

Modernizing Splunk Enterprise Storage with Cisco UCS & SwiftStack

Store twice the Splunk data at half the cost of legacy infrastructure



By helping organizations turn machine data into answers, Splunk is the unquestioned leader in IT operations and security management and offers a growing suite of business analytics tools. Machine data is one of the fastest-growing and most pervasive segments of big data. Splunk monitors and analyzes everything from customer clickstreams and transactions to network activity and call records to help enterprises make better operational and business decisions.

Splunk users want to expand platform usage to gain valuable insights, and to retain Splunk data longer to enable deep searches and meet compliance requirements. But historically, the cost and complexity of the storage infrastructure necessary to manage large volumes of machine data have presented challenges to IT.

Splunk has addressed these challenges through the *SmartStore* feature, which is available beginning in Splunk Enterprise 7.2. SmartStore is a data management model that separates compute from storage, delivering on-demand scalability of those resources and reducing infrastructure costs by 50-75%. Further, SmartStore's cache optimizations ensure search performance remains high for the majority of searches.

Why Cisco UCS & SwiftStack for Splunk Enterprise with SmartStore?

Splunk users

- Gain new business insights by expanding Splunk usage
- Enable deep searches and meet compliance standards by retaining Splunk data longer
- Achieve consistently high Splunk search performance

Do more with your data

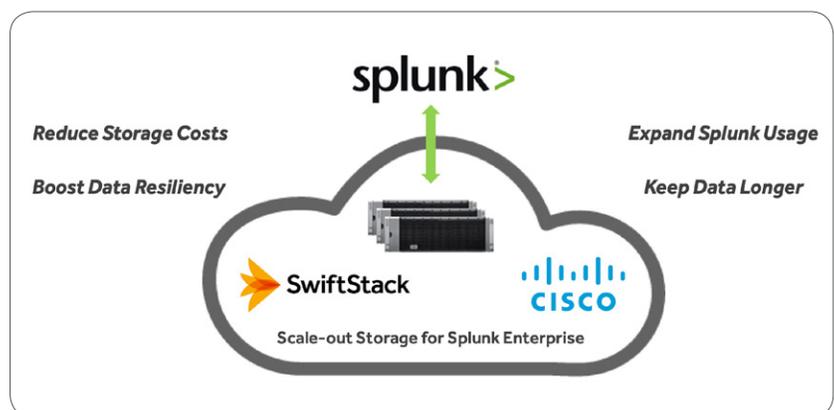
IT managers

- Ensure the highest levels of Splunk data durability
- Scale the storage modularly as the Splunk environment grows
- Leverage the storage platform for Splunk and other use cases

