

# Save Time and Money When Upgrading to Microsoft® SQL Server® 2019

## Dell Technologies can help you build a Microsoft® Hyper-V® infrastructure that is ideal for running SQL Server 2019.

Reaching the end of support for core systems and hardware is inevitable, but it also presents an opportunity to invest in new technology that can help your business move forward.

This is especially true for database management systems (DBMSs) that keep businesses running. For organizations running legacy versions of Microsoft® SQL Server®, Microsoft ended support for SQL Server 2008 and SQL Server 2008 R2 in July 2019, and it will be ending support for SQL Server 2012 in 2022.<sup>1</sup>

If your organization is running a legacy version of SQL Server on old hardware, but you've been held back by concerns about the difficulty and cost of upgrading, Dell Technologies offers an upgrade path to SQL Server 2019 running on Microsoft® Hyper-V® and Dell EMC™ PowerEdge™ servers. This path provides simple and cost-effective OEM licensing, one-stop technical support, broad tools for systems management, and multi-layer security.

86%

Faster to deploy a server<sup>2</sup>

40

Fewer steps to deploy a server<sup>2</sup>

31%

Less-expensive licensing<sup>2</sup>

1

Source for hardware and software support

## Build a Better Solution

Create Scalable, High-Performance Systems for SQL Server 2019

Dell Technologies and Microsoft have collaborated for more than 35 years on industry-leading hardware and software solutions. This collaboration helps ensure that Microsoft® software, such as Hyper-V, Windows Server® 2019, and SQL Server 2019, runs optimally on Dell EMC PowerEdge servers.

An infrastructure built with Dell EMC PowerEdge servers and Hyper-V can provide:

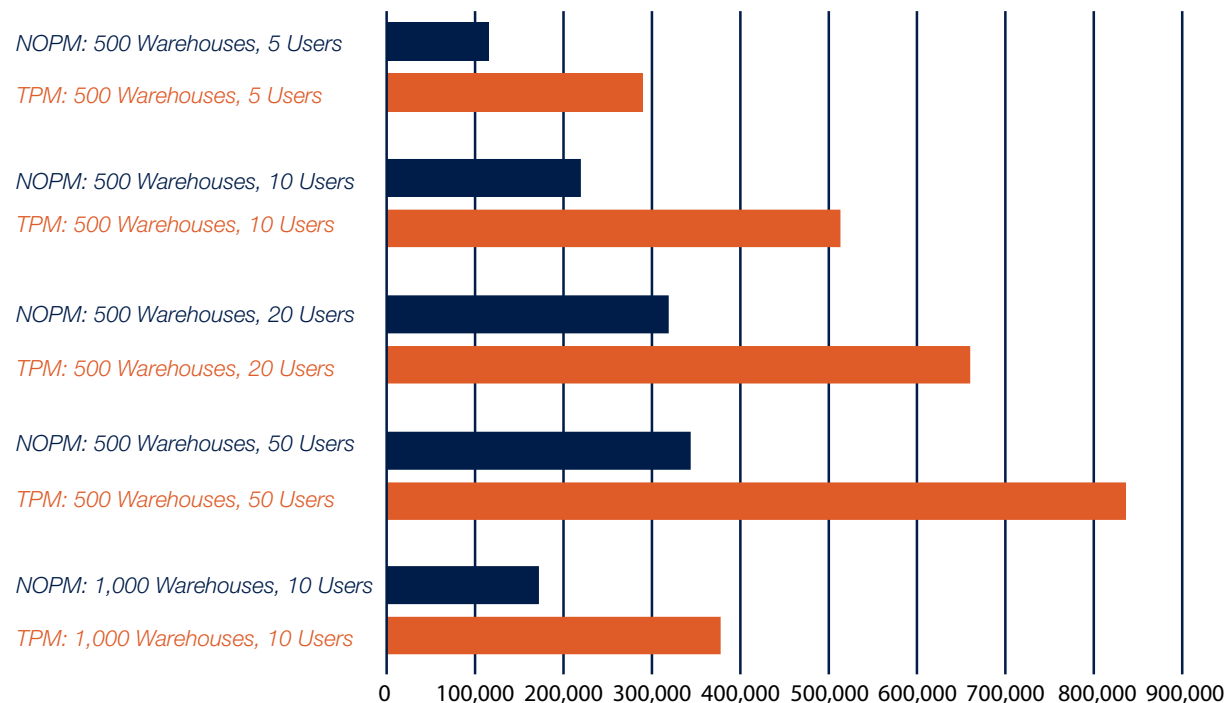
- A high-performance environment for SQL Server 2019 workloads
- The scalability to meet changing business demands
- Higher server utilization that improves hardware total cost of ownership (TCO)
- Better management tools for busy IT professionals

# PowerEdge Servers Accelerate SQL Server 2019 on Hyper-V

Prowess Consulting built a testing environment to determine how SQL Server 2019 performs when running on PowerEdge servers with Hyper-V. The environment consisted of two Dell EMC PowerEdge R740xd servers with Windows Server 2019 and Hyper-V installed. Each server contained two Intel® Xeon® Gold 6246 processors, 192 GB of DRAM, 512 GB of Intel® Optane™ persistent memory configured in App Direct Mode, and eight 960 GB Intel® SSD DC S4610 drives.

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 tests showed that SQL Server 2019 performs well in a Hyper-V virtualized environment, obtaining more than 833,000 transactions per minute (TPM) and 360,000 new orders per minute (NOPM) in a single-instance configuration.

## HammerDB Results: Microsoft® SQL Server® 2019 Single Instance on Microsoft® Hyper-V®



## All-in-One Licensing and Support

Dell Technologies offers a high-performance upgrade path for legacy SQL Server deployments running in a Hyper-V environment while also providing simplified Microsoft OEM licensing and support. Organizations have one phone number to call with questions about both their hardware and their Microsoft software, which simplifies hardware and software support considerably.

### Read the full report:

#### **“Upgrading to Microsoft® SQL Server® 2019 on Microsoft® Hyper-V®? Choose the Right System for Your Needs”**

To learn more, visit

[www.delltechnologies.com/microsoft](http://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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<sup>1</sup>End-of-support date according to <https://support.microsoft.com/en-us/lifecycle/search>.

<sup>2</sup>Prowess 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](http://www.prowesscorp.com/project/dellemc-poweredge-windowsserver-report).



Windows Server 2019

