The healthcare industry is growing and changing every day. Hospitals and care facilities are consistently challenged to deliver the very best in patient care. Physicians, providers, and patients are demanding information at lightning speeds. This means the demand on your IT infrastructure and your electronic health records (EHR) has never been greater. Dell EMC PowerMax with its powerful architecture, simple operation, and trusted innovation with NVMe done right is truly the best array for your deployment.

1. **Incredible Performance for Epic Environments**

   Patients and providers are demanding information almost instantly. Whether the patient is trying to access records on a portal or a physician needs to look something up at the point of care, they need the information right away. Dell EMC PowerMax is the world’s fastest storage array¹. With NVMe done right, PowerMax offers up to 15 million IOPS², 350 GB per second bandwidth³, and less than 100 microsecond response times⁴, ensuring everyone gets the information they need when they need it.

2. **Experience Zero Down Time in Your Data Center**

   We know that your data center can’t skip a beat. That’s why PowerMax is architected for six nines of availability. With functionalities such as non-disruptive migrations and upgrades, and component-level fault isolation and multi-controller architecture, PowerMax offers virtually zero unplanned downtime. When it comes to mission-critical availability, PowerMax does its best with SRDF software – the gold standard in replication. With SRDF, you can replicate across multiple sites or extended distances and SRDF/Metro delivers active/active high availability for non-stop data access. It also complements Caché mirroring and allows you to protect non-Caché data with no additional infrastructure. Simply put: PowerMax always keeps the lights on.
3 EHR can be Demanding, Consolidate on the Right Platform

EHR deployments can be extremely demanding with the need to run and maintain multiple production databases, 3rd party apps, as well as copies for analytics, dev/test, backup, go-live testing and more. With PowerMax, you can consolidate all these workloads on a single array with confidence. PowerMax offers consistent, predictable, performance across all aspects of Epic including databases, virtualized apps and desktops. PowerMax can even help you consolidate your data center by supporting mixed workloads of both mainframe and open systems on the same platform. Plus, Dell EMC CloudIQ allows you to monitor your storage health from anywhere; it’s like a fitness tracker for PowerMax.

4 Uncompromised Security for Patient Data

Patient records, health information, and personal data warrant the toughest security measures. PowerMax meets the security standards to keep your data safe. It all starts with data at rest encryption which protects your data at the drive level and easily integrates with external key managers. PowerMax is designed for FIPS 140-2 validation and meets the Advanced Encryption Standard (AES) 256. Secure snaps with SnapVX keep your snapshots safe by stopping any intentional or malicious deletion and have zero impact on performance.

5 Powerful Data Services

PowerMaxOS offers rich data services including global, inline deduplication and compression, non-disruptive migration, SnapVX, and SRDF. PowerMax software comes in two simple appliance-based packages. The Essentials package offers local replication, embedded services, migration tools (NDM), and deduplication and compression to name a few. The Pro package adds remote replication, path failover, D@RE, SRM and AppSync iCDM advanced. RecoverPoint heterogeneous replication and ProtectPoint Storage Direct can be purchased a la carte.

6 PowerMax Grows with You

Simply put, your healthcare organization is rapidly growing and with it, your EHR deployment. Maybe your hospital is going through an acquisition and is now taking on more physicians and patients, or maybe you simply have more patients and thus more records to maintain, either way you need storage that grows with you. PowerMax delivers both scale-up and scale-out, starting as small as 13TB and growing to 4PBe on a fully configured PowerMax 8000 array, offering you the flexibility to expand capacity and performance as needed. This is why PowerMax, with its multi-dimensional scale and multi-controller architecture, is the right storage array for you.

7 Epic Gets the Best Performance with Machine Learning

PowerMax ensures maximum performance with no management overhead thanks to its built-in, real-time machine learning engine, which analyzes and forecasts 40 million data sets in real-time, driving 6 billion decisions per day. So, what does this mean to you? It means you can meet SLAs on both Epic and non-Epic workloads with service level objectives. With the installation of Storage Class Memory (SCM) drives into PowerMax in 2019, the machine learning will leverage analytics to intelligently place your data on the correct media based on its IO profile. This works hand-in-hand with our service levels to ensure that your Epic apps get consistent performance. You can guarantee service levels for applications such as Caché and more. These capabilities allow your patients and physicians to get the information they need as fast as possible.
Top 10 Reasons Why PowerMax for Epic

8  20x Faster Direct Backups
   Your EHR needs to be protected at all times. PowerMax with Dell EMC ProtectPoint Storage Direct technology empowers you to back up your data directly to Dell EMC Data Domain, eliminating the need of a backup server and freeing your resources while speeding up the backup process. In fact, with ProtectPoint Storage Direct you can deliver up to 20x faster backups and 10x faster recoveries.

9  PowerMax Receives “High Comfort” for Epic Deployments
   PowerMax, the next generation of the industry’s most trusted enterprise storage platform, and VMAX are clearly the best choice to run your Epic environment. Due to Epic’s experience with PowerMax, they gave the array the distinction of High Comfort at launch! Dell EMC VMAX is extremely popular in EHR environments and has the highest number of Epic deployments worldwide. All-in-all, over 120 Epic customers run on VMAX, the predecessor of PowerMax.

10 Future-Proof Your Investment

1 Based on Dell EMC internal analysis of published bandwidth of the PowerMax 8000 versus competitive mainstream arrays, July 2019.
2 Based on Dell EMC internal analysis of Random Read Hits Max I/Os Per Second (Within a single array on 2 floor tiles) for the PowerMax 8000, July 2019.
3 Based on Dell EMC internal analysis of Random Read Hits Max GB per Second (Within a single array) for the PowerMax 8000, July 2019.
4 Based on Dell EMC internal analysis using the OLTP2 HW benchmark for a single PowerMax 8000 array, July 2019.

Learn more about Dell EMC PowerMax solutions
Contact a Dell EMC Expert

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