Executive summary

Elevate your e-commerce business by upgrading to the Dell EMC PowerEdge R740xd with 2nd Generation Intel Xeon Scalable processors

Moving from a legacy environment can drive the number of customers you support to new heights

A successful online business requires powerful data center hardware that handles large numbers of orders and lets customers make their purchases without delay. Upgrading your aging servers can empower your business to handle significant growth.
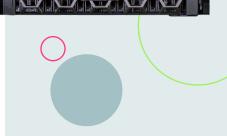
In the Principled Technologies data center, we ran an e-commerce workload on a two-server VMware® vSAN™ cluster of Dell EMC™ PowerEdge™ R740xd servers powered by 2nd Generation Intel® Xeon® Scalable processors. Compared to previous tests running the same workload on 1) a pair of seven-year-old Dell PowerEdge R720 servers with a SAN storage array (legacy server environment) and 2) a previous-generation vSAN cluster of Dell EMC PowerEdge R740xd servers with 1st Generation Intel Xeon Scalable processors (previous generation solution) the new servers with 2nd Generation Intel Xeon Scalable processors offered a dramatic performance boost that makes a compelling argument for a server upgrade.

In fact, the new cluster powered by 2nd Generation Intel Xeon Scalable processors did the work of over 11 legacy server clusters, showing that improving hardware efficiency is possible when you upgrade your servers to the latest Dell EMC PowerEdge R740xd.

Handle more customers

with **11.4X** the orders per minute vs. a legacy R720 environment

Increase orders over the previous generation

with **1.3X** the orders per minute vs. a solution with 1st Gen Intel Xeon Scalable processors

Invest in the Dell EMC PowerEdge R740xd server with 2nd Generation Intel Xeon Scalable processors and watch database performance grow

How much does your business stand to benefit from upgrading your data center hardware? It depends on the hardware you currently have. A two-node software-defined storage (SDS) cluster of the latest Dell EMC PowerEdge R740xd servers with 2nd Generation Intel Xeon Scalable processors delivered 1.3 times the orders per minute (OPM) of a previous generation solution and over 11.4 times the database OPM of a legacy environment consisting of two Dell PowerEdge R720 server and an external array.

The winning solution at a glance

Dell EMC PowerEdge R740xd server

- Room for extra drives, with up to 24 NVMe drives and 32 2.5" or 18 3.5" drives in 2U
- Flexibility through several drive options
- Storage density allows for demanding SDS solutions[1]

2nd Generation Intel Xeon Scalable processors

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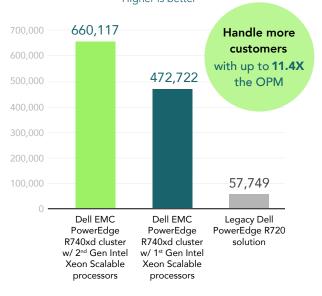- Supports new memory and storage technology for workload acceleration, Intel Optane DC memory[2]

Replacing many older servers and external arrays with a sleek, new vSAN cluster of 2nd Generation Intel Xeon Scalable processor-powered Dell EMC PowerEdge R740xd servers can simplify your data center and help you serve more customers. A two-node cluster of Dell EMC PowerEdge R740xd did up to 11 times the work of a legacy environment, which means that upgrading would help you:

- Improve the efficiency of your data center, which lets you serve more customers with less hardware and save on operating costs
- Avoid maintenance hassles and costs that come with aging hardware
- Get the latest in internal storage capabilities to take advantage of flexible storage solutions like SDS

These are just some of the benefits that upgrading to the latest Dell EMC PowerEdge R740xd servers with 2nd Generation Intel Xeon Scalable processors can provide your organization, proving that making the switch from a legacy solution or even the previous generation can help elevate your e-commerce business.

Total orders per minute (OPM)
Higher is better

Solution	OPM
Dell EMC PowerEdge R740xd cluster w/ 2nd Gen Intel Xeon Scalable processors	660,117
Dell EMC PowerEdge R740xd cluster w/ 1st Gen Intel Xeon Scalable processors	472,722
Legacy Dell PowerEdge R720 solution	57,749

Handle more customers with up to **11.4X** the OPM

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1. Dell EMC, "PowerEdge R740xd Rack Server," accessed July 1, 2019, https://www.dell.com/en-us/work/shop/cty/pdp/spd/poweredge-r740xd/pe_r740xd_12238_vi_vp.
2. Intel, "2nd Gen Intel Xeon Scalable Processors Brief," accessed July 1, 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/4mw53ty ▶

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