

## Dell EMC PowerFlex Software-Defined Infrastructure for Modern Datacenters

Flexibility Unleashed

### PowerFlex Business Value Outcomes

**321%**

5-year ROI\*

**47%**

Reduced total cost of  
operations\*

**70%**

More efficient IT Staff\*

*“PowerFlex provides us the stability, scalability, resiliency, and performance that our leading-edge applications require.”*

**BURAK HOBAN,**  
PRINCIPAL PLATFORM  
ARCHITECT, IAG

Information Technology is central to the functioning of today’s business, enabling critical competitive advantages. IT organizations must deliver complex services at an unprecedented pace – and to cope with these new workload demands, many are looking to modernize their datacenters.

Yet, IT organizations often struggle with inflexible, outdated, and siloed legacy infrastructure. In order to modernize effectively, organizations need a flexible infrastructure platform that delivers stringent SLAs while simplifying operations and boosting agility, for both traditional and cloud-native workloads. As companies modernize, they search for a way to bring all workloads under a single operational model and become more agile.

### A Unified, Modern platform

Software-defined approaches provide compelling choices to deliver this organizational agility. They combine industry-standard hardware with software to pool and manage resources. When selecting a software-defined platform there are some critical aspects to consider:

- **It must deliver stringent SLAs predictably**, and do so at scale. It also must be able to offer enterprise reliability, security, and critical data services.
- **The platform must offer extensive flexibility** by supporting broad architectural choices, workload objectives and scaling needs.
- **It must enhance simplicity and agility** of the environment by empowering administrators to automate and orchestrate infrastructure workflows.

### PowerFlex: A New Breed of Software-Defined Infrastructure

**Dell EMC PowerFlex meets all of these key IT objectives**, enabling organizations to harness the power of software and embrace change while achieving consistently predictable outcomes for mission-critical workloads. PowerFlex is a modern foundation that delivers extreme flexibility, massive performance and linear scalability while simplifying complete infrastructure management. It’s the ideal foundation for organizations to modernize their mission-critical applications, consolidate heterogeneous workloads and build agile private and hybrid clouds.

| Deliver Stringent SLAs Effortlessly  | Embrace Change  | Deliver Predictability   |
|--|---|--|
| PowerFlex is designed for mission-critical, SLA-sensitive workloads.   | PowerFlex enables customers to respond quickly and seamlessly to changing business needs.   | PowerFlex is designed to deliver predictable outcomes for mission-critical deployments.  |
| It supercharges these demanding workloads by delivering extreme performance, massive scalability, and 99.9999% availability. | PowerFlex provides unprecedented architectural freedom to support heterogeneous workloads ranging from bare-metal and virtualized, to modern containerized. | It enables organizations to achieve consistent outcomes for their most demanding workloads, with extensive automation and a broad ecosystem of validated enterprise workloads. |

## Deliver Stringent SLAs Effortlessly

PowerFlex leverages software to unlock the full potential of rapid advances in industry-standard hardware and deliver extreme SLA outcomes. PowerFlex aggregates resources across a broad set of nodes, unlocking massive I/O and throughput performance while minimizing latency. Its self-balancing architecture eliminates any hotspots and ensures consistency and simplicity over time. You can scale the system while linearly scaling performance from as few as 4 nodes to 1000s of nodes, on-demand and non-disruptively. And with its self-healing architecture, PowerFlex is able to handle outages, upgrades and maintenance without downtime, resulting in 99.9999% availability. Additionally, PowerFlex is available in a broad range of resource configurations, allowing you to reach your performance objectives precisely with extensive CPU choices (Intel and AMD), GPU options, varied drive types including SAS, NVMe, and Intel Optane Memory, and a range of networking options that include 25GbE and 100GbE networking options.

## Embrace Change

PowerFlex delivers transformational agility that enables organizations to rapidly respond to changing business needs. PowerFlex offers flexibility to mix and match storage, compute and HCI nodes in a dynamic deployment, allowing you to scale storage and compute resources together or independently, one node at a time, and as your needs dictate. The platform can also support a broad range of operating environments simultaneously – bare metal operating systems, hypervisors, and container platforms – with a unified underlying infrastructure platform and management. With this, you can support heterogeneous workloads with varying requirements on a flexible shared infrastructure platform and modernize your application architectures on your schedule.

PowerFlex infrastructure can be rapidly reconfigured as needed to meet changing workload requirements quickly and effortlessly. It offers a choice of consumption options built on the innovations within Dell's latest generation of PowerEdge servers. PowerFlex rack is designed to simplify deployment and accelerate time-to-value. With PowerFlex appliance, customers can start small and scale as their needs grow. PowerFlex offers full-stack IT Operations Management (ITOM) and Life Cycle Management (LCM) with PowerFlex Manager. And to fully embrace change while managing cost, you can implement PowerFlex by choosing an OPEX consumption model from Dell Technologies' APEX Custom solutions: APEX Flex on Demand or APEX Datacenter Utility options.

## Deliver Predictable Outcomes

PowerFlex is designed from the ground up to deliver consistent predictable outcomes at large scales for your most-demanding mission-critical environments. It is optimized for a wide range of validated workload solutions ranging from traditional relational databases and modern cloud-native NoSQL databases to throughput-intensive analytics workloads.



PowerFlex offers a large ecosystem of cloud automation and container management platforms. It provides extensive automation capabilities with PowerFlex Manager REST APIs and custom Ansible modules to integrate with your infrastructure, application, and DevOps workflows. PowerFlex Manager enables automated deployments and expansions with minimal hands-on time for the IT team, letting them focus on other strategic initiatives. Advanced capabilities like native replication, compression, and integrated encryption, and FIPs-140-2 compliance simplify data management and protection, and provide security compliance. When combined with VMware Site Recovery Manager (SRM), PowerFlex offers compelling disaster recovery & business continuity. Native CloudIQ support simplifies infrastructure management at large scales, while integration with AppSync provides Copy Data Management and application data protection.

**PowerFlex delivers exceptional SLA outcomes while enabling you to embrace change and deliver predictability across a broad range of mission-critical workload deployments. PowerFlex supercharges your modern datacenter so your IT is the enabler and the cornerstone of your business innovation.**



Learn more about Dell EMC  
PowerFlex solutions



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