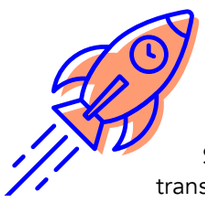
Get significantly better transactional database performance for less from a Dell EMC PowerEdge R740xd server with value SAS and data center NVMe SSDs from Toshiba Memory

A PowerEdge R740xd server with drives from Toshiba Memory achieved better transactional database performance at a lower cost than the same server with enterprise SATA SSDs

Dell EMC PowerEdge R740xd server running a transactional database workload

Speed up your transactional database performance



A Dell EMC™ PowerEdge™ R740xd server configured with RM5 Series value SAS SSDs boosted transactions per second by **71 percent** compared to the enterprise SATA SSDs we tested. CD5 Series data center NVMe™ SSDs delivered an increase of **115 percent** versus enterprise SATA SSDs.

Total transactions per second *higher is better*

RM5 Series value SAS SSDs: 4,771

Enterprise SATA SSDs: 2,779

Total transactions per second *higher is better*

CD5 Series data center NVMe SSDs (no RAID): 5,987

Enterprise SATA SSDs: 2,779

TPS per dollar *higher is better*

System with RM5 Series value SAS SSDs: 0.1150

System with enterprise SATA SSDs: 0.0663

TPS per dollar *higher is better*

System with CD5 Series data center NVMe SSDs: 0.1389

System with enterprise SATA SSDs: 0.0663

Get better performance for less

Value SAS and data center NVMe SSDs delivered, respectively, up to **73 percent** and **109 percent** better transactional database performance per dollar than the enterprise SATA SSDs we tested.

RM5 Series value SAS and CD5 Series data center NVMe SSDs

Value SAS SSDs deliver a 12Gb/s connection,[1] and data center NVMe SSDs from Toshiba Memory push transfer speeds to 32 gigatransfers per second (GT/s).[2] SATA SSDs, by contrast, have had the same 6Gb/s transfer speeds since 2008.[3]

Learn more at http://facts.pt/ll2fgw2

1 Toshiba Memory, "Toshiba Memory America First to Deliver Value SAS SSDs Targeting SATA Applications," accessed March 22, 2019, https://business.toshiba-memory.com/en-us/company/tma/news/2018/06/storage-20180619-1.html.

2 Toshiba Memory, "Data Center SSD," accessed March 22, 2019, https://business.toshiba-memory.com/en-emea/product/storage-products/da-ta-center-ssd/cd5.html.

3 "New SATA Spec Will Double Data Transfer Speeds to 6 Gb/s," accessed April 5, 2019, https://sata-io.org/system/files/member-downloads/SATA_6Gb_Phy_PR_Finalv2.pdf.

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