

AWS Partner Network Storage Solutions: Primary Storage

Primary storage provides storage for high performance production workloads. AWS Partner Network (APN) Primary Storage Partners enhance the benefits of AWS primary storage by extending the functionality beyond AWS core capabilities to meet the varied needs of customers while still implementing AWS best practices, including security, economics, performance, and simplicity, to deliver a rich set of features.

Primary Storage Challenges

Performance is often a key consideration when choosing primary storage. Networked storage provides reliable latency but can be inflexible. Shared storage provides better economics through increased resource utilization but comes with the risk of resource contention. Moving applications and the workloads they support entirely into the Cloud is a mandate more companies are facing, and ensuring continued application performance, reduction in associated costs, and improved deployment flexibility are critical concerns.

- **Rigorous application performance requirements:** The need for acceptable performance is paramount, regardless of whether an application runs via on-premises infrastructure or in the cloud. Because system capacity and system performance are inexorably tied together, many times the only solution for improved performance is to increase capacity.
- **Large capital expense:** Physical IT resources are acquired, often on rigid refresh cycles; changes in application demand may result in the unexpected need for more storage, or in idle, underutilized systems.
- **Limited scalability and elasticity:** Adding or replacing hardware to account for data growth is costly and often results in data migration and risk for data unavailability, which can hamper productivity and lead to significant administrative overhead and associated IT expenses.
- **Appropriate levels of data durability:** Ensuring that stored data is durable - that it doesn't experience corruption, loss, and accidental or malicious overwrites, modifications, or deletions - renders end-to-end data protection critical for primary storage and can contribute to management complexity.



Storage Partner solutions complement and augment native services, and similarly present as the same three types of storage: block, file, and object.

AWS for Primary Storage

AWS provides a variety of native primary storage services, including Amazon Elastic Block Store (EBS), Amazon Elastic Compute Cloud (EC2) Instance Store, Amazon Elastic File Storage (EFS), and Amazon Simple Storage Service (S3). Storage Partner solutions complement and augment native services, and similarly present as the same three types of storage:

- **Block:** Storage commonly used for file systems or database applications, or any application that needs to manage raw storage.
- **File:** Storage typically presented through the use of either the NFS or SMB/CIFS protocols, but also can be handled through custom protocol drivers for extreme levels of performance and scalability.
- **Object:** Storage that provides an abstracted interface to data and is typically API driven. Its performance characteristics cater to parallelism and aggregate throughput, but it is not a replacement for block or file storage.

AWS Storage Competency Consulting Partners

AWS Storage Competency Consulting Partners possess deep domain and consulting expertise to help enterprises adopt and deploy complex storage solutions in one or more core storage categories, including Primary Storage. These APN partners have demonstrated success fully implementing storage solutions and projects on AWS, and are familiar with existing AWS Storage Competency Technology Partner solutions on AWS. For more information on AWS Storage Competency Consulting Partners, please visit https://aws.amazon.com/backup-recovery/partner-solutions/#Consulting_Partners

Benefits of AWS Storage Competency Partners for Primary Storage

APN storage partner solutions rely on underlying AWS service components, which have pay-as-you-go pricing models. Customers are benefiting from primary storage solutions built on AWS in the following ways:



Run production workloads on the cloud: Have same trusted products that you run on-premises with identical feature sets, while capitalizing on all the inherent advantages that AWS provides, including high availability.



Lower CapEx investments: Storage becomes an operating expense, and reduces need for local infrastructure, investments and time-consuming optimizations. Ease of scalability reduces the need to over-provision storage up front, eliminate recurring upgrade cycles and the costs of under-utilized assets.



Simplified file distribution: Use AWS as a distribution channel for file assets, reducing storage sprawl and providing on-demand resources to distributed teams.



Data security: Partner solutions offer features, including security elements that enable customers to achieve Health Insurance Portability and Accountability (HIPAA) eligibility and other compliance requirements, quickly.



Get more value from your data: Running workloads with AWS primary storage solutions puts those workloads in proximity to other AWS services – compute, big data, etc. – so you can get more value out of your data.