PURESTORAGE®

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Pure Storage FlashBlade and AWS Outposts

Enhance your hybrid-cloud infrastructure with unified fast file and object (UFFO) storage.

Microservice and container architectures along with object storage usage have heavily influenced new ways in which applications are created and deployed, often managed with on-premises, cloud-native operations. These applications require a multi-protocol, high-performance storage foundation that can service a wide variety of applications and data services

Pure FlashBlade® for AWS Outposts

Pure FlashBlade for AWS Outposts is a hybrid-cloud infrastructure solution that extends the capabilities of AWS Outpost racks using multi-protocol connections to support common file and object storage, such as NFS protocols and REST APIs (compatible with Amazon S3 API operations). It brings the power of unified fast file and object (UFFO) storage capabilities to deliver cloud-adjacent storage at scale to meet modern data and application needs.

FlashBlade provides a built-in high-performance network, extensive storage capabilities, data processing via flash, and scalable packaging. It offers the ability to deliver real-time insights from unstructured data, break down silos, and manage storage on a single platform. Connected to AWS Outposts, FlashBlade provides:

- High-speed data availability for analytics and AI workflows

- Storage for billions of files and objects

- Rapid Restore support for backup, disaster recovery, and ransomware mitigation

- Management of significant amounts of user- and machine-generated data

Simplicity

- Achieve cloud scalability and operational simplicity.

- Quickly connect FlashBlade to an AWS Outpost rack.

- Stay up-to-date with an Evergreen™ architecture and non-disruptive upgrades.

Performance

- Deliver multidimensional performance and support.

- Use massive parallelism to Increase performance across all aspects of computational storage.

Consolidation

- Deliver a cloud-like experience with on-premises infrastructure and UFFO storage designed to break down silos and consolidate workloads.
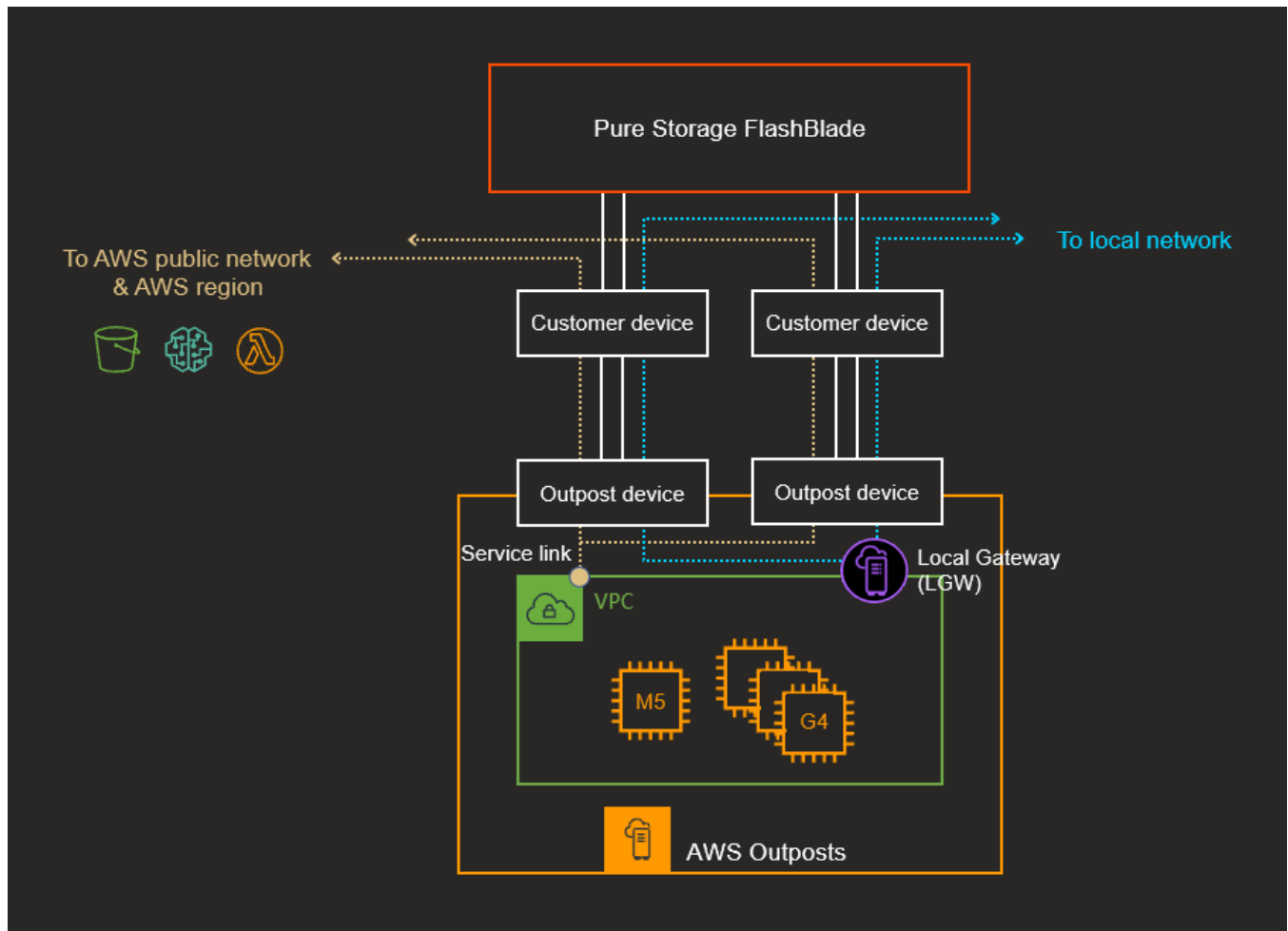
Figure 1. Single AWS Outpost deployment with FlashBlade architecture

