



Offer a Faster Virtual Desktop Experience on Ddsv5 VMs Featuring 3rd Gen Intel Xeon Scalable Processors vs. Dadsv5 VMs Featuring AMD EPYC™ Processors

Give Virtual Desktop Users Application Performance That's 14% Faster by Selecting Microsoft® Azure® Ddsv5 VMs Over Dadsv5 Virtual Machines with AMD EPYC™ Processors

Running virtual desktop infrastructure (VDI) in the cloud gives IT staff and users alike flexibility to choose a VM configuration type that drives the performance levels for their virtual desktop users. To show how two general-purpose virtual machine (VM) options compare on VDI workloads, we tested Microsoft Azure Ddsv5-series VMs featuring 3rd Gen Intel® Xeon® Scalable processors and Dadsv5-series VMs with AMD EPYC processors using two different worker profiles.

In these tests, Microsoft Azure Ddsv5 VMs featuring 3rd Gen Intel Xeon Scalable processors delivered performance that was up to 14% faster for common office activities (using the Knowledge Worker workload) compared to Dadsv5 VMs with AMD EPYC processors. This advantage allows you to provide virtual desktop users with faster performing applications, thereby enabling them to be more productive throughout each workday.

Speed Up Office Tasks with 3rd Gen Intel Xeon Scalable Processors

The Login Enterprise benchmark tool from Login VSI simulates workers in a VDI environment performing common tasks. Using the Knowledge Worker profile, Login Enterprise captured the time it took 32 simulated users to log on and to carry out common office activities in the following Microsoft applications: Teams, Edge, Outlook, Excel, Word, and PowerPoint.

As Figure 1 shows, the 16-vCPU Ddsv5 VMs with 3rd Gen Intel Xeon Scalable processors outperformed the 16-vCPU Dadsv5 VMs with AMD EPYC processors, by completing the tasks 14% faster. The 14% performance increase is the Geomean of all applications that Login Enterprise tests, representing common office tasks that a Knowledge worker would access throughout the workday.

Up to 14% Better Application Performance on Intel vs. AMD for Knowledge Worker

Higher is better

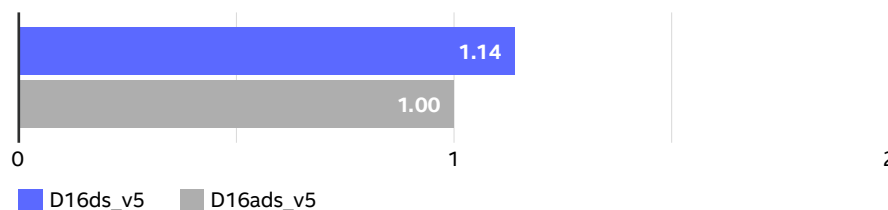





Figure 1. Relative Login Enterprise performance (Knowledge Worker profile) for the 16-vCPU Azure Ddsv5 and Dadsv5 virtual machines. Higher is better.

**Login Enterprise**



Perform office tasks on virtual desktops up to 14% faster with 16-vCPU Ddsv5 VMs featuring 3rd Gen Intel Xeon Scalable processors
vs. D16ads_v5 VMs



Perform developer tasks on virtual desktops up to 7% faster with 16-vCPU Ddsv5 VMs featuring 3rd Gen Intel Xeon Scalable processors
vs. D16ads_v5 VMs

Speed Up Developer Tasks with 3rd Gen Intel Xeon Scalable Processors

To emulate a typical developer workflow, we tested with a custom Developer Profile that completes tasks on the same Microsoft applications as the Knowledge Worker profile (listed above), but adds Microsoft Visual Studio tasks (creating, compiling, and running a generic .NET project shell). As Figure 2 shows, the 16-vCPU Ddsv5 VMs with 3rd Gen Intel® Xeon® Scalable processors completed the Developer Profile workloads 7% faster than 16-vCPU Dadsv5 VMs with AMD EPYC processors.

Up to 7% Better Application Performance on Intel vs. AMD for Developer Profile

Higher is better

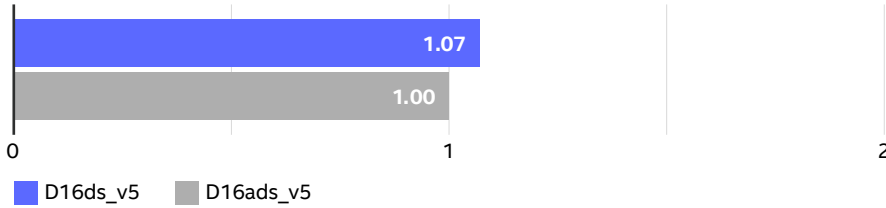


Figure 2. Relative Login Enterprise performance (Developer Profile) for the 16-vCPU Azure Ddsv5 and Dadsv5 virtual machines. Higher is better.



Conclusion

Selecting Microsoft Azure Ddsv5 VMs featuring 3rd Gen Intel Xeon Scalable processors over Dadsv5 VMs with AMD EPYC processors can provide virtual desktop users a faster experience completing everyday office or developer tasks, which can help those teams boost their productivity.

Learn More

To begin running your VDI workloads on Microsoft Azure Ddsv5 virtual machines with 3rd Gen Intel Xeon Scalable processors, visit <https://docs.microsoft.com/en-us/azure/virtual-machines/ddv5-ddsv5-series>.

Knowledge Worker workload tests performed in January 2022 using Login Enterprise v. 4.6.5 on Windows 10 20H2 host pools. Developer workload tests performed in February 2022 using Login Enterprise v. 4.8.4 with Windows 10 21H1 host pools. Both tests used Microsoft 365 and Microsoft Teams on Azure's East US zone with a max session limit of 120 users, breadth-first load balancing, and Premium SSDs. Development workload tests also included Visual Studio 2019. Standard D16ds v5 equipped with 16 vCPUs, 64GiB of RAM, 32GB of storage for data disk, 600GB of temp storage, Intel 8370C CPU. Standard D16ads v5 equipped with 16 vCPUs, 64GiB of RAM, 32GB of storage for data disk, and 600GB of temp storage, AMD 7763 CPU.



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