile, and on-premises applications, and secures data from unauthorized access without compromising productivity.

Innovating continuously at the edge

Customers are extending their hybrid environments to the edge so they can take on new business opportunities, and Microsoft has been leading this type of innovation. Here are some examples.

- [Azure Data Box Edge](#) provides a cloud-managed compute platform for containers at the edge, enabling customers to process data and accelerate machine learning workloads. Data Box Edge also enables customers to transfer data over the internet to Azure in real-time for deeper analytics, model re-training at cloud scale, or long-term storage.
- [Azure SQL Database Edge](#) is currently available in preview, bringing the SQL engine to edge scenarios. Developers will now be able to adopt a consistent programming surface area to develop on a SQL database and run the same code on-premises, in the cloud, or at the edge.

Preparing for what's next

While the business landscape around the world may have experienced an unprecedented shift, there are some certainties we can rely on when it comes to continuity of business, security, scalability, and agility. Taking steps now to migrate Windows Server and SQL Server workloads to the cloud will position companies to respond more quickly in unexpected circumstances. And we know that the cost savings, security, scalability, and agility businesses need can only be found in the cloud.

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Get started – Integrate your hybrid environments with Azure

[Get to know Azure hybrid](#)