SOLUTION BRIEF

Maximize Data Impact with Splunk SmartStore on Pure Storage

Deliver a cloud-like experience for on-prem Splunk SmartStore.

The capability to quickly search and act on all current and historical machine data can create a strong competitive edge to your organization—for security, IT operations, customer experience, and application performance. But the volume of data being indexed and searched makes observability platforms like Splunk a challenge to scale. To help customers better support larger data sets, Splunk released SmartStore, which disaggregates compute from storage and brings simplicity to IT operations. Pure Storage® complements and extends the powerful capabilities of on-prem SmartStore with a cloud-like experience by offering simplicity, agility, and resilience at scale. By using FlashBlade//S®, the platform for modern analytics from Pure Storage, you can uncomplicate your Splunk deployment while preserving infrastructure flexibility and control over your data.

Limitations of Distributed Scale-out Models

Splunk delivers business value to customers via indexing, analysis, and visualization of streaming machine data. Traditional approaches to Splunk colocated storage and compute struggle when deployments grow to terabyte scale. Distributed architecture bloats compute and storage requirements, leading to high TCO; operational inefficiencies with too many hours spent on software updates, patches, and scaling hardware to support growth. It can also result in inconsistent search performance. This approach is impractical when responding to search requests that require information beyond the most recent data (which cannot be found in either warm or hot tiers)in areas like regulatory or compliance requirements, cybersecurity, and legal discovery.

SmartStore addresses these challenges by reducing costs, simplifying management, and offering greater resiliency. To maximize these advantages, customers need to implement a faster architecture to optimize search performance, as well as bring SmartStore capabilities to data on-prem.

Uncomplicate Splunk at Scale

Requires near-zero maintenance with an as-a-service cloud-like consumption model that seamlessly scales from TBs to PBs

Accelerate Time to Insight

Get all-flash performance for data operations and search in object—for all archived data

Optimize TCO

The warm remote tier only requires a single copy, reducing storage by 50%. Compression adds to this space savings.

Pure Storage Extends the Benefits of SmartStore

Pure Storage FlashBlade//S maximizes the benefits of a SmartStore implementation on prem while providing cloud-like simplicity. A disaggregated, all-flash scale-out storage system with native object support is ideal for high performance, enhanced simplicity, and seamless scalability as you grow your data footprint with Splunk SmartStore. You'll be able to eliminate the complexities of cluster management as you grow from TBs to PBs—all while managing an entire system from a single IP address. Storage performance and capacity can be improved in required increments on-demand and without requiring downtime. Evergreen™ enables your IT teams to achieve greater infrastructure agility on-premises by deploying data infrastructure solutions that keep evolving, stay always-leading, and never go obsolete with non-disruptive periodic hardware upgrades and all-inclusive software enhancements. Additionally, pay-as-you-go billing options provide you with the flexibility to scale up or down so that you tailor your storage to your business needs.
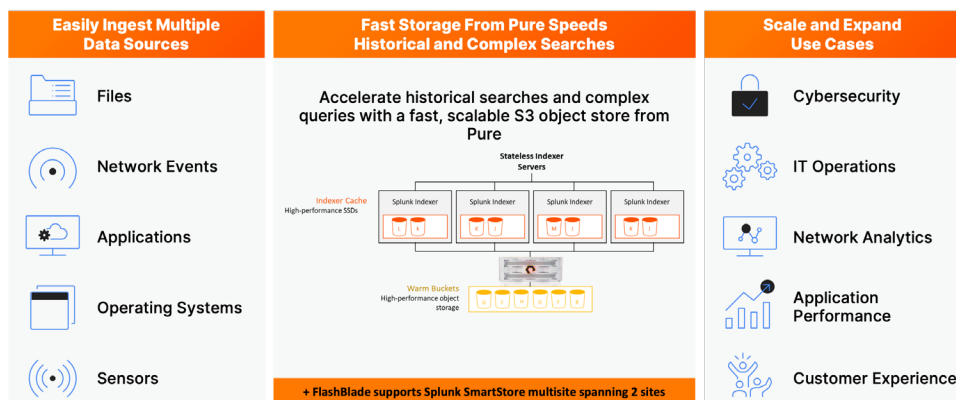

Figure 1. High performance object storage of Pure Storage FlashBlade extends the benefits of disaggregated architecture of Splunk SmartStore.

With Pure, you can confidently deploy a solution that meets the unique needs of your organization today and will scale into the future, without adding unwanted complexity. A Splunk SmartStore solution with Pure Storage FlashBlade//S also offers many additional benefits for both application users and IT teams.

Application users can accelerate warm remote search performance with linear scalability while reducing footprint, enabling them to store and analyze more data. The solution ensures high availability for Splunk SmartStore with multi-site support spanning two sites to extend the resiliency of the solution to include events, such as loss of indexers, indexer clusters, FlashBlade//S, network, or the entire site. Users can also meet data sovereignty requirements with cloud-optimized on-premises data storage.

IT teams can benefit from efficient independent scaling of compute and storage for superior TCO, faster recovery from indexer failure and fast data rebalancing, and deploying optimized infrastructure when and where you need it with Evergreen//One™.

Additional Resources

- Learn more about Splunk SmartStore on Pure FlashBlade.

- Learn about how Splunk on Pure Storage provides faster time to answers.

- Discover how to accelerate Splunk with Pure Storage all-flash storage systems.