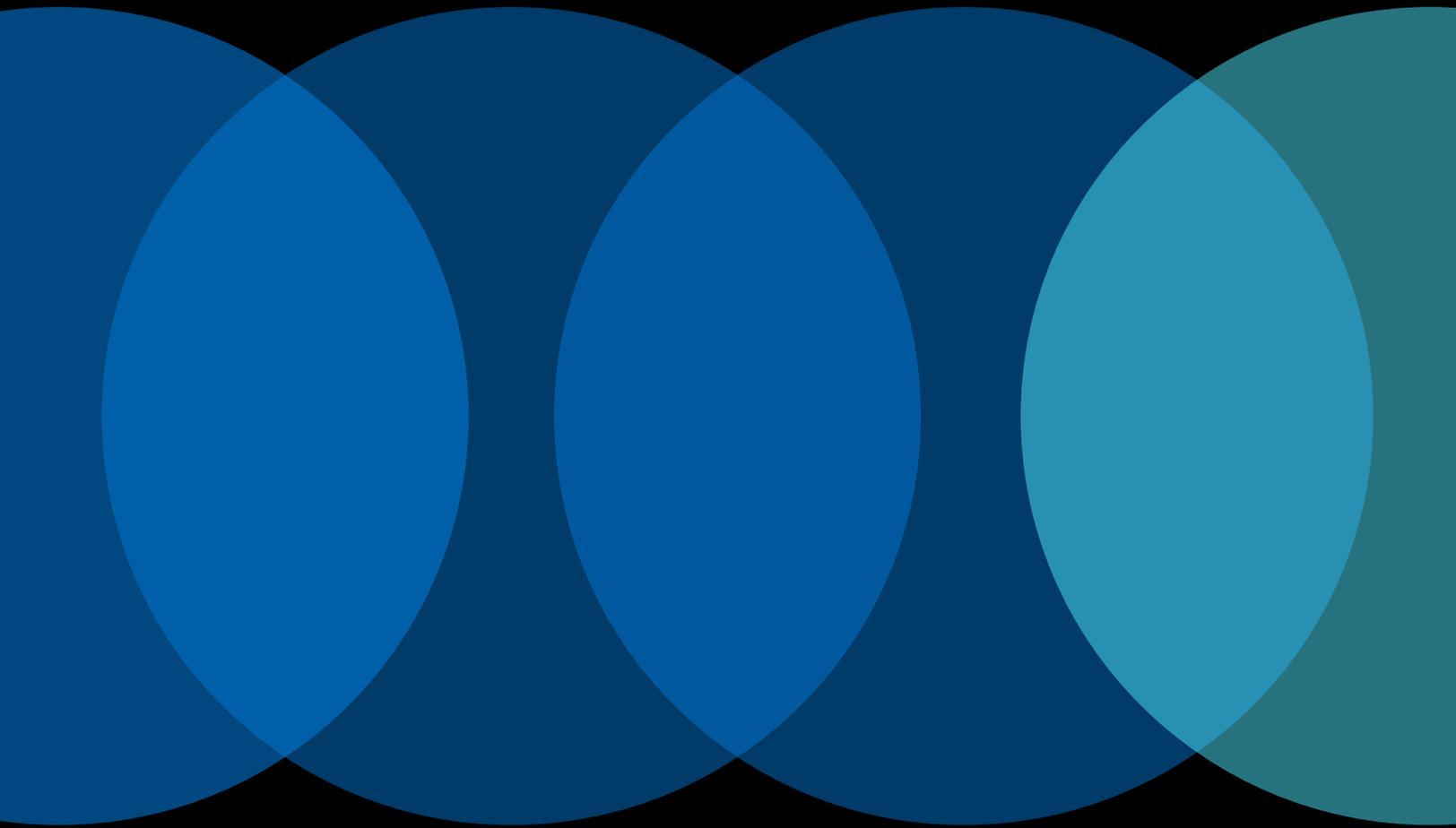




# Cloud lessons learned

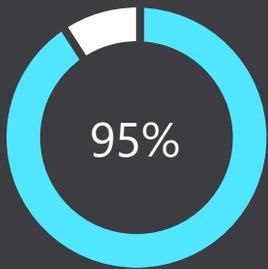
Four companies that migrated their Windows Server and SQL Server workloads to Azure