Example Use Cases

Modern Analytics Capabilities Enable Artificial Intelligence

Together, FlashBlade and AWS Outposts provide the foundation for scalable hybrid storage on the edge to help you optimize your IT strategy and achieve a competitive advantage. For example, it leverages low latency and high throughput to power graphics processing units (GPUs) and load images to for machine-learning inference. FlashBlade offers UFFO storage across the various components of an analytics pipeline concurrently, providing multi-dimensional access to a variety of datasets, sizes, and types.

FlashBlade Rapid Restore™ Recovers Data Quickly

FlashBlade Rapid Restore provides high-performance, high-throughput capability to restore data from a data snapshot to quickly access and recover data. FlashBlade adds comprehensive, built-in data protection capability to AWS Outposts. You can direct third-party managed service protections to FlashBlade to enable fast data recovery. You can also archive data on Amazon S3 outside of FlashBlade, where it sits separately for quick access and replacement.

Simplicity, Performance, and Consolidation

AWS Outposts is a fully managed service that extends AWS infrastructure and services, APIs, and tools to virtually any data center or on-premises facility. For workloads that require real-time, on-premises, low-latency processing—or those that have on-premises data-retention requirements—FlashBlade for AWS Outposts provides fast-object access in a similar way to fast files. For instance, you can:

- Reduce networking complexity and costly network switches/ports.

- Handle a broad range of file sizes and types to support workload consolidation; add more blade servers to FlashBlade for easily scalability.

- Extend AWS Outposts on-premises data-integrity capabilities with flash object storage for fast analytics processing.

- Simultaneously leverage local data-response needs and cloud capabilities, including AI/ML frameworks.

- Deliver replication, speed, and performance with Amazon S3 protocol connections to AWS Outposts racks, enabling cloud-optimized efficiency for data and data services.

- Disaggregate compute and storage to eliminate the challenges of direct-attached storage (DAS).

- Reduce resources, from physical infrastructure to required teams, by consolidating file and object storage onto the same platform.

Additional Resources

- Learn more about FlashBlade.

- Take advantage of a free FlashBlade Test Drive.

- Learn more about Pure's participation as an AWS Partner Network (APN) Partner.