TOP 10 REASONS WHY CUSTOMERS DEPLOY DELL EMC POWERMAX FOR VMWARE

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Dell EMC PowerMax, the world's fastest storage array,[1] is perfect for large scale VMware environments. Leveraging a powerful, future-proof, next-generation storage architecture, it delivers unparalleled availability, trusted data services, superior storage efficiency, and deep VMware integration. Accelerate your journey to the modern data center with PowerMax.

1 | Performance for Modern Virtualized Environments

PowerMax is the fastest storage array on the planet.[1] With an end-to-end, NVMe design and cache-centric, scale-out architecture, PowerMax can deliver up to 10M IOPS and 150 GB/s sustained throughput with less than 300 microsecond latencies—even as the system scales to its maximum capacity. The system is fully future-proofed with its readiness for next-generation flash memory (Storage Class Memory[2]) and connectivity technology (NVMe over Fabrics[2]).

2 | Simple Scaling for the Largest Deployments

With its scale-out architecture, PowerMax scales up to eight fully redundant engines working in a cluster. Upgrades are seamless to cater for unexpected growth. And with support for up to 4 PBe capacity and performance of up to 10M IOPS, the PowerMax platform can support up to 70,000 VMs in a single array, making it a highly robust solution.

3 | Enterprise Class Data Protection and Mission-Critical Availability

PowerMax is the world's most trusted storage platform with its legendary six-nines (99.9999%) availability. Dell EMC SRDF is the gold standard in the industry for remote replication solutions. Many customers buy PowerMax specifically for SRDF—SRDF environments easily exceed even six-nines availability. Whether your requirements are for an efficient asynchronous replication solution, a local synchronous solution, an Active/Active Metro solution, or a combination of synchronous and asynchronous, PowerMax delivers true fault tolerance to the most demanding VMware environments. And, PowerMax is fully integrated with VMware Site Recovery Manager (SRM) for the added ease of deployment, irrespective of which SRDF mode you choose.

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1. Based on Dell EMC internal analysis of published bandwidth of the PowerMax 8000 versus competitive mainstream arrays, March 2018
2. NVMe over Fabric and SCM drives are planned to be Generally Available (GA) with PowerMax during 1H 2019

4 | Accelerated Test/Dev with Unique iCDM Capabilities

PowerMax leverages space efficient snapshots that enable thousands of VMware Datastore copies to be created using little additional storage capacity. It includes integrated copy data management (iCDM) tools that provide simple creation, management, orchestration, and automation of VMware and application copies. Integrated workflows allow simple deployments of application copies for test/dev and other use cases.

5 | Cost Effectiveness through Innovative Data Efficiencies

PowerMax inline compression and deduplication deliver significant data reduction efficiencies, guaranteeing 4:1 storage efficiencies. Additionally, the inline data reduction operations are carried out in hardware, so there are no performance penalties.

6 | Core VMware Integration

PowerMax delivers deep integration with all of the core storage enablement primitives offered by VMware vSphere. VAAI, the core VMware API for storage offload, increases the performance of the vSphere cluster significantly. PowerMax supports all VAAI primitives—XCOPY, UNMAP, WRITE SAME and ATS Lock Extents. PowerMax also supports VVols and VASA V2.0 for next-generation VMware environments. Additionally, PowerMax integrates with VMware (SRM) and VMware Metro Storage Cluster (vMSC) with SRDF to enable orchestrated disaster recovery failover. And, PowerMax provides integration with Dell EMC RecoverPoint for heterogeneous target replication in virtualized environments as well as VM-specific replication with Dell EMC RecoverPoint for VMs.

7 | Fully Integrated VMware User Experience

PowerMax goes beyond core VMware integration points, offering many additional integration points to ensure a complete integrated user experience that is familiar to a VMware administrator. Virtual Storage Integrator (VSI) plugs into the VMware vSphere web client, allowing administrators to directly provision PowerMax storage, visualize the infrastructure, manage local replication, schedule UNMAP operations and much more—all from the VMware administrator's familiar user interface. EMC Storage Analytics Plug-In (ESA) provides integration with vRealize Operations Manager to provide a complete end-to-end, in-context view of systems and storage health. And the VMAX and PowerMax Log Insight content pack provides dashboards, alerts, and queries to sort and intelligently present PowerMax log Information directly from vCenter. All of the PowerMax integrations for VMware environments are available at no additional cost.

8 | Mixed Workload Service Levels

PowerMax comes with a built-in machine learning (ML) engine that automatically learns from the workload patterns and delivers an end-to-end performance management system. Whether you operate a service catalog of application performance options or wish to protect certain workloads from noisy neighbor problems, PowerMax service levels and host IO limits work together to ensure an unprecedented level of performance consistency from deployment to retirement. PowerMax ML engine constantly monitors workloads and adjusts in real time as workload profiles change, leading to an always-consistent and predictable user experience.
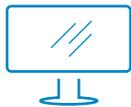
9 | Future-Proof Investments for Virtual Environments

PowerMax protects today's investments with non-disruptive upgrade paths to NVMe over Fabric and next-generation Storage Class Memory (SCM) drives. More importantly, the intelligent built-in ML engine constantly analyzes the IO patterns and automatically places data on the most optimal media type (NVMe flash or SCM) with zero overhead. VMware deployments will continue to benefit from the innovations in next-generation storage media because the ML engine continues to optimally place the data between the fastest media available today and the next-generation media of the future.

10 | Inspiring Loyalty

The Dell EMC Future-Proof Storage Loyalty Program takes the worry out of buying storage. Purchasing PowerMax qualifies for the 3-Year Satisfaction Guarantee, 4:1 All-Flash Storage Efficiency Guarantee, Never-Worry Data Migrations, Hardware Investment Protection, All-Inclusive Software, and Clear Price Maintenance. It's by far the best program in the industry. Get peace of mind with PowerMax.

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