# Table of contents

## 1

# Introduction

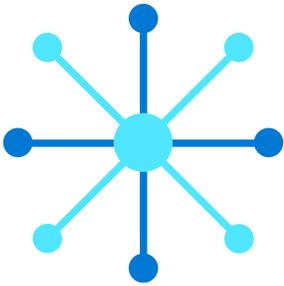


of Fortune 500 companies trust their business on Azure, the only cloud provider with 90+ compliance offerings.

Cloud computing offers measurable benefits and solutions to real problems, including aging hardware, barriers to innovation, data center capacity constraints, and even regulatory requirements. But moving Windows Server and SQL Server workloads can be daunting. Unless, of course, you choose a cloud provider that understands those workloads and has extensive experience across multiple companies and industries, including financial services and healthcare.

Moving Windows Server and SQL Server to Azure helps you get better performance out of your investment. Unlock possibilities to do more with your data, while bringing your legacy data to the cloud and stimulating growth.

Many other businesses, including Legacy Health, Bank of America, and FedEx, have already migrated their Windows Server and SQL Server workloads to Azure. They've realized the benefits of a smooth migration process, achieved high performance, centralized infrastructure management, and deployed a hybrid cloud. What follows are actual customer experiences that illustrate both the process of migration and its benefits. This e-book will help you learn from their experiences.



## 2

# Migrate with ease

[Carlsberg Group](#) is a Denmark-based brewery that manages more than 140 master beer brands in a global market. When the company found itself with 12 months remaining on its data center lease, Carlsberg Group knew it was time to embrace all the cloud has to offer.



## The path to migration

Carlsberg wanted to migrate everything to the cloud. That meant the systems running on 1,070 servers in the datacenter on-premises that ran AIX, Windows, and Linux, along with the data stored in IBM DB2 databases and SAP HANA database for BW on SUSE Linux nodes. It also meant several legacy SAP environments in Western Europe, including one used by HR, and an ERP setup in Italy.

Because of the company's long association with Microsoft, the team chose Azure, which provided the scale and support to match the scope of the Carlsberg cloud vision.

The company wanted to transform its SAP landscape by migrating the outdated systems based on UNIX and an old version of DB2 to a new platform based on Windows Server 2016 and Microsoft SQL Server 2016. Carlsberg's IBM DB2 databases were replaced with SQL Server on Azure. The team chose SQL Server for its proven stability and operational power. Two SQL Server VMs

were deployed to the back-end subnet and joined to the Active Directory domain. The new data tier uses the native SQL Server Always On Availability Groups to improve database uptime and enable improved resource use. Always On provides synchronous high availability replication and, for disaster recovery, asynchronous replication to a secondary Azure region.

The second phase of the migration will be to create a data lake. The team wants to take advantage of the structured data in SQL Server and other heterogeneous data to support the future Carlsberg Analytics Platform, which serves as the pivotal back end for Carlsberg business systems.

From planning through execution, the project team completed the data center and SAP migration in less than six months. To ensure a speedy data transfer, the team supersized the initial Azure infrastructure. Afterward, Carlsberg began to scale back the resources to operational levels.

The team also planned for contingencies by implementing data-consistency checks and potential reruns of failed transfers. Most of all, it rehearsed. For each step of the migration, the team had rollout and rollback plans.

**The result:** No significant downtime was incurred during the migration, and that stability continues. As the Azure estate has matured, there hasn't been a single high-priority incident.

