Multi-Cloud Data Services, enabled by Faction

Best of breed storage directly connected to the public clouds of your choice

Customer Benefits

- High-speed, low latency connection to the public cloud
- Durable, persistent cloud attached storage with up to 6-9s availability
- Fast and simple multi-cloud access
- Eliminate cloud vendor lock-in with data independent of the cloud
- Scale up on demand without adding complexity
- Fully managed service – networking and storage
- Object storage archive with multi-cloud access
- Efficiently run compute-intensive workloads in Azure and Oracle Cloud
- No outbound data traffic costs with Azure and Oracle Cloud
- No secondary data center or infrastructure to manage
- 3rd party proven, scalable multi-cloud deployments. ESG Paper: Solving Big Data Challenges with Multi-Cloud Data Services for Dell EMC PowerScale
- Predictable, subscription-based consumption model
- 24x7 support

Business Challenges

Organizations today are increasingly leveraging public clouds as part of their IT strategy for agility, competitive advantage and reduced TCO. However, public cloud can lead to challenges such as inability to scale storage capacity and performance effectively, high operating costs, vendor lock-in, and data compliance and control issues.

Dell Technologies offers a solution that addresses these challenges by delivering durable, persistent cloud attached storage that is scalable, highly available, and has a broad selection of service levels to optimize costs and keep businesses in control of their data.

Solution Overview

Multi-Cloud Data Services enabled by Faction, allows users to connect their file, block and object storage – Dell EMC Unity, PowerStore, PowerMax, PowerScale and ECS - consumed as a service, directly to public cloud(s) including VMware Cloud on Amazon Web Services (AWS), AWS, Microsoft Azure, Google Cloud Platform and Oracle cloud. This is done through a high-speed, low latency connection from Dell EMC storage at the Faction service location to the cloud or clouds of choice. Organizations gain an on demand, cloud consumption model for compute workloads and storage, combined with high performance, up to 6-9s availability, and scalability of Dell EMC storage. This solution is ideal for securely moving or deploying demanding applications to the public cloud for disaster recovery, analytics, test/dev and more.

Multi-Cloud Agility

Hyperscale cloud vendors are continually innovating and developing new services and capabilities which makes multi-cloud access an undeniable competitive advantage. However, there can be significant time and complexity associated with moving data between clouds. Multi-Cloud Data Services offers agile, multi-cloud support allowing users to easily and quickly leverage multiple clouds and switch clouds based on applications’ needs to maximize business outcomes.

Organizations can avoid cloud vendor lock-in by keeping data independent of the cloud, so they do not have to worry about high egress charges, migration risk, or effort required to move data. Extending the data center to the cloud using enterprise-class storage empowers users to innovate in the cloud and easily scale cloud environments to hundreds of thousands of IOPS to support high-performance workloads, while reducing risk and maintaining complete control of their data.
Object Storage as Long-Term Archive and Lower Cost Tier for Multi-cloud

The primary use case object storage in Multi-Cloud Data Services implemented with Dell EMC ECS is for long-term retention/archive of data originated on Dell EMC PowerMax, PowerScale and PowerProtect Data Domain storage. Each of the supported storage arrays has its own connectivity to ECS, with its own feature set – Cloud Mobility for PowerMax, Cloud Pools for PowerScale, and CloudTier for PowerProtect Data Domain. Multi-Cloud Data Services object storage can be an offsite archive for on-premises storage or a cheaper tier for arrays that make capacity available to multiple public clouds, i.e. multi-cloud. A secondary use case is that ECS can provide S3 protocol-connected storage for cloud native applications running in the hyperscalers. In all cases, object storage at MCDS has no egress charges, because the data is not at a hyperscaler.

Microsoft Azure for Compute-intensive Workloads

Multi-Cloud Data Services for Dell EMC PowerScale with Microsoft Azure provides a higher bandwidth (up to 200Gbps) and lower latency (as low as 1.2ms) connection to the cloud using Azure ExpressRoute Local. This solution allows for the right combination of storage and compute in the cloud for data intensive, high I/O throughput workloads that require high compute performance on a periodic and/or unpredictable basis. With no outbound data traffic costs, this solution enables workloads that require a lot of temporary writes to storage to cost-effectively take advantage of Azure’s application services. This is ideal for industries such as Life Sciences and Media and Entertainment, giving them the best of both worlds – reliable, cost-effective Dell EMC Storage performance at scale and the scalable compute performance of Microsoft Azure.

Why Dell EMC Storage

With Multi-Cloud Data Services, you gain the advantages of Dell EMC storage including high-availability for business continuity, data resiliency, and flexible scalability coupled with the economic benefits of a public cloud-based service. Because Dell EMC storage is persistent, organizations will not lose data if a node in the cloud is deleted. Plus, native replication capabilities allow businesses to easily move their data from on-premises to workloads in the cloud.

This solution is supported with Dell PowerStore smart adaptable storage for next-gen workloads, Dell EMC Unity XT for simple and efficient unified block and file storage, Dell EMC PowerMax built with end-to-end NVMe for massive scale and performance, Dell EMC PowerScale scale-out NAS for demanding file workloads, including support for Superna Eyeglass Suite for Disaster and Cyber Recovery for Isilon / PowerScale and Dell EMC ECS object storage for archive and big data analytics applications.

Availability and Services

Dell Technologies Cloud Storage for Multi-Cloud is available in the US, UK, EMEA and Australia for the following public cloud providers: VMware Cloud on AWS, AWS, Google Cloud, Oracle Cloud and Microsoft Azure.