

Dell PowerFlex

A new era of efficiency, resilience, and intelligent scale for the software-defined data center.

Customer Benefits

Adaptability - Evolved

- Flexible deployment for diverse workload requirements.
- Scales compute and storage independently for optimal resource management.
- Deploy on any combination of hybrid, public cloud, or on-premises.

Efficiency - Redefined

- Leverages advanced erasure coding to achieve up to **80% storage efficiency**¹.
- Reduces the physical storage footprint **by over 50%**².
- Automates workflows, simplifying storage management.

Trust - Reinforced

- Built for enterprise operations with **up to 10x9s data availability**³.
- The industry's **most resilient software-defined block storage**⁵.
- Ensures high security through built-in encryption and governance.

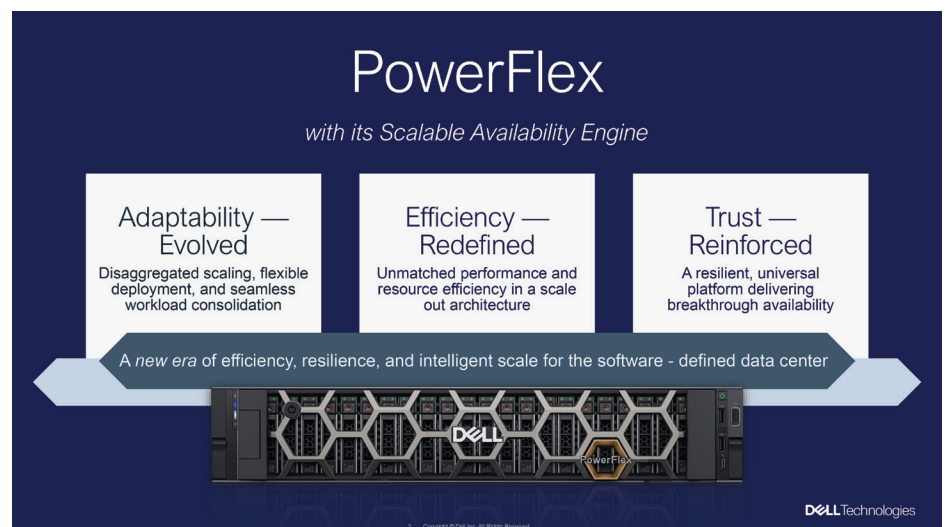
Industry Trends and Challenges

Large enterprises are under pressure to manage massive volumes of block data spread across hybrid and multi-cloud environments. Traditional storage architecture often cannot keep pace, leading to silos, under-utilized resources, and rising costs that make it harder to deliver at scale. Block sprawl not only creates inefficiency but also increases operational risk, slows innovation, and erodes the ability to guarantee performance and availability.

At enterprise scale, the stakes are high. Outages or service disruptions can cascade across applications, disrupt critical services, and impact both revenue and reputation. At the same time, IT teams face growing demands to simplify operations, maximize efficiency, and scale seamlessly without inflating budgets, providing unified, resilient, and adaptive platforms that can grow with business needs.

Why Enterprises Choose PowerFlex

For years, PowerFlex has been the platform enterprises rely on to take control of block data sprawl and operate reliably at scale. Built as a software-defined storage solution, it brings performance, resiliency, scalability, and efficiency together in ways traditional architectures cannot. Today, it underpins critical operations for some of the world's largest enterprises, helping them consolidate workloads, eliminate silos, and reduce complexity across on-premises and multi-cloud environments.



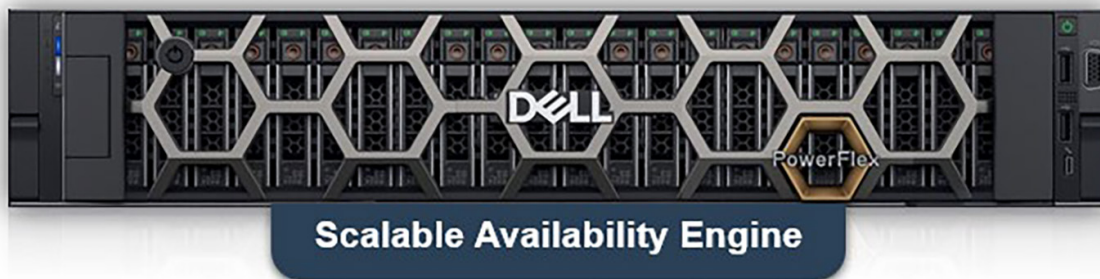
The PowerFlex advantage:

- **Scale without waste:** Grow storage and compute resources in lockstep with business demand, avoiding over-provisioning and lowering total cost of ownership.
- **Deliver high performance:** Maintain predictable, consistent application as data scales into the petabytes. Workloads continue to run reliably without degradation, ensuring SLAs are met, and customer experiences remain seamless.
- **Reduce operating expenses:** Automate routine management and streamline operations, cutting administrative overhead and freeing IT teams to focus on strategic initiatives.
- **Lower risk in hybrid environments:** Gain consistent visibility and control across on-premises, private, and public clouds, improving governance and reducing compliance exposure.
- **Increase return on IT investment:** Optimize resource utilization and minimize waste, ensuring infrastructure investments deliver measurable business impact.

With the introduction of the **Scalable Availability Engine (SAE)**, PowerFlex strengthens this foundation even further, delivering new levels of scale, resiliency, and efficiency for enterprise block storage.

Strengthening the Advantage with its Scalable Availability Engine

The Scalable Availability Engine (SAE) is a next-generation storage architecture that removes the long-standing tradeoffs between scale, performance, efficiency, and availability. Its design combines distributed erasure coding, advanced metadata management, and new distributed caching services to create a foundation that is both highly resilient and highly efficient. For enterprises, this means predictable operations, less overhead, and the ability to scale infrastructure without compromise.



Improved Storage Efficiency

SAE achieves up to 80% storage efficiency¹ and reduces physical footprint by more than 50%². This translates directly into lower infrastructure costs, less demand on power and cooling, and better use of existing resources. PowerFlex also disaggregates compute and storage and allows them to scale independently, giving IT the flexibility to meet changing business needs without wasteful provisioning of unneeded compute or storage. These efficiency gains are available on-premises and in the cloud through PowerFlex for public cloud, ensuring consistent operations and faster time to value across environments.

Enhanced Resiliency

Resiliency is at the core of SAE. PowerFlex delivers up to ten-nines availability³, ensuring that applications remain available even during node or hardware failures. The distributed block erasure coding and self-healing architecture maintain performance under stress, while built-in redundancy protects enterprise workloads. The result is fewer disruptions, stronger compliance posture, and reduced business risk. With this level of reliability, enterprises can confidently run their most demanding workloads on PowerFlex, knowing they will meet SLAs and regulatory expectations.

Consolidation at Enterprise Scale

Efficiency, resiliency and performance together create the conditions for true consolidation. With SAE, enterprises can run traditional databases, analytics platforms, and cloud-native applications on a single platform. This eliminates siloed infrastructure, reduces vendor sprawl, and simplifies governance. PowerFlex's adaptable software-first design supports a wide range of environments—bare metal, hypervisors, Kubernetes, and block workloads—on common infrastructure.

Consolidation is further strengthened by automation. Intelligent frameworks streamline deployments, simplify DevOps workflows, and reduce routine administrative tasks. IT teams can move faster, operate with consistency across environments, and redirect more time to strategic initiatives. For executives, consolidation is not only about lowering costs but also about increasing agility and positioning the business for long-term competitiveness.

Trusted at the largest scale

PowerFlex with its Scalable Availability Engine is built for enterprises operating on the largest scale. It delivers the efficiency, resiliency, and consolidation required to support massive deployments, while simplifying operations and ensuring availability without compromise. For IT leaders, it provides a proven way to manage relentless data growth, reduce infrastructure costs, and lower risk while preparing for the future.

PowerFlex is trusted by the best: Powering three of Americas top five largest banks - trusted with trillions in assets⁴. These banks depend on PowerFlex to scale seamlessly, operate without disruption, and deliver measurable business impact.

If your organization is ready to solve storage challenges at enterprise scale, connect with your Dell Technologies representative to explore what PowerFlex can deliver, or visit the [PowerFlex](#) page to learn more.

¹ Based on Dell internal testing, using 11 node PowerFlex 5.0 cluster versus previous generation PowerFlex software. May, 2025

² Effective storage capacity savings using erasure coding compared to mirroring in PowerFlex 4.x and earlier. Comparison made using identical node capacity of 154TB. To obtain an effective capacity of 2.54PB, PowerFlex 5.0 (8+2 EC) requires 11 nodes

³ Based on Dell internal analysis. May, 2025

⁴ Based on Dell internal analysis. September, 2025

⁵ Based on Dell analysis of software-defined block storage systems and the external enterprise storage market, August 2025



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