Carlsberg is now finding new ways to use its data to improve the quality of its products. A new beer dispenser will preserve freshness and monitor beverage data, enabling the company to keep an eye on quality at the tap. Thanks to its scalability, Azure can keep pace with this innovation as potentially thousands of these machines go into service.

### Benefits



Data center and SAP migration completed in less than six months.



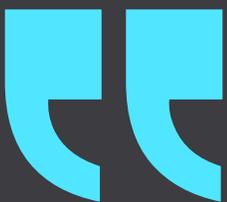
Reduction in data center footprint and related costs.



Improved customer experience.



Cloud drives product innovation.



**We wanted to get really scalable, efficient, secure, lower cost IT to come up with a digital solution to market at a much faster scale. Within six months we migrated all of our infrastructure.”**

**Mark Dajani,**  
Chief Information Officer,  
Carlsberg Group



### 3

## Enhance performance, control costs

As a global business, [Epos Now](#) provides cloud-based point-of-sale (POS) solutions to customers that span multiple vertical markets, with a key focus on hospitality and general and specialized retail. Epos Now wanted to deliver higher quality reporting capabilities for its thousands of business customers to gain data insights and make better business decisions. But first it needed a more robust, connected data ecosystem.



### The path to migration

Epos Now ran Microsoft SQL Server on Amazon Web Services (AWS) Relational Database Service for transactional and analytical workloads. To be able to offer a new service, Epos Now needed to optimize SQL Server capabilities, including connecting the data more easily and improving scalability. The company decided to migrate its data to [Azure SQL Database](#) and to work with the [Microsoft FastTrack for Azure](#) team to help make the transformation.

The FastTrack for Azure experts provided technical guidance throughout the migration process. That included architecting, designing, and completing a proof of concept for the entire deployment within Azure. Epos Now felt confident knowing that they had access to the skill sets they need and could therefore move forward quickly with the migration.

Epos Now used Azure Data Factory to extract data from SQL Server on AWS and load it into Azure Blob Storage. From there, the data was loaded into staging tables within Azure SQL Database Managed Instance. The new ecosystem—a SQL Server, Azure Data Factory, and Blob storage pipeline—operates seamlessly.

In addition, Epos Now built a bespoke reporting solution from the ground up in Azure. The data-as-a-service offering is a best-in-breed solution that differentiates Epos Now from other POS solution providers. The company's customers have real-time access to the data insights they need to compete, while Azure provides Epos Now with the scalability it needs to serve tens of thousands of customers.

**The result:** In addition to enabling a new line of revenue, Azure enabled Epos Now to improve performance on custom reporting by a factor of three and reduce its operating costs.

### Benefits



Improved SQL Server performance.



Reduced operating costs.



Increased scalability.



We've improved performance on custom reports by a factor of three, and we know we still have more optimization that we can do."

Josh Hart,  
Cloud Architect,  
Epos Now



## 4

# Centralize infrastructure management

[TraXall France](#) provides vehicle fleet management services. A leader in the French market, the company serves more than 70 key account customers and upwards of 40,000 managed vehicles. When its diverse private clouds became too labor-intensive to manage, TraXall France turned to Azure.



## The path to migration

[TraXall France](#) sought a public cloud that would be compatible with its SAP HANA ERP environment. Right from the start, the teams at TraXall France opted for the Azure cloud platform due to its solid relationship with Microsoft. TraXall France had used Microsoft technologies for many years, including cloud-based Microsoft Office 365 and Windows Server.

With support from Azure teams and Project SI, a systems integrator, TraXall France made a smooth, fast transition to Azure. The company successfully deployed SAP ERP on Azure in just six months, including all modules. Feedback on the platform was so positive that TraXall migrated several other systems to Azure, including its internal accounting servers, web servers, and Microsoft SQL Server workloads—all of which migrated as smoothly as the initial implementation.

