Drive Epic Performance with Dell PowerMax

Best-in-class storage delivers best-in-class patient care

Architecture

- Incredible Performance
- Scale from 13TB to 18PBe
- Up to 5:1 Data Reduction

Operation

- Consolidate workloads on one platform
- Achieve consistent and predictable performance
- Monitor storage health with CloudIQ

Innovation

- Machine learning ensures maximum performance and SLAs
- Architected for 6 9's of availability
- Industry's gold standard in replication with SRDF
- D@RE keeps patient data safe

Electronic Health Records (EHR) are an integral part of today's healthcare IT landscape. With EHR deployments, such as Epic, hospitals can deliver safer and better patient care across the healthcare continuum. With the implementation of electronic records, storing, protecting, and accessing critical patient data where and when it is needed becomes a top priority for care providers.

Focused on the patient at the center, healthcare IT professionals need next-generation infrastructure they trust to perform without ever "skipping a beat." With physicians, nurses, pharmacists, technicians, and patients demanding information at the speed of now, the technology needs to be fast. Storage needs to have the ability to scale as the number of patients and corresponding data continues togrow. At the same time, data must be protected and secured to enable and meet HIPAA and GDPR requirements. This is where DellPowerMax solutions can help.

Deploying and maintaining an EHR environment can be demanding, and you need technologies that seamlessly address the workflow, management, and security needs associated with these workloads. Dell Technologies offers technology that truly works with Epic. In fact, more than 65% of Epic's customers deploy Dell Technologies solutions[1]. When it comes to storage, PowerMax is a true and trusted solution for EHRenvironments.

Dell PowerMax, the world's leading high-end storage platform, brings performance without compromise to your healthcare organization byproviding a powerful architecture, simple operation and trusted innovation for EHR workloads.

Performance Without Compromise

When patient data is needed at the point of care, healthcare providers need access to the data at lightning speed. PowerMax is architected to deliver incredible performance with NVMe done right including dual port NVMe-based flash drives and NVMeover Fabric. Blazingly fast speeds of up to less than 60 microseconds response times[2] ensure clinical data is there when it's needed most. The highest levels of performance deliver a better experience for both patients and healthcare professionals.

Many healthcare institutions are growing, either in the number of patientsor through acquisitions, and oftentimes both. With that, the amount ofpatient data also continues to grow, meaning you need storage that grows with you. PowerMax starts as small as 13TB and offers true multi-dimensional scale up to 18PBe. With the ability to scale up and out, you have the flexibility to expand capacity and performance

When it comes to capacity, you want the most out of your storage. PowerMax offers extreme efficiency with inline, hardware-based global deduplication and compression. With the use of these two data services, you can see up to a 5:1 data reduction and you can turn them off or on at the application level. This means you have the flexibility to manage your workload the way that best fits your needs.

Simple Operation

In many cases, EHR deployments like Epic have multiple production databases and 3rd party applications, as well as copies for analytics, dev/test, back up, go-live testing and more. PowerMax simplifies operations by consolidating all of your workloads on one platform whileachieving consistent and predictable performance. PowerMax is the ultimate platform for EHR consolidation.

Patients are not the only ones who need to stay healthy in healthcare institutions; your storage does as well. By utilizing Dell CloudIQ, you can monitor your storage health from anywhere, anytime. CloudIQ alerts you when problems arise and helps prevent issues from occurring in the first place - it's like a "fitness tracker" for your storage.

Trusted Innovation

PowerMax, with its trusted data services, has been a solution for mission-critical databases for years. The PowerMaxOS offers innovations such as the built-in machine learning engine that ensures maximum performance with no management overhead. PowerMax analyzes 40 million data sets in real-time and makes 6 billion decisions a day[3]. This means you can consistently meet your SLAs on both Epic andnon-Epic workloads with the service level objectives your organization requires.

PowerMax is a trusted platform offering high availability, protection and security for your EHR data. Caregivers need to access a patient's record in a moment's notice. The only way to guarantee this is with a storage array architected for 6 9's of availability, like PowerMax. With non-disruptive migrations and updates as well as component-level fault isolation and multi-controller architecture, PowerMax simply does not go down. Epic is mission-critical for you, and we intend to keep it up and running all the time.

Protection and security of patient data is also enabled with PowerMax. PowerMax provides replication with the use of SRDF software, which is the gold standard in the industry for business continuance. SRDF allows you to replicate data across multiple sites or extended distances. In fact, SRDF/Metro delivers active/active high availability for non-stop data access. Replication on PowerMax complements cache mirroring and allows you to replicate non-cache data with no additional infrastructure.

PowerMax 2000/8000 with PowerProtect Storage Direct technology gives you the ability to back up data directly to Dell Data Domain. This results in up to 20x faster direct backups and 10x faster recoveries.

PowerMax is FIPS 140-2 validated and meets the Advanced Encryption Standard (AES) 256.

Trust your patient's data is safe and protected with PowerMax.
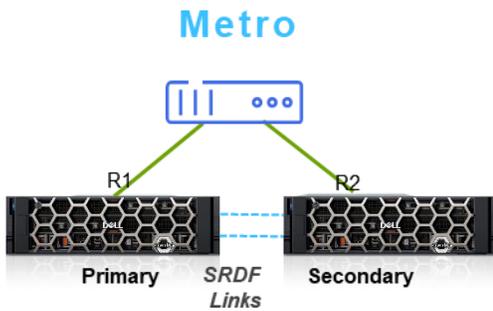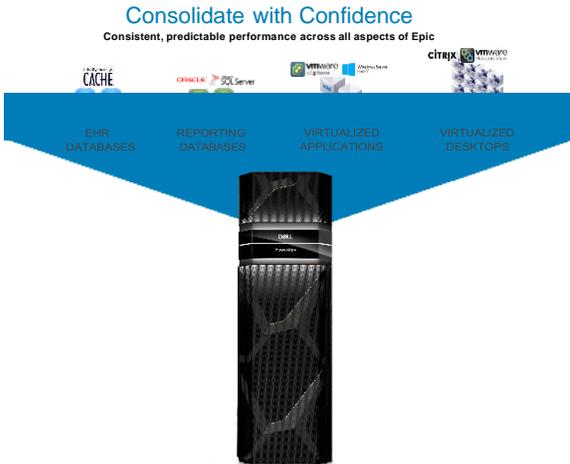
Customers trust PowerMax and VMAX to run Epic

PowerMax and VMAX before it, set the standard to support EHR workloads and both currently support the highest number of Epic deployments worldwide.

Future-Proof Infrastructure Investments

[Dell's Future-Proof Program](#) takes the worry out of buying storage and qualifies your PowerMax purchase for a 3-yearsatisfaction guarantee. Get peace of mind with your PowerMax.

1 HIMSS Analytics, October 2018

2 Based on Dell internal analysis using the random read hit benchmark for PowerMax 8500 array, April 2023

3 Based on Dell internal analysis of PowerMax 2000/8000 with 200TB of capacity, July 2019 Based on Dell internal analysis of a single PowerMax 2000 or 8000 array, July 2019
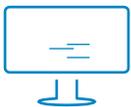
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