Splunk compatible solution

Store 2X the Splunk data at 1/2 the cost

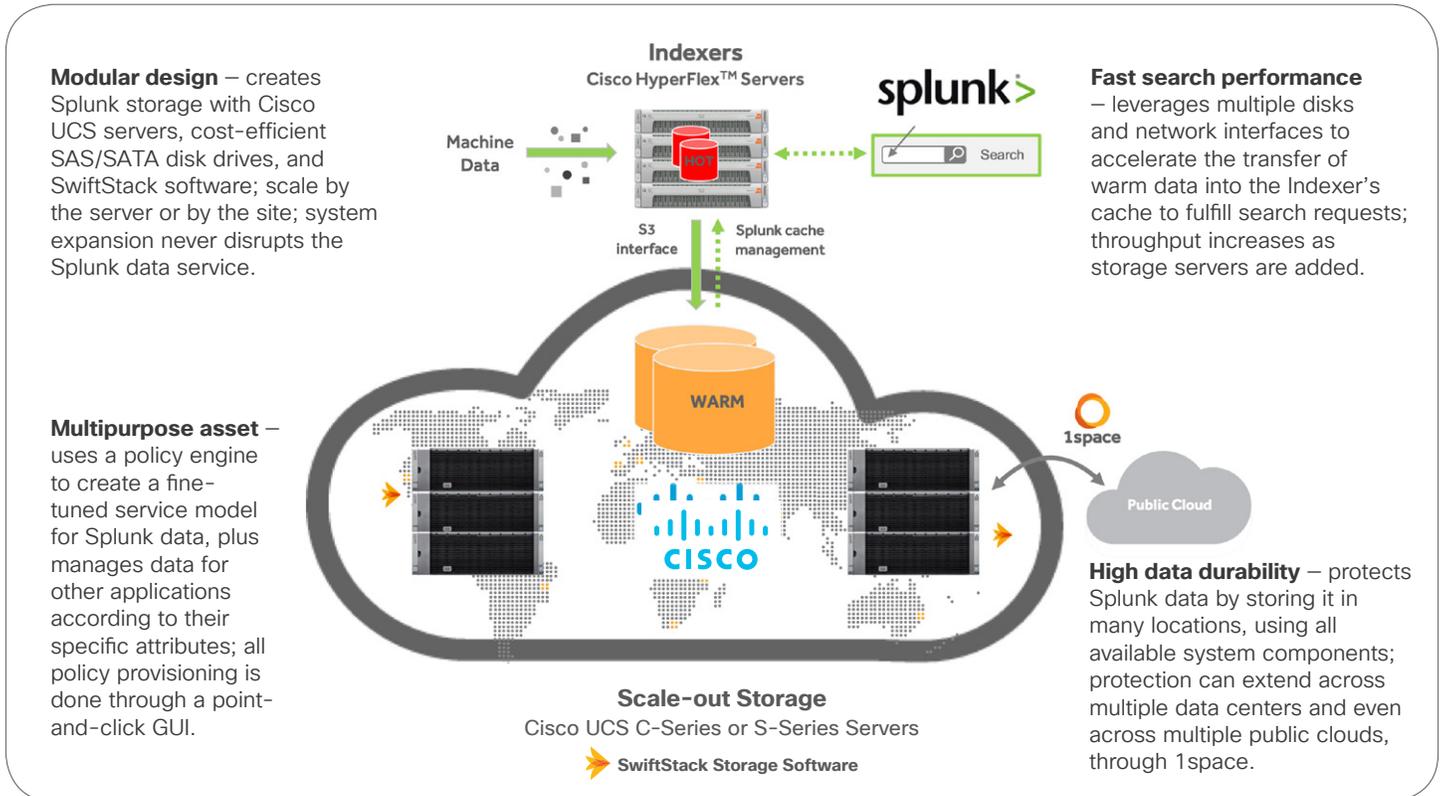
Cisco & SwiftStack offer scale-out storage for Splunk Enterprise with SmartStore



Cisco UCS® & SwiftStack storage interfaces with Splunk Enterprise through the S3 API, the de facto standard for cloud-native storage. The system holds Splunk warm data – inactive data that has been tiered off the Indexer's cache by SmartStore until it is needed to fulfill a search request. Flexible yet simple by design, Cisco UCS and SwiftStack storage can be configured to withstand multiple failure scenarios to maximize Splunk data durability levels.

Optimized for fast-growing Splunk environments

The Cisco UCS & SwiftStack storage architecture fits well in a Splunk Enterprise with SmartStore deployment, as it forms a scale-out storage tier for warm data that is independent of the Splunk Indexer compute nodes, which hold hot data. Depending on data retention requirements, over 90% of total Splunk data can reside on this warm tier. Cisco & SwiftStack’s “grow as you go” approach offers complete flexibility for Cisco UCS hardware models, number of sites in the deployment, and policy controls for the data sets. With Cisco UCS & SwiftStack, IT can right-size a Splunk storage configuration for cost efficiency, system resiliency, and performance.



Standard Splunk storage configuration	Large-scale Splunk storage configuration
Daily ingest rate = 500GB to 1TB Retention period = 90 days or more	Daily ingest rate = 1 to 2TB and higher Retention period = 90 days or more
<p>3x (or more) Cisco UCS C240 Storage Servers <i>Scale capacity and throughput by adding more C240s</i></p> <p>↑ scale-out</p> <p>SwiftStack Storage Software</p>	<p>3x (or more) Cisco UCS S3260 Storage Servers <i>Scale capacity and throughput by adding more S3260s</i></p> <p>↑ scale-out</p> <p>SwiftStack Storage Software</p>



For more information and next steps

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