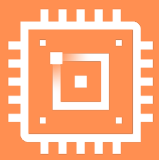
Host 2x More VMs on VMware Cloud™ on AWS i3en Instance Clusters with 2nd Gen Intel® Xeon® Scalable Processors

VMware Cloud on AWS i3en Instances Feature Intel Cascade Lake Processors

Microsoft SQL Server

Support up to 100% more VMs
per cluster

Achieve up to 140% more orders per minute
per cluster



Host larger VMs

Improve Scale-Out Performance with New i3en Instance Types of VMware Cloud on AWS Featuring 2nd Gen Intel Xeon Scalable Processors

To measure Microsoft SQL Server database performance, you can assess scale-up performance with increasing resources or scale-out performance, which shows how many virtual machines (VMs) an instance cluster can effectively host.

In Microsoft SQL Server database scale-out testing comparing VMware Cloud on AWS offerings, new i3en instances enabled by Intel Xeon Platinum 8259CL processors outperformed i3 instances with older processors, supporting up to 100% more VMs on a three-node cluster. At two different vCPU configurations, the i3en instances outperformed the older i3 instances, hosting significantly more database VMs overall and achieving more performance per VM. Because of the additional cores in 2nd Gen Intel Xeon Scalable processor-enabled servers as well as an enhanced memory capacity per host, the new i3en instance was able to support 20 VMs with 8 vCPU allotted and 16 at 16 vCPU, compared to only 12 and 8 VMs respectively for the i3 instances at those vCPU counts.

These scale-out performance tests show that organizations selecting VMware Cloud on AWS i3en instances featuring 2nd Gen Intel Xeon Scalable processors gain the ability to host significantly more or larger SQL Server VMs and achieve more performance than organizations selecting older i3 instances.

Support More VMs per Cluster to Serve More Customers (8 vCPUs)

When selecting the hardware configurations that drive your VMware Cloud on AWS instances running SQL Server databases, choosing underlying hardware that takes advantage of newer technology can directly translate to increased customer support for your business.

In DVD Store 3 testing comparing a three-node cluster with VMs allotted 8 vCPUs, AWS i3en instances enabled by 2nd Gen Intel Xeon Scalable processors could host up to 66 percent more VMs and double the orders per minute each cluster could achieve.

This means that organizations looking to support more customers on fewer instances can do so by selecting VMware Cloud on AWS i3en instances featuring 2nd Gen Intel Xeon Scalable processors.

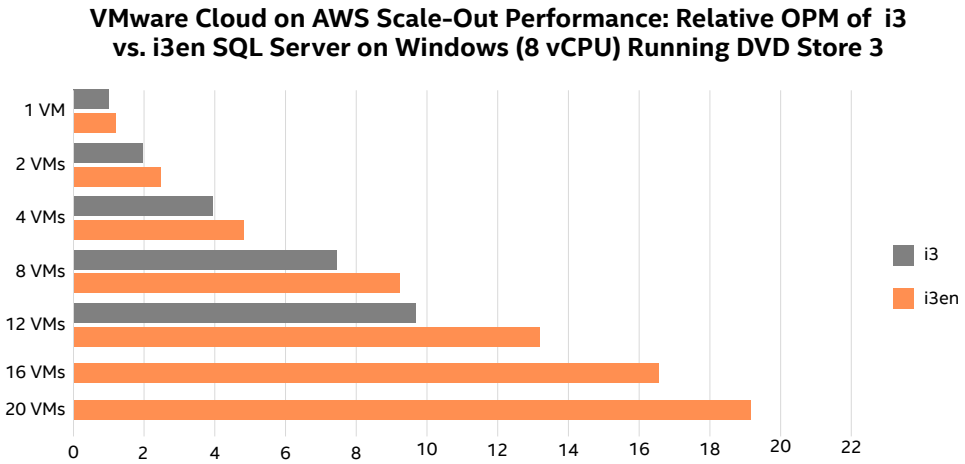


Figure 1. SQL Server scale-out performance results (8 vCPU) from DVD Store 3 testing comparing AWS i3 to newer i3en instances.

Support More VMs per Cluster to Serve More Customers (16 vCPUs)

In DVD Store 3 testing comparing a three-node cluster with VMs allotted 16 vCPUs, AWS i3en instances enabled by 2nd Gen Intel® Xeon® Scalable processors could host 100% more VMs and achieve 140% more orders per minute per cluster. VMware Cloud on AWS i3en instances enabled by 2nd Gen Intel Xeon Scalable processors, organizations can support more customers on fewer instances and achieve greater e-commerce performance no matter how many VMs they need to support their databases.

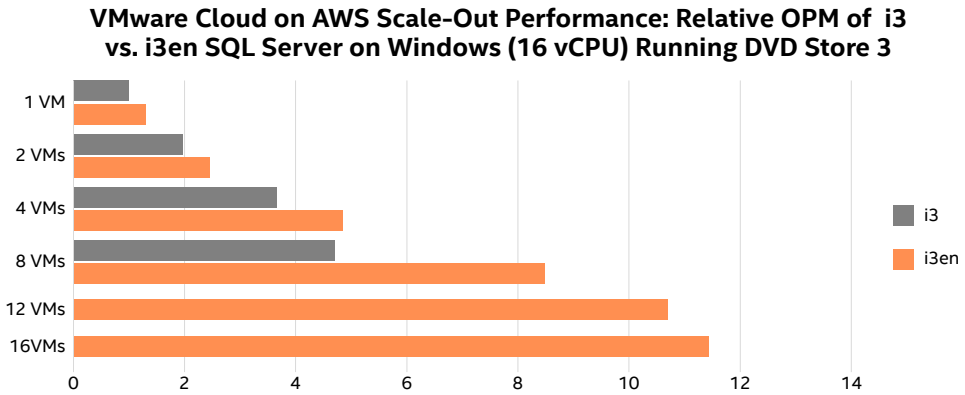


Figure 2. SQL Server scale-out performance results (16 vCPU) from DVD Store 3 testing comparing AWS i3 to newer i3en instances.

Learn More

To begin your SQL Server database deployments on VMware Cloud on AWS i3en instances featuring 2nd Gen Intel Xeon Scalable processors, visit http://intel.com/AWS.

For more test details, visit https://www.vmware.com/techpapers/2020/sqlserver-vmconaws-i3en-perf.html.