

RESEARCH NOTE

DELL APEX FILE STORAGE FOR MICROSOFT AZURE

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CONTEXT

Dell <u>recently introduced</u> its new APEX File Storage for Microsoft Azure, designed to enhance businesses' multi-cloud capabilities. The new solution integrates Dell PowerScale OneFS, its high-performance storage system, into the Azure cloud, allowing customers to manage and consolidate data efficiently, reduce costs, and improve data security and protection. It also utilizes Azure's Al tools to provide quicker insights.

Let's take a deeper look at the offering.

APEX FILE STORAGE FOR AZURE

Dell APEX File Storage for Microsoft Azure is a cloud storage solution that extends the capabilities of Dell's PowerScale OneFS file storage system into the Azure cloud environment. It's designed to provide a seamless and efficient storage experience similar to on-premises solutions but with the added benefits and scalability of the cloud.

Critical aspects of APEX File Storage for Azure include:

- Integration with PowerScale OneFS: At the core of APEX File Storage for Azure
 is Dell's PowerScale OneFS, a proven scale-out file storage technology that
 supports high-performance requirements. This integration allows users to
 leverage the robust features of OneFS, such as advanced data management
 and security, within the Azure cloud.
- 2. **High Performance and Scalability**: The system supports a scale-out architecture that can handle up to 18 nodes and store up to 5.6PiB in a single namespace, providing significant scalability and flexibility.
- Seamless Multi-cloud Experience: APEX File Storage for Azure offers a consistent user experience across different environments, whether onpremises or in the cloud. This is achieved through automated replication tools



- and advanced data services that do not require changes to the underlying storage architecture when moving data to the cloud.
- 4. **Enhanced Data Management**: Users can quickly transfer data from onpremises systems to the cloud using native replication features without needing to refactor the storage architecture. Once in the cloud, all enterprisegrade features of PowerScale OneFS are available.
- 5. **Improved Cost Efficiency and Data Protection**: The solution helps reduce storage costs while enhancing data protection and security measures. It leverages Azure's native cloud AI tools to provide faster insights, adding value to the stored data.
- 6. **Support and Customer Satisfaction**: Dell provides proactive support with a high customer satisfaction rate, offering expert assistance globally to address any issues, thereby minimizing disruptions and maintaining productivity.
- 7. **Designed for AI and Hybrid Cloud Use Cases**: APEX File Storage for Azure is particularly beneficial for AI workflows and hybrid cloud scenarios, supporting traditional IT workloads and cutting-edge GenAI applications with high performance at scale.

TECHNICAL CAPABILITIES

The technical capabilities of Dell APEX File Storage for Microsoft Azure are designed to cater to high-demand enterprise environments where performance, scalability, and data management are critical:

1. Integration with PowerScale OneFS

- **Proven File System**: PowerScale OneFS is a well-established file storage system known for its high performance and reliability, which forms the backbone of the APEX File Storage solution.
- **Enterprise-grade Features**: Users benefit from the same advanced features in the cloud as they do on-premises, including robust data protection, security, and management capabilities.

2. Performance and Scalability

- **Scale-Out Architecture**: The system can expand to up to 18 nodes, offering substantial scalability to handle growth in data volume and access demands seamlessly.
- **Large Namespace**: Supports a single namespace up to 5.6PiB, allowing organizations to manage massive datasets efficiently without fragmentation.



• **Enhanced Performance Metrics**: According to Dell, the solution provides 6x greater cluster performance than competitors like Azure NetApp Files.

3. Data Management and Security

- **Snapshots and Replication**: Offers up to 23x more snapshots per volume than competitors, enhancing data protection and recovery options.
- **High Cluster Resiliency**: Promises twice the cluster resiliency of similar solutions, ensuring greater uptime and reliability.
- **Robust Expansion Capabilities**: This feature offers easier and more robust options for cluster expansion, accommodating growing storage needs without significant downtime or complexity.

4. Multicloud Integration and Management

- **Consistent User Experience**: Provides a seamless experience across Azure and on-premises environments, simplifying the management of hybrid storage infrastructures.
- **Automated Replication Tools**: Facilitates data movement between onpremises and cloud environments without requiring significant changes to storage architecture, making it easier to adopt and integrate.

ANALYSIS

Dell APEX File Storage for Microsoft Azure is a step forward in Dell's approach to supporting workloads in the public cloud. However, Dell is introducing the new offering into a highly competitive market.

NetApp, for example, offers its Cloud Volumes ONTAP and Cloud Volumes Service for AWS, Google Cloud, and Azure. These solutions are known for efficient data management, protection features, and hybrid capabilities, directly competing with Dell's new offering.

Dell APEX File Storage for Microsoft Azure combines powerful technical capabilities in a package that promises to enhance how enterprises store, manage, and utilize their data in multi-cloud environments. Its emphasis on scalability, performance, and seamless integration makes it a compelling choice for organizations looking to leverage cloud advantages while maintaining robust data management and security standards.



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