



## Serve more customers with the Dell EMC PowerEdge R740 and 2nd Generation Intel Xeon Scalable processors

The 2U, two-socket PowerEdge R740 delivered more transactions per minute than an older HPE ProLiant DL380 Gen9

Holding on to data center hardware for too long can put your business at a disadvantage, burdening your IT admins with many aging servers that begin to need extra maintenance, all while performing at a level far below their modern counterparts, making inefficient use of data center space.

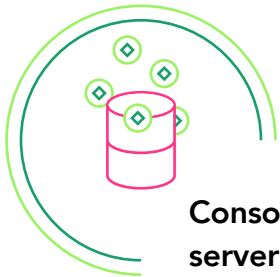
By upgrading to the Dell EMC™ PowerEdge™ R740 rack server with 2nd Generation Intel® Xeon® Scalable processors, your business could consolidate multiple older servers and take advantage of significant performance and management benefits. In fact, in the PT data center, we found that the Dell EMC PowerEdge R740 handled over 2.6 times the workload transactions against an Oracle Database using the TPC-C-like benchmark from HammerDB compared to a four-year-old HPE ProLiant DL380 Gen9.

Moving to a Dell EMC PowerEdge R740 platform with 2nd Generation Intel Xeon Scalable processors can free your business from the burdens of outdated hardware, setting you up for what comes next.



Support more database users

**2.6x** the transactions per minute (TPM)



Consolidate servers and plan for the future

**2.6x** the new orders per minute (NOPM)





## About the Dell EMC PowerEdge R740

The Dell EMC PowerEdge R740 is a 2U, two-socket server powered by 2nd Generation Intel Xeon Scalable processors. It features 24 DDR4 DIMM slots, up to 122TB of SSDs, up to eight PCIe Gen3 slots, and GPU and FPGA options. According to Dell EMC, the PowerEdge R740 is a general-purpose server with the ability to support demanding workloads including VDI, cloud applications, Web tech, and HPC.<sup>1</sup>

To learn more about the Dell EMC PowerEdge R740, visit <https://www.dell.com/en-us/work/shop/poww/poweredge-r740>.

## Is it worth it to move to a new platform now?

Though the quantifiable benefits vary organization to organization, moving to a new platform featuring the latest technology can bring several potential benefits, including:

- Improved performance per server to serve more customers or consolidation of multiple older servers to save data center space, power, cooling, and more
- The latest in embedded server management
- Support for the latest storage technologies
- Reduced maintenance costs to replace aging server parts

To show the performance gains that the new Dell EMC PowerEdge R740 with 2nd Generation Intel Xeon Scalable processors could provide, we ran a TPC-C-like workload using the HammerDB benchmark to compare the Oracle Database performance of the new platform vs. a four-year-old HPE ProLiant DL380 Gen9 with older Intel Xeon processors. How did the two compare? Read on to find out, or head to the [science behind the report](#) for specific details about our testing.

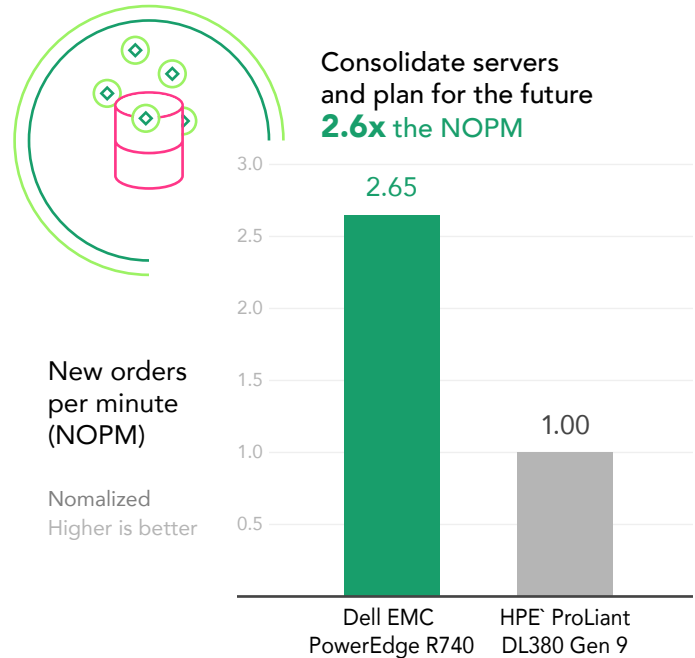
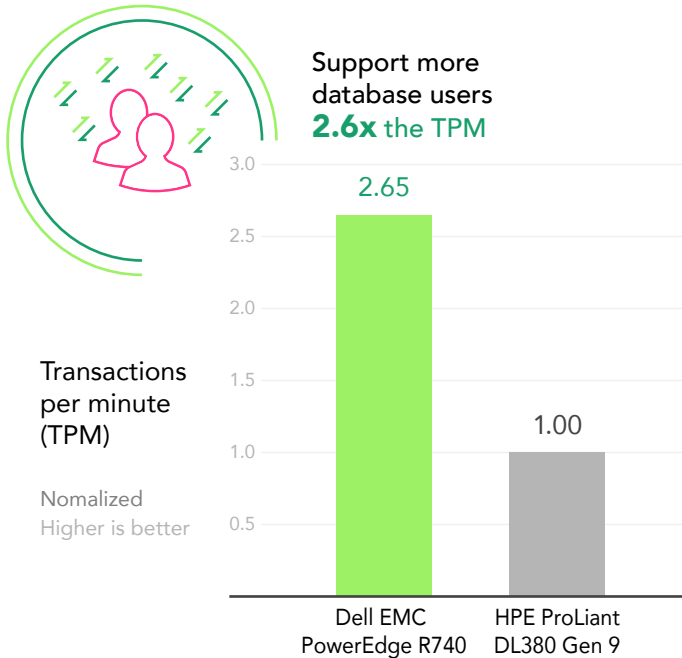
### About 2nd Generation Intel Xeon Scalable processors

The latest from Intel, the 2nd Generation Intel Xeon Scalable processor platform features a wide range of processors to support the workloads you run, including Bronze, Silver, Gold, and Platinum. According to Intel, the 2nd Generation Intel Xeon Scalable platform can handle a variety of workloads, including enterprise, cloud, HPC, storage, and communications.<sup>2</sup> This new processor line also supports a new memory and storage technology to further accelerate workloads, Intel® Optane™ DC persistent memory.

To learn more about the 2nd Generation Intel Xeon Scalable processor family, visit <https://www.intel.com/content/www/us/en/products/docs/processors/xeon/2nd-gen-xeon-scalable-processors-brief.html>.

# New Dell EMC PowerEdge R740 more than doubled the performance of the legacy solution

Looking to get more value out of each server in your data center? We found that for Oracle Database performance, the Dell EMC PowerEdge R740 with 2nd Generation Intel Xeon Scalable processors handled over 2.6 times the TPM and NOPM of the legacy HPE ProLiant DL380 Gen9.



Please note that the Oracle Database EULA does not permit us to publish exact TPM or NOPM results, so we've done the math and relativized performance numbers between the two platforms to make our comparison.

## About HammerDB

We tested each server with an OLTP workload from the HammerDB suite of benchmarks. Their TPC-C-like benchmark gives results in two metrics: TPM and NOPM. Note: HammerDB results aren't official TPC-C results and are therefore not comparable.

To learn more about TPM, NOPM, and other information specific to our benchmark workloads, visit the HammerDB website at [www.hammerdb.com](http://www.hammerdb.com).







## Do more database work with the 2nd Generation Intel Xeon Scalable processor-powered Dell EMC PowerEdge R740

The costs of hanging on to older hardware can be detrimental to your business. Refreshing your data center with the latest technology can increase the number of customers you serve while also removing the maintenance costs associated with hardware as it begins to age out of usefulness.

With the Dell EMC PowerEdge R740 powered by 2nd Generation Intel Xeon Scalable processors, your organization could get 2.6 times the TPM running an Oracle Database workload or start consolidating to save on ongoing operating costs vs. an older HPE ProLiant DL380 Gen9. Don't overlook the hidden costs and performance inefficiencies of aging hardware—moving to the Dell EMC PowerEdge R740 with 2nd Generation Intel Xeon Scalable processors could prove more than worth it for your business.

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- 1 Dell EMC, "PowerEdge R740 Rack Server," accessed May 16, 2019, <https://www.dell.com/en-us/work/shop/povw/poweredge-r740>.
  - 2 Intel, "2nd Gen Intel Xeon Scalable Processors Brief," accessed May 16, 2019, <https://www.intel.com/content/www/us/en/products/docs/processors/xeon/2nd-gen-xeon-scalable-processors-brief.html>.

Read the science behind this report at <http://facts.pt/u20qogn> ►



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