



Executive summary

Serve more online customers and gain business insights faster with new Dell EMC servers and Microsoft SQL Server 2017 software

A Dell EMC PowerEdge R740xd server with Microsoft SQL Server 2017 Standard and Windows Server 2016 processed more orders and analyzed data in less time than a legacy solution

Successful businesses have the vision to stay one step ahead of the crowd. Why not apply that same visionary thinking to your datacenter? Your legacy servers and SQL Server® database environment could be lagging when it comes to order processing and data analysis. Replacing those servers with new hardware and software could help you support more online customers and reach data insights quicker.

In hands-on testing, we ran order processing and data warehouse workloads on a legacy Dell EMC™ PowerEdge™ R720xd server with older software, as well as the new 14th generation PowerEdge R740xd server running Microsoft® SQL Server 2017 Standard and Windows Server® 2016 Standard. The new solution processed almost seven times as many orders per minute and significantly sped up business analytics queries. With an upgrade to new Dell EMC servers and the latest software from Microsoft, you could support more customers and get data insights faster, giving your business the competitive edge it needs to grow.



Support nearly
7x
as many customers

Reach data insights faster
90%
faster query times

Testing the new Microsoft-Dell EMC solution

We used the DVD Store 2 benchmark to gauge how many online transactions each solution could process, as measured in orders per minute. We then assessed how fast each solution could answer complex database queries using HammerDB, a tool that generates various benchmarking workloads.

Our testing revealed that the new Dell EMC PowerEdge R740xd server with Microsoft SQL Server 2017 Standard delivered markedly better transactional database performance than the legacy solution, processing 6.7 times as many orders per minute and lowering average application latencies by 88 percent. Business analytics performance also improved: the updated Microsoft-Dell EMC solution completed a query set in 90 percent less time and decreased drive read latency by 99 percent. If your database is running on legacy hardware and software, it might be time for a refresh.

What do these testing results mean for your business?

Nearly 7 times as many orders per minute

A server solution that can handle 6.7 times as many orders each minute reduces the chance of a slowdown (even during periods of peak use) and opens up new options for datacenter use. Your business could choose to consolidate, using fewer servers to process just as many orders. This can reduce datacenter costs like power and cooling, as well as ease the burden on IT staff. Alternatively, you could expand your overall capacity by fitting servers that can process more orders into the same amount of datacenter space.

88 percent lower application latency

Reduced application latency indicates that users will spend less time waiting for a response—decreasing the risk that they'll take their business elsewhere.

90 percent faster query times

The updated Microsoft-Dell EMC solution ran a set of 22 queries in just 16 minutes, while the legacy solution took almost three hours to complete the same query set. A solution that analyzes data faster enables you to act sooner, helping you make business decisions that improve your bottom line.

Support more customers and get business insights quicker

Our testing showed that a Dell EMC PowerEdge R740xd server with Microsoft SQL Server 2017 Standard and Windows Server 2016 Standard handled significantly more orders per minute and reduced application latency versus a legacy solution—benefits that can directly translate into a better customer experience. The new solution also processed database queries in less time than the legacy solution, helping your business quickly get the insights it needs to stay competitive and profitable. With a new Microsoft and Dell EMC solution, your business could stop worrying about whether your legacy servers will support customer growth and data analysis, and focus on increasing revenue.

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