Switching to Azure significantly simplified infrastructure management for TraXall France by eliminating the need to manage software licenses. Licenses authenticate directly on the servers when the subscription takes effect and when more servers are added. When an admin sets up a Windows Server in Azure, they can assign the Windows Server license at the same time. This enables TraXall France to centralize purchasing of its licenses.

**The result:** Azure provides TraXall France with the flexibility to increase capacity as needed and switch off servers when they're not needed, thereby reducing costs. Microsoft services also provide a set of tools to help TraXall France meet its regulatory requirements.

### Benefits



Reduced costs with a pay-per-use model.



Eliminated the burden of service management and security.



Facilitated data management and protection to comply with the General Data Protection Regulation (GDPR).



**When you set up a Windows Server in Azure today, you can assign the Windows server license at the same time. This greatly simplifies infrastructure management."**

Cyrille Pelatan,  
Infrastructure Manager,  
TraXall France



## 5

# Bring your legacy with you

[Allscripts](#) is a Chicago-based professional services firm that develops and hosts software for hospitals, clinics, pharmacies, and pharmaceutical companies around the world. Through a corporate acquisition, the company inherited roughly 1,000 virtual machines containing dozens of applications running on older versions of Windows Server and SQL Server, or on Linux. The company needed to quickly integrate these workloads to generate value as soon as possible.



## The path to migration

The Allscripts development team had been using Microsoft Azure for years to gain rapid access to development infrastructure. Based on its positive development experiences and Azure's significant security posture, Allscripts chose to rehost its newly acquired assets in Azure.

Using a lift-and-shift strategy, Allscripts rehosted the acquired applications to Azure in just three weeks. Any systems that could not be migrated were moved to an Allscripts data center. A VPN was set up between that data center and the Azure data center in a hybrid fashion.

The migration included 600 on-premises VMs, most of which ran older versions of Windows Server and SQL Server. For these, Allscripts took advantage of the [Azure Hybrid Benefit](#), an offer that lets customers reuse their existing on-premises Windows Server and SQL Server licenses in Azure and realize licensing savings of up to 82 percent.

A group of 500 development VMs was moved to Azure using [Azure Site Recovery](#). The team used Azure Site Recovery to replicate on-premises VMs to Azure, and then fail the VMs over from the primary site to the Azure data center. Thus, the team moved the VMs, which were running critical healthcare applications, to Azure without a hitch.

In some cases, Allscripts took advantage of Azure SQL Database Managed Instance to gain platform as a service (PaaS) benefits. This deployment option with Azure SQL Database enables existing SQL Server customers to migrate their on-premises databases. They can also benefit from built-in PaaS capabilities, like automatic patching, backup, and high availability.

**The result:** Allscripts moved its acquired intellectual property into a safeguarded, reliable cloud with very low risk. In addition, by integrating the acquired workloads in Azure, Allscripts reduced its data center footprint and finds it much easier to manage the systems.

### Benefits



Integrated 1000+ newly acquired workloads with plans to move another 5000+ VMs.



Closed or moved three data centers.



Increased data security.



By moving our acquired applications to Azure, we were able to get them up, running, and adding value to the business in three weeks versus the three months needed to requisition servers and storage.”

Peter Tomlinson,  
Director of IS, Technology Operations,  
Allscripts



## Moving forward

While Carlsberg, Epos Now, TraXall France, and Allscripts had different IT goals and challenges, they all found that their migration to Azure helped them improve cost and operational efficiencies. Azure also helped pave the way for further innovation.

Azure is the cloud of choice for Windows Server and SQL Server workloads. Organizations of all sizes take advantage of migration ease, high performance, centralized control, and seamless hybrid capabilities that can only be found on Azure.

Interested in realizing these benefits for your organization? Let us guide you through a smooth cloud migration. [The Azure Migration Program](#) provides expert advice on migrating not just Windows Server and SQL Server workloads, but also the rest of your IT estate that may benefit from a move to the cloud.

Get free, hands-on experience with Azure.

Talk to us directly to learn more.

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