



Solution Brief

NetApp Converged Infrastructure Solution for Splunk

Proven performance and flexibility for machine analytics

Key Benefits

Proven, affordable performance

- Increase search performance by up to an average of 118% compared to commodity servers with internal disks
- Speed data analysis from weeks to hours and generate reports 3x faster
- Leverage a hybrid architecture to optimize performance and capacity buckets for Splunk's hot, warm, and cold data tiers

Security and reliability with best-of-breed solution

- Get greater than 99.999% hardware availability backed by experience from more than 1 million deployments
- Enable media erasure and full disk encryption
- Improve reliability with a groundbreaking solution that leverages enterprise storage building blocks

Simplified deployment and access to data

- Scale compute and storage independently to better match application workloads
- Simplify deployment and accelerate time to value from months to weeks with a pretested NetApp Verified Architecture
- Easily install and administer your storage systems by using on-box, web-based, and powerful NetApp® SANtricity® System Manager software

The Challenge

An organization's data is a definitive source of intelligence, because it is a categorical record of activity and behavior, including user transactions, customer behavior, machine behavior, security threats, and fraudulent activity. Splunk is operational intelligence software that enables you to monitor, report, and analyze live streaming and historical machine-generated data. Splunk helps you distill, sift, and understand this machine data to improve service levels, reduce IT operational costs, mitigate security risks, enable compliance, and create new product and service offerings.

As the use of Splunk for operational intelligence grows, its operational integrity becomes even more critical. Splunk deserves a storage infrastructure that promotes optimal and consistent performance with minimal maintenance and expense.

The Solution

The NetApp Converged Infrastructure Solution for Splunk brings together the latest storage, networking, and server technologies in a pretested, prevalidated reference architecture to help you simplify deployment of Splunk environments. Accelerate your time to insight so you can drive rapid innovation and discover new ways to engage with your customers.

Composed of Cisco UCS C-Series servers, Cisco Nexus switches, and NetApp E2800 hybrid storage systems, this groundbreaking infrastructure delivers superior performance for faster decision making and improved business agility. NetApp E-Series storage systems provide better performance, data availability, scalability, and data protection for Splunk workloads compared to commodity servers with internal drives. Together, the solution's prevalidated architecture and modular scalability make it easy to deploy and scale as you grow.

Proven, Affordable Performance

Powered by the speed of NetApp E2800 hybrid flash storage systems, the NetApp Converged Infrastructure Solution for Splunk increases performance compared to commodity servers with internal storage, enabling you to search and analyze Splunk data in less than half the time.

Recent testing that closely simulated real-world Splunk search performance showed conclusively that operations have much to gain from the NetApp storage approach. Searching was significantly faster with NetApp versus commodity servers with internal storage, on average up to 118% faster. Very dense searching was up to 35% faster, and rare search performance was up to 200% faster. NetApp installations have seen even faster search run times.

Security and Reliability with a Robust, Full-Featured Solution

With solutions for IT operations, applications management, security and compliance, business analytics, and industrial data, Splunk has rapidly become a central source of business intelligence. The NetApp Converged Infrastructure Solution for Splunk offers the reliability you need to derive timely insights from your Splunk data.

NetApp E-Series storage provides robust, full-featured storage management software, a rugged array chassis, and the most recent solid-state drive (SSD) innovations. The E2800 uses the same chassis that is deployed in thousands of installations that demand high-performance, dense, cost-effective storage. The chassis has a proven record of