PowerStore: Out-Innovating the Competition

We live in the data era. Every IT decision maker I talk to is faced with the unique challenges that comes with the exponential growth in data storage driven by next generation applications and emerging technologies like 5G. At the same time, the need to process and store data at edge locations is quickly growing and placing more pressure on IT teams who need adaptable, easy to manage and intelligent appliances to overcome these growing obstacles. This was the driving force behind the need to innovate and deliver a newly designed next generation storage array.
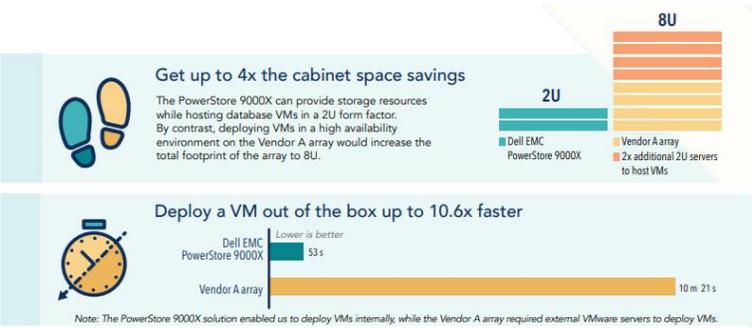
Dell Technologies PowerStore – The Innovator

To fully address the challenges of the data era, a next-generation storage platform must be able to meet four key requirements:

1.   Scale up and scale out to manage unpredictable growth
2.   Support any workload (block, file, vVol or container-based)
3.   Adapt as needs change, without disruptive migrations or upgrades
4.   Offer flexibility to support both traditional storage topologies and run applications locally[1]

The answer to these existing and emerging challenges is PowerStore: the all-new storage platform from Dell Technologies and the most innovative storage array in the industry. None of our top competitors can deliver all of these capabilities in a single solution. What you should be asking yourself is, "Is my partnership with Dell and the innovation that PowerStore is delivering today going to take my business into the future?". Let's get into some details on the innovation.

- **AppsON –** PowerStore is the only purpose-built array with a built-in VMware ESXi hypervisor[2], which provides flexibility to run VMware virtualized apps directly on the appliance, while providing capacity for external workloads at the same time. None of our major competitors offers this capability; the best they offer is layered storage apps to perform specific functions. When compared to a leading industry competitor, PowerStore achieves up to 4x the cabinet space savings and up to 10x faster deployment of a VM out of the box – learn more about it here or check out this video about AppsON.

Get up to 4x the cabinet space savings
The PowerStore 9000X can provide storage resources while hosting database VMs in a 2U form factor. By contrast, deploying VMs in a high availability environment on the Vendor A array would increase the total footprint of the array to 8U.

Deploy a VM out of the box up to 10.6x faster
Note: The PowerStore 9000X solution enabled us to deploy VMs internally, while the Vendor A array required external VMware servers to deploy VMs.

- **Flexible, Scale-Out Architecture –** One of our North American Higher Education customers has a brand-new web ordering application needing a high-performance database while marketing was hungry for capacity to support new creative materials. PowerStore's flexible scale-up AND scale-out architecture is perfect to address both challenges in one platform. Every other

competitor can either scale-up or scale-out, leaving customers to make trade-offs and not fully meet the needs of the business. Check out the details in this video.

- **Anytime Upgrade** – Competitive programs for controller modernization don't offer the same flexibility in upgrade programs to increase performance or scale-out. In addition to those shortcomings, they claim their upgrades are "free every 3" or "timeless" but require an expensive maintenance renewal which locks you in for another three years. Anytime Upgrade[3] is the only program that allows you to redeem your upgrade anytime after 180 days, and you won't have to cut another check to renew your support contract[4]. This conversation with ESG is a great way to understand Anytime Upgrade.

- **Architecture optimized for next-gen media –** Persistent SCM media is necessary to deliver the highest performance and lowest response times. While other vendors' architecture adds SCM only as read cache or not at all, PowerStore's next generation architecture lets customers put their most mission-critical applications directly on SCM for top performance. Our competition
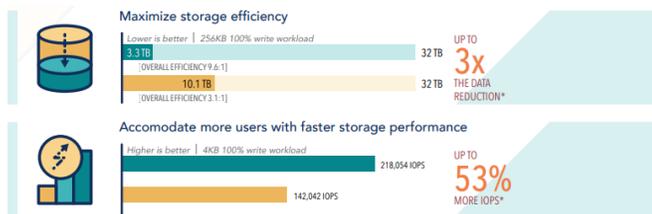
will need to rearchitect their platforms entirely to deliver the same levels of performance. Even with NVMe flash media, a recent industry report shows PowerStore delivers up to 53% more IOPS and 3x the data reduction compared to a major market competitor[5]- check it out here.

- **Simplicity through automation and Machine Learning (ML) –** PowerStore scales-out and automates labor-intensive tasks to drive IT efficiency even as your environment grows unpredictably, eliminating dozens of time-consuming tasks and decision points to reduce volume rebalancing tasks by up to 99% compared to traditional environments.[6] Check this video out for a more technical explanation:

Seeing through the FUD

Customers I talk with are excited about the outcomes PowerStore delivers but the competition is eager to spread fear and doubt around an early adoption of a version one product. The reality is:

- Dell Technologies has held the #1 revenue share ranking for external OEM Storage in North America for the last 18 years[7]. For almost 2 decades customers have overwhelmingly entrusted us to host their most mission-critical data. The same engineering experience and pedigree that built those storage systems is behind PowerStore.
- We ran a comprehensive beta involving 110,000 test executions across 60+ participants as part of the design process for PowerStore. It is designed for 99.9999% reliability[8] and since launch, PowerStore has had hundreds of thousands of run hours in customer datacenters.

- Confident in our earned reputation, we go above and beyond with a 3 Year Satisfaction Guarantee[9] through our [Future Proof Program](#). Some of our top competitors in North America can't match this with products they've had in place for years.

Furthermore, our competition is telling you an incomplete story about our capabilities and strategy. Here is what they aren't telling you:

- They fail to mention how our new Dynamic Resiliency Engine (DRE) delivers storage efficiency alongside data availability without compromise – you can read more about it [here](#).
- They don't want to acknowledge PowerStore's metro node offloads replication from the array requiring ZERO CPU cycles to protect only the workloads you need to make your replication strategy more efficient. There are more benefits to metro node which you can read about [here](#).
- They don't tell you how expensive it is to run a VSA in a hyperscaler, having to pay for a software license, compute, and storage just for data portability. That's why I love talking about our strategy with [Cloud Storage for Multi-Cloud](#). You get a storage managed service that provides consistent operations, portability, DR and only pay for what you use without the software licensing and compute overhead.

These types of FUD and diversions are simply because they can only offer architectures that are equipped for the challenges of the past – not the future. They simply *do not* have the ability to achieve what we have done with PowerStore.

The Future of Storage is Here

Innovation is nothing unless it delivers value to your business. PowerStore's unique capabilities, not found in competitive arrays, gives you the freedom to evolve your IT in a rapidly changing world. We can support ANY scale, ANY workload, ANY future need, and ANY topology without compromise or disruption. And going forward, our containerized software architecture will enable us to innovate faster than ever before.

Watch this space for more as I'll be diving deeper into how PowerStore helps customers accomplish more with their storage and deliver on business outcomes. In the meantime, you can learn more about how Dell Technologies storage stacks up against the competition [here](#), get more details on PowerStore [here](#), or reach out to your local Dell Technologies or partner representative.

[1] AppsOn capability available on PowerStore X models.

[2] Based on Dell analysis of publicly available information on current solutions from mainstream storage vendors, April 2020. Available on X models.

[3] Based on Dell analysis, April 2020 using publicly available data to compare the highest available program/subscription offers for controller upgrades. Requires purchase of Anytime Upgrade Standard or Select option and minimum 3-year ProSupport or ProSupport Plus contract at point of sale to qualify. Upgrade eligibility begins 180 days after invoice.

[4] Upgrade available 180 days after invoice. Requires purchase of minimum 3-year ProSupport with Anytime Upgrade Select or Standard add-on option at point of sale to qualify. Anytime Upgrades program availability may vary by country and segment. For details, contact your sales representative.

[5] Based on an April 2020 Principled Technologies Report commissioned by Dell EMC, "Enable greater data reduction, storage performance, and manageability with Dell EMC PowerStore storage arrays" comparing PowerStore 9000T/X vs. a competitive array. Actual results may vary.

[6] Based on Dell internal analysis of staff time required to maintain balanced PowerStore cluster vs. traditional multi-array deployment, March 2020. Factors in effort required to monitor, plan, define and execute volume migrations. Actual results will vary.

[7] IDC North American (USA + Canada) Quarterly External OEM Enterprise Storage Systems Tracker, 2020Q2, September 8, 2020, Vendor Revenue

[8] Based on Bellcore component reliability modeling for common configurations of all PowerStore models.

[9] Three-year Satisfaction Guarantee: Requires purchase of a 3-year ProSupport agreement. Compliance is based on product specifications. Any refund will be prorated. Applicable products include: PowerProtect DD, Dell EMC Unity, Dell EMC Unity XT, ECS Appliance, PowerProtect Appliances, Isilon, Networking (N, S, Z Series, MX Switching Modules), PowerFlex appliance, PowerMax, PowerStore, PowerVault ME4, SC Series, XtremIO X2, VMAX All Flash, VxRail

About the Author: Kyle Leciejewski is senior vice president of storage, platforms and solutions sales and leads a large team that helps customers navigate their journey to a modernized and automated cloud infrastructure future. He focuses his time with customers and partners to better understand how Dell Technologies can serve them as they transform their approach to cloud & data center operations. With years of experience in enterprise cloud infrastructure and hundreds of conversations every year with customers, he brings a deep understanding of the industry, market trends and customer outcomes. His goal is to help customers take advantage of Dell's cutting-edge technology in a way that drives their business.

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