Achieve more storage performance with Dell PowerEdge R750 servers equipped with Broadcom PCIe Gen4 switches

vs. a PowerEdge R740xd server equipped with Broadcom PCIe Gen3 switches



We compared the server and storage switch performance of a Dell™ PowerEdge™ R750 equipped with the new Dell PEX88000 series switch, which is a Broadcom PCIe Gen4 switched topology storage adapter, to that of a Dell PowerEdge R740xd, equipped with a Broadcom PCIe Gen3 switch (Dell PEX 9733).

Process more storage requests

Random read FIO results on 24 NVMe drives with 56 cores for the PowerEdge R750 and 36 cores for the PowerEdge R740xd IOPS | Higher is better



Sustain more concurrent throughput

Sequential read FIO results on 24 NVMe drives with 56 cores for the PowerEdge R750 and 36 cores for the PowerEdge R740xd



Random write FIO results on 24 NVMe drives

with 56 cores for the PowerEdge R750 and 36 cores for the PowerEdge R740xd IOPS | Higher is better



Sequential write FIO results on 24 NVMe drives with 56 cores for the PowerEdge R750 and 36 cores for the PowerEdge R740xd Throughput | Higher is better



Performance and scalability

Want to see more results? In addition to these 24 NVMe drive results, we also tested with 8 and 12 NVMe drives. Plus, we gathered 8, 16, and 36 (plus 56 for the PowerEdge R750) core performance metrics for both server solutions in all three NVMe drive configurations. Click below for a deeper dive into our testing and results.

*In the random write comparison, we found that the NVMe drives, not the Broadcom switch or processors, were a bottleneck.

Learn more at https://facts.pt/yjZGZ6O



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