Enable greater data reduction and storage performance with the Dell EMC PowerStore 7000X storage array

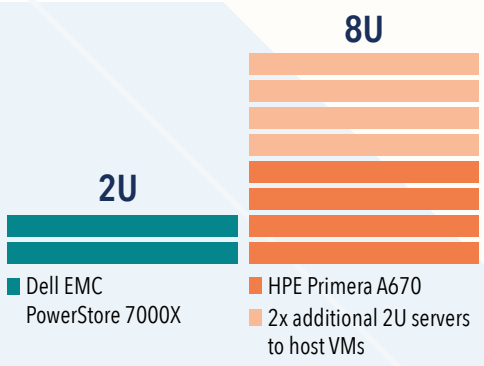
Compared to an HPE A670 array, the Dell EMC™ PowerStore™ 7000X:

- ✓ Reduced data more efficiently
- ✓ Required less time to deploy a VM out of the box
- ✓ Provided storage to external hosts with better performance while internally servicing a database workload, a capability that the HPE Primera A670 does not have
- ✓ Took up ¼ of the rack space while running compute and storage simultaneously

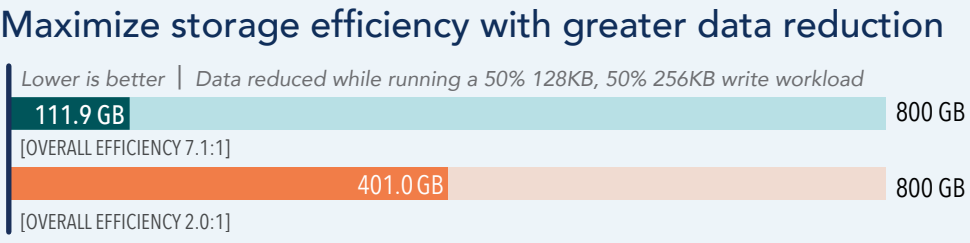
KEY: Dell EMC PowerStore 7000X | HPE Primera A670

Save cabinet space when hosting VMs in a highly available environment

The Dell EMC PowerStore 7000X can provide storage resources while hosting database VMs internally in a 2U form factor. If businesses using the HPE Primera A670 wanted to host VMs in a highly available (HA) environment, they would need to purchase additional servers, increasing the total footprint of the HPE Primera A670 array. Our testbed comprised two 2U servers, but space savings can very depending on the server form factor a company uses (for example 1U, 2U, or 4U rack or blade servers).



Maximize storage efficiency with greater data reduction



3.5x THE DATA REDUCTION

Deploy a VM out of the box 9x faster

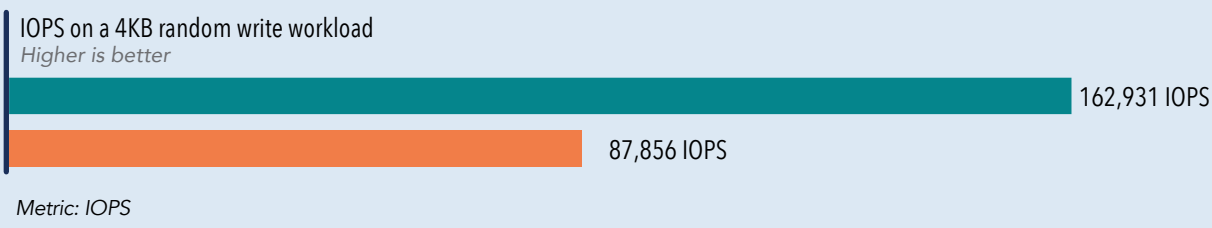
9x FASTER VM DEPLOYMENT

Note: The PowerStore 7000X array enabled us to deploy VMs internally, while the HPE Primera A670 required external VMware servers to deploy VMs.

Host database VMs internally while providing storage resources to external hosts

We ran four scenarios to test various aspects of storage performance on both arrays:

Scenario 1: Dell EMC PowerStore 7000X hosting VMs internally and HPE Primera A670 hosting VMs externally



85% MORE IOPS

Metric: IOPS
Workload: Vdbench

Note: We ran Scenarios 3 and 4 one after the other. While running these two scenarios, we simultaneously ran Scenario 2. This means the Dell EMC PowerStore 7000X achieved these results while hosting VMs internally and externally. The HPE Primera A670 was only hosting VMs externally.

Scenario 2: Dell EMC PowerStore 7000X hosting VMs internally while running simultaneous workloads from Scenarios 3 and 4

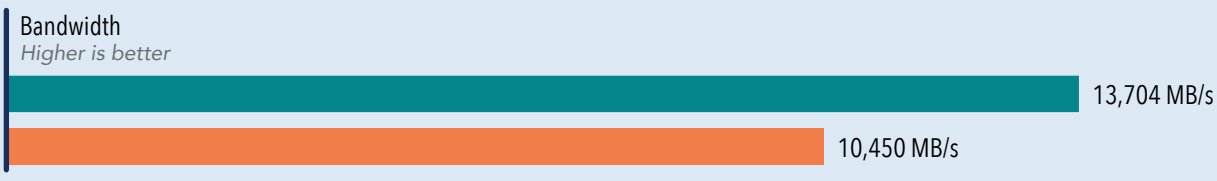
188,320 database operations per second

Application response times as low as **.33 MILLISECONDS** (read database application latency)

HPE Primera A670 cannot host internal VMs, so we could not make a comparison

Metric: Database operations per second and database application latency
Workload: Yahoo! Cloud Serving Benchmark (YCSB) on VMs running the document-based database MongoDB

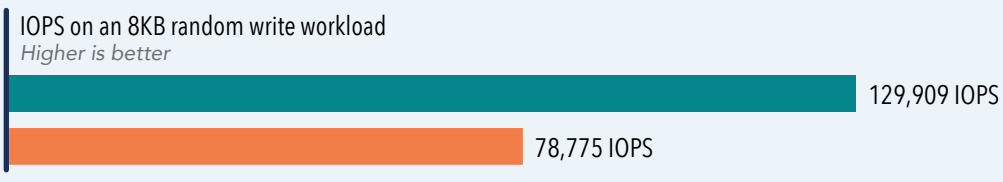
Scenario 3: HPE Primera A670 hosting VMs externally and Dell EMC PowerStore 7000X hosting VMs externally while simultaneously hosting the workload from Scenario 2



31% MORE BANDWIDTH

Metric: Bandwidth
Workload: Vdbench

Scenario 4: HPE Primera A670 hosting VMs externally and Dell EMC PowerStore 7000X hosting VMs externally while simultaneously hosting the workload from Scenario 2



65% MORE IOPS

Metric: IOPS
Workload: Vdbench

The Dell EMC PowerStore 7000X

With this offering, Dell EMC has combined all-flash storage with VMware-compatible AppsON application support in a single array. Organizations could gain a completely virtualized environment ready to host VMs and applications with minimal configuration. These capabilities could decrease hardware requirements (reducing the need to buy additional servers and switches); lower capital, operational, and licensing costs; and simplify deployment and management.

Learn more at DellEMC.com/PowerStore

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