

# SQL Server on Azure Virtual Machines Up to 3.6x faster at 84% lower cost than SQL Server on AWS



## Azure vs. AWS performance study for SQL Server VMs

GigaOm recently wrote several studies where they tested throughput performance between SQL Server on Azure VMs and SQL Server on AWS EC2. The studies evaluated SQL Server on Azure and on AWS across three benchmarks: **Windows OS, Linux OS, and high-end SSD storage**. Performance is derived from the TPC-E transaction per second (TPS) metric.

### The results

**Performance**  
Higher is better

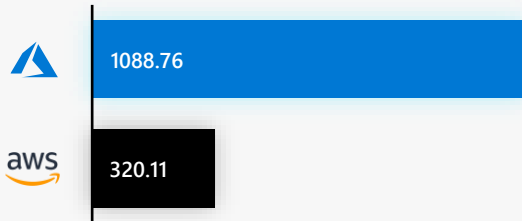
**Price/performance**  
Lower is better

#### Latest GigaOm study

#### Windows OS

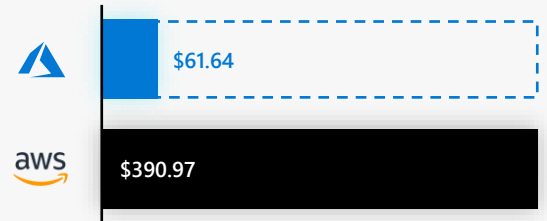


Transactions per second (TPS)



**3.6x faster on Azure**

3 year pricing / TPS\*



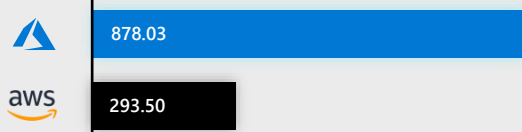
**Costs 84% less than AWS**

\*Includes Azure Hybrid Benefit and Reserved Instances with three-year commitment.

#### Linux OS

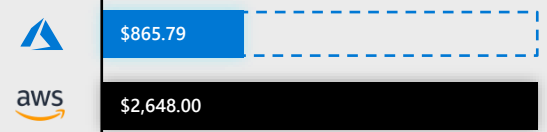


Transactions per second (TPS)



**3.0x faster on Azure**

3 year pricing / TPS



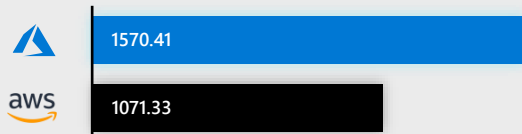
**Costs 67% less than AWS**

Red Hat Enterprise Linux

#### High-end storage

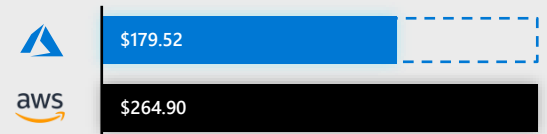


Transactions per second (TPS)



**1.5X faster on Azure**

3 year pricing / TPS








**Costs 32% less than AWS**

Azure VMs with Ultra Disk and AWS VMs with i01 Volumes

**Azure leads AWS across key performance and price/performance benchmarks**

# 5 more reasons to pick Azure over AWS for SQL Server workloads

-  **Free support for SQL Server 2008/R2**  
Get free extended security updates for SQL Server 2008/R2 images when migrating to Azure IaaS for three years.
-  **Free Disaster Recovery secondary in Azure**  
On-premises SQL Server with Software Assurance now comes with free SQL license when adding an Azure Disaster Recovery secondary
-  **Automatic security updates**  
Ease of maintenance with automatic application of the latest security patches, only on Azure.
-  **Pre-configured cloud backup**  
Restore to a specific point in time with an automatically-generated Azure backup.
-  **Only cloud with Developer edition**  
Access the fully-featured free SQL Server Developer edition, only pre-configured on Azure.



## Allscripts leveraged existing licensing to seamlessly migrate to the cloud with Azure Virtual Machines

### Challenge

Need to consolidate data after acquisitions

### Solution

Migration of 600 SQL Server VMs to Azure with existing Windows and SQL Licenses

### Outcome

Licensing savings up to 82% with Azure Hybrid Benefit

“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



## Choose Azure when migrating SQL Server to the cloud

- Read the complete performance studies:  
[SQL Transaction Processing, Price-Performance Testing \(Feb. 2020\)](#)  
[SQL Transaction Processing, Price-Performance Testing \(Oct. 2019\)](#)
- Leverage your on-premises licenses with [Azure Hybrid Benefit](#)

