PT

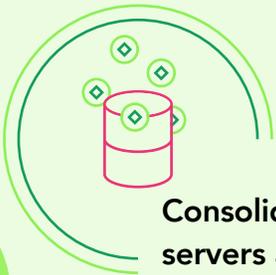## Executive summary

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)

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PowerEdge R740 platform with 2nd Generation Intel Xeon Scalable processors can free your business from the burdens of outdated hardware, setting you up for what comes next.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

In our hands-on tests using an Oracle Database workload, we found that the 2nd Generation Intel Xeon Scalable processor-powered Dell EMC PowerEdge R740 handled over 2.6 times the TPM and NOPM of a legacy HPE ProLiant DL380 Gen9, meaning that each new server could serve significantly more customers than the legacy solution. The Oracle Database EULA does not permit us to publish exact results, so we present relativized performance numbers.

The winning solution at a glance

Dell EMC PowerEdge R740 server

- 2U, two-socket server
- 24 DDR4 DIMM slots, up to 122 TB of SSDs, and up to 8 PCIe Gen3 slots
- General-purpose server that handles a range of workloads from VDI to cloud apps to HPC[1]

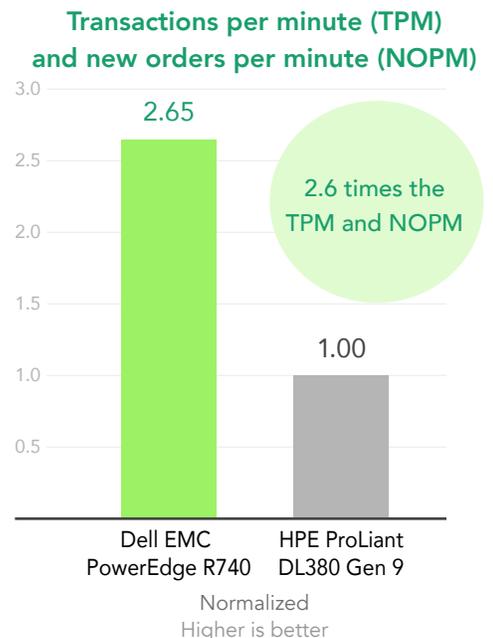### 2nd Generation Intel Xeon Scalable processors

- Offers multiple levels of performance to match your workloads, including Bronze, Silver, Gold, and Platinum
- Supports new memory and storage technology for workload acceleration, Intel Optane DC memory[2]

The business value of investing in the Dell EMC PowerEdge R740 server with 2nd Generation Intel Xeon Scalable processors

Before you spend on new data center hardware, you've got to justify the investment with concrete business gains. A performance increase of 2.6 times the database application transactions can provide that: Every new Dell EMC PowerEdge R740 server with 2nd Generation Intel Xeon Scalable processors can do the work of more than two legacy HPE ProLiant DL380 Gen9 servers. This means that you can:

- Mitigate the maintenance burden of aging hardware, which includes spending on parts and costly admin time and attention
- Reduce the number of servers you must store, power, and cool, saving on port costs, electricity bills, and more
- Gain the latest in embedded management technology and support for faster storage, which can further reduce management burdens and increase performance

Moving to the 2nd Generation Intel Xeon Scalable processor-powered Dell EMC PowerEdge R740 server can make good business sense for those looking to provide a strong customer experience, minimize ongoing operating costs, and pave the path to future growth with forward-looking technology.

Transactions per minute (TPM) and new orders per minute (NOPM)

2.6 times the TPM and NOPM

Dell EMC PowerEdge R740	2.65
HPE ProLiant DL380 Gen 9	1.00

Normalized
Higher is better

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1. Dell EMC, "PowerEdge R740 Rack Server," accessed June 10, 2019, https://www.dell.com/en-us/work/shop/povw/poweredge-r740.
2. Intel, "2nd Gen Intel Xeon Scalable Processors Brief," accessed June 10, 2019, https://www.intel.com/content/www/us/en/products/docs/processors/xeon/2nd-gen-xeon-scalable-processors-brief.html.

Read the report at http://facts.pt/3z99w9i ▶

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