

Dell Technologies Offers a Smooth Upgrade Path to Microsoft® SQL Server® 2019

All-in-one solutions make upgrades easy and help reduce TCO.

If your company is running an outdated version of Microsoft® SQL Server® on legacy hardware, and you've been held back by concerns about the difficulty and cost of upgrading, the best way forward is to find a simple and cost-effective upgrade path from a trusted source.

Dell Technologies offers just such an option through Dell EMC™ PowerEdge™ servers together with all Windows Server® 2019 and SQL Server 2019 OEM licensing. This offer of hardware bundled with software makes deploying SQL Server easy. And Dell Technologies' combination of one-stop technical support, rich tools for smart management, and multi-layer security helps contribute to a simple and dependable solution with low total cost of ownership (TCO).

PowerEdge servers with OEM-licensed, preinstalled Windows Server 2019 deliver the following benefits:

86%

Faster to deploy a server¹

40

Fewer steps to deploy a server¹

31%

Less-expensive licensing¹

1

Source for hardware and software support

Dell EMC™ PowerEdge™ Servers:

A Rock-Solid Foundation for Microsoft SQL Server

- **Pre-validated.** Dell Technologies offers a wide array of servers that have been pre-validated for SQL Server 2019, which gives you complete flexibility in selecting a solution to match your needs.
- **Intelligent automation and management.** Dell Technologies offers automation through its Dell EMC™ OpenManage™ portfolio of systems-management tools.
- **Integrated security.** PowerEdge servers offer a hardware root of trust that protects against low-level attacks and validates that firmware is unmodified. PowerEdge servers also support Unified Extensible Firmware Interface (UEFI) Secure Boot, which checks the cryptographic signatures of UEFI drivers and other code that is loaded prior to the operating system (OS) running.



Windows Server 2019



High Performance, Accelerated by Intel® Optane™ Persistent Memory

Prowess Consulting completed performance testing of SQL Server 2019 running on a standalone Dell EMC PowerEdge R740xd server, installed with two Intel® Xeon® Gold 6246 processors, 192 GB of DDR4 RAM, and 512 GB of Intel® Optane™ persistent memory (PMem) configured in App Direct Mode. The servers were equipped with eight 960 GB Intel® SSD DC S4610 drives. For the performance tests, Prowess engineers used HammerDB 3.3, an open-source database load testing and benchmarking tool that measures transaction rates against increasing levels of “users” and “warehouses.”

The results below demonstrate that a well-tuned PowerEdge server running SQL Server 2019 is capable of achieving lightning-fast performance, with rates of more than one million transactions per minute.

HammerDB Results—Transactions per Minute (TPM)

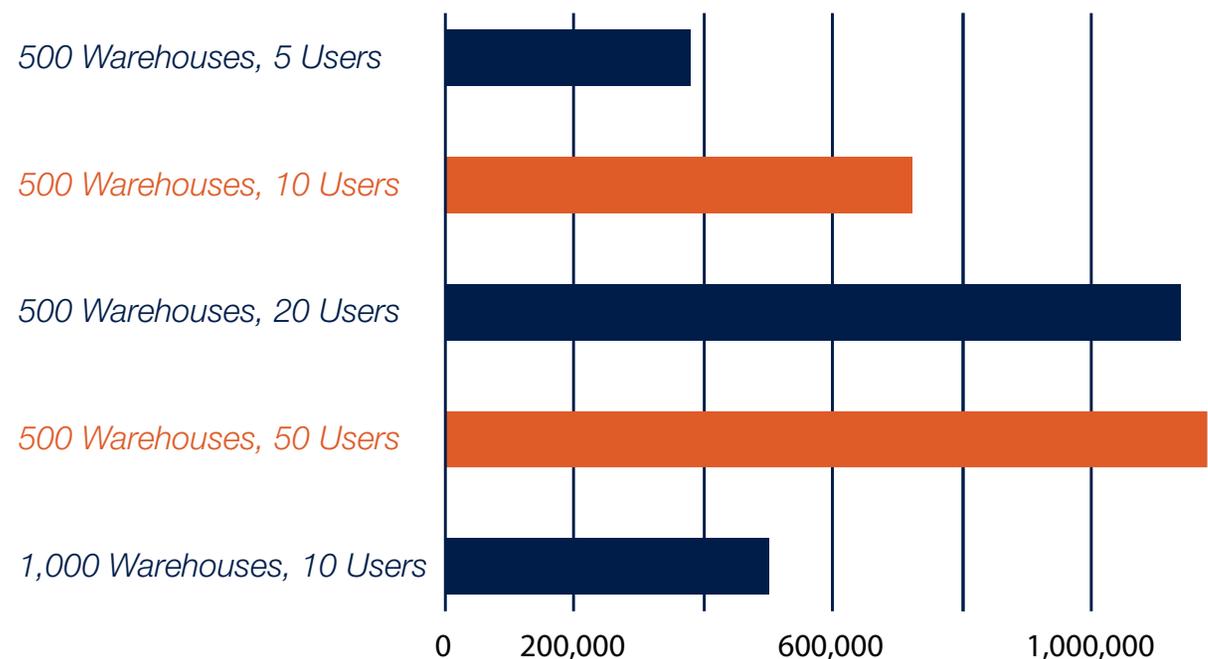


Figure 1. TPM scores for HammerDB; these scores are best used to compare performance against other systems also running Microsoft® SQL Server®

Reduce TCO with High-Performance All-in-One Solutions

Dell Technologies offers an easy, cost-effective, and pre-validated upgrade path to SQL Server 2019 through its all-in-one solutions on PowerEdge servers, which deliver both excellent performance and security. Dell Technologies' all-in-one solutions further reduce TCO by providing simplified Microsoft OEM licensing, excellent management features, and one-stop support for both hardware and software.

Read the full report:

"Upgrading to Microsoft® SQL Server® 2019? Here's Why Dell EMC™ PowerEdge™ Servers Are a Great Option"

To learn more, visit www.delltechnologies.com/microsoft

The analysis in this document was done by Prowess Consulting and commissioned by Dell Technologies.

Results have been simulated and are provided for informational purposes only. Any difference in system hardware or software design or configuration may affect actual performance.

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¹Prowess Consulting. "Streamline Your Server Deployments by Choosing Dell EMC™ PowerEdge™ Servers with Preinstalled Microsoft® Software." January 2020. www.prowesscorp.com/project/dellemc-poweredge-windowsserver-report.