## Dell PowerFlex

**SOLUTION BRIEF** 

## Dell PowerFlex for AWS

The world's most scalable cloud block storage<sup>1</sup>

#### **SIMPLICITY**

- Automated deployment: Deploy and configure block storage on AWS with simplicity and ease
- Streamlined management: Utilize consistent and familiar tools to manage storage across multicloud environments
- Efficient consolidation: Unify disparate cloud resources and workloads through a consistent multicloud storage experience

#### **AGILITY**

- Extreme versatility: Optimize a variety of workloads such as databases, analytics, Dev/Test, virtualization and containers
- Seamless data mobility: Move data efficiently between multicloud environments to take advantage of a variety of AWS services
- Linear scalability: Accommodate demanding and unpredictable workloads with high performance and low latency

#### CONTROL

- Advanced data services: Meet SLAs with enterprise-class features such as thin provisioning, snapshots and backup/ restore
- Unparalleled resiliency: Efficiently place data across multiple availability zones without unnecessary replication or data copies
- Continuous security: Accelerate zero trust adoption with role-based access control, single sign-on, encryption and federated identity

#### Challenges with mission critical applications in the public cloud

Organizations that select public cloud deployments as part of their multicloud strategy seek to increase their agility, accelerate application deployment time and improve overall time-to-value. However, certain mission critical workloads have not been considered viable candidates for running in the public cloud due to performance, scale and resiliency limitations. Add to that inconsistent throughout, capacity charges associated with meeting application requirements, and migrating workloads – and extending into the public cloud becomes even more challenging. Additionally, its often difficult to monitor performance and capacity utilization across public cloud-based storage resources.

#### **Enterprise-class block storage for AWS**

Dell PowerFlex for AWS enables you to run diverse workloads in the public cloud without these limitations and risks. Flexible deployment options and enterprise-grade resiliency offers a simplified public cloud experience powered by innovative storage solutions from Dell Technologies that the industry has come to know and trust.

### Designed for 99.9999% availability<sup>2</sup>

With Dell PowerFlex for AWS, you get the best of both worlds with Dell's enterprise-class storage performance, scalability and resiliency combined with the economics, compute and agility provided by the public cloud.

#### **Extreme performance and scalability**

The scale-out software architecture for Dell APEX Block Storage for AWS enables exceptionally high performance by aggregating storage across multiple instances in a cluster. This allows you to independently scale compute up to 2048 instances or storage up to 512 instances within a single cluster.

In fact, Dell PowerFlex for AWS surpasses the limits of native cloud-based storage volumes while delivering extremely large IOPs with low latency allowing you to run a wide range of block-based workloads – even mission critical use cases that require high performance.

Dell PowerFlex for AWS delivers over 100x better performance than native cloud block storage<sup>3</sup>

#### Simpli ied deployment, management and mobility

Dell PowerFlex for AWS can be deployed utilizing Elastic Block Storage (EBS) volumes for most workloads or on EC2 Instance Store for more performance-intensive use cases.

Plus, data mobility is efficient and seamless between on-premises and AWS environments, as well as between different regions in the public cloud. By leveraging asynchronous replication and snapshots for data protection and mobility, this offer provides fast and efficient data transfer, along with backup copies for disaster recovery, without lock-in.

## Up to 87% cost savings compared to native public cloud storage4

#### Multi-AZ and enterprise data services

Dell PowerFlex for AWS has the unique ability to spread data across multiple available zones, ensuring data access without requiring extra copies of data or replication across AZs. By using the native fault sets feature, data is distributed across three or more availability zones to offer additional protection against AZ failure.

Enterprise-class features such as thin provisioning, snapshots, replication, volume migration and backup/restore are also available with Dell PowerFlex for AWS. With its extreme performance and scalability -- and proven enterprise data services -- this solution is well suited to support the most challenging workloads including large databases, analytics, Dev/Test, virtualization and containers.

#### **Enterprise-level support with Dell ProSupport Infrastructure Suite**

Dell ProSupport Infrastructure Suite delivers enterprise-level support for managing storage solutions from the datacenter, to the edge, to the cloud. ProSupport provides comprehensive 24x7 proactive support and ProSupport Plus delivers mission critical support with priority access to remote senior support engineers and an assigned Service Account Manager. Maximize workload availability and increase IT staff productivity with ProSupport Infrastructure Suite.

#### **Summary**

With Dell PowerFlex for AWS, you can modernize and streamline your block storage experience in the public cloud, quickly adapt to unexpected changes in workload requirements and maintain peace of mind with reliable enterprise-class data services. With all the proven capabilities of enterprise on-premises block storage now available in the public cloud, you can run any block-based workload in the cloud with confidence.

# Dell PowerFlex for AWS is the industry's most resilient and flexible cloud storage offering<sup>1</sup>



<u>Learn more</u> about Dell PowerFlex for AWS



Contact a Dell Technologies Expert

<sup>1</sup>Based on Dell analysis of storage software deployable on AWS, Azure, and Google Cloud, May 2023. CLM-007736 and CLM-007738. <sup>2</sup>Performance claims based on internal Dell testing, October 2023.

<sup>3</sup> Based on Dell analysis comparing maximum IOPS published results, September 2023. APEX Block Storage for AWS maximum performance using a single AWS EC2 instance store (i3en.12xlarge), NVME attached storage, running 4KB IO size, 100% random read per SDS and assumes public cloud volumes consolidate performance of entire storage pool in a single volume. Actual results may vary.

<sup>4</sup>Based on a Silverton Consulting white paper, sponsored by Dell Technologies, "Conceptual TCO: Dell APEX Block Storage for Public Cloud," October 2023. Systems were configured to support IOPS performance of 7,740 KIOPS. The Dell solution assumes 4:1 thin provisioning vs thick provisioning for AWS EBS. Actual costs will vary depending on the thing provisioning factor used, region, data change/ snapshot rates, capacity, type of storage and instances used, and other factors.

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