

Solution Brief

PowerVault ME5 at the Edge

PowerVault at the edge empowers emerging business progress

Edge computing is transforming industries by bringing data processing and storage closer to the source of data creation. However, this shift comes with challenges such as managing growing data volumes, maintaining system reliability, and ensuring cost-efficiency at distributed locations. Dell PowerVault ME5 addresses these challenges by offering a flexible, high-performance storage solution designed for edge environments. With its simplicity, scalability, and data protection, PowerVault ME5 empowers IT leaders to unlock the full operational potential of edge computing.

Dell PowerVault



Simple

PowerVault ME5 simplifies your operations with an intuitive interface and effortless management, making data storage and administration easier than ever. Its straightforward design eliminates complexity, freeing up time and resources so you can focus on achieving your business goals without disruptions.

Fast

Designed for 99.999% availability, PowerVault ME5 delivers fast, efficient, and dependable performance, accelerating data access and optimizing storage to reduce costs. Its reliable design safeguards your data while simplifying management, so you can focus on growth with confidence.

Affordable

PowerVault ME5 offers high-performance storage with a low acquisition cost, cost-effective TCO, and a flexible pay-as-you-grow model. It empowers businesses to scale seamlessly, optimize budgets, and focus on success without compromise.

POWERVAULT ME5 AT THE EDGE: A PERFECT FIT

Designed for edge environments, PowerVault ME5 delivers exceptional performance and bandwidth in a compact, easily managed solution. It has the ability to support diverse industry applications and operations such as retail, energy, digital cities, gaming, and telecommunications. With scalability and affordability at its core, PowerVault ME5 empowers businesses to excel at the edge.

EXAMPLES OF POWERVAULT AT THE EDGE OIL AND GAS EXPLORATION

Exploration ships operating in remote environments must process and store vast amounts of real-time data from seismic sensors and sonar equipment. Existing storage setups often struggle with performance, making it hard to deliver timely insights. These systems can also be difficult to manage mid-expedition, adding operational strain.

Solution

PowerVault ME5 provides unmatched performance and bandwidth, ensuring seamless real-time data processing. Its compact design fits within the physical constraints of a ship, while its intuitive management interface minimizes complexity, even in remote or resource-limited scenarios. Unlike traditional systems, PowerVault ME5 also offers robust data protection features, safeguarding critical findings against loss or downtime during expeditions.

Outcome

- Immediate insights into seismic and sonar data, enabling faster, more confident decision-making
- Reliable performance in harsh environments reduces operational risks
- Simplified management reduces IT resource dependence onboard, cutting operational costs

CLOUD GAMING

Cloud gaming providers face immense challenges maintaining smooth gameplay experiences for users worldwide. High-latency storage infrastructure leads to lag, while traditional systems lack the scalability to handle spikes in player activity.

Solution

PowerVault ME5 is optimized for performance, delivering 800K IOPS, 14Gb/s read bandwidth, and 11Gb/s write bandwidth, ensuring swift access to game engines and player data at edge locations. Its compact design allows deployment in regional data centers close to users, minimizing latency. Unlike competing systems, PowerVault ME5 combines performance with simple management tools, ensuring quick setups and hassle-free maintenance. Affordable scalability allows providers to cost-effectively accommodate growing user bases and peak loads.

Outcome

- Delivers streamlined gaming performance, enhancing player satisfaction
- Reduced downtime and maintenance through easy, intuitive operations
- Cost-efficient scaling to address player surges without instituting major overhauls

RETAIL OPERATIONS

Retailers must contend with data processing challenges across multiple store locations, including managing realtime purchases, tracking inventory accurately, and analyzing customer behavior. Failure to process data swiftly can lead to stock shortages, poor service, and inefficient operations.

Solution

With exceptional performance metrics of up to 800K IOPS and impressive R/W throughput, PowerVault ME5 ensures real-time transaction processing and inventory updates without delay. Unlike traditional solutions, PowerVault ME5 offers an affordable, highly available and reliable system that's easy to scale as new store locations are added. Its simple interface and user-friendly tools make system management straightforward for IT teams, even in fast-paced retail environments.

Outcome

- Reduced checkout times, improving both transaction speed and customer satisfaction.
- Increased inventory accuracy, minimizing wasted stock or missed sales opportunities.
- Scalable setup for growing retail networks, ensuring consistency without high costs.

SUMMARY

PowerVault ME5 combines outstanding performance with up to 800K IOPS with significant R/W throughput capabilities, making it ideal for edge computing. Its compact design and intuitive management simplify deployment and operations. Whether optimizing inventory in retail, supporting real-time data processing in oil and gas exploration, or delivering seamless experiences in cloud gaming, PowerVault ME5 delivers the scalability, reliability, and affordability needed to thrive at the edge.

Enhance your edge performance, availability and reliability today.

Contact a Dell Technologies expert today to discuss your specific needs and build a tailored edge solution for your organization.



Learn more about Dell PowerVault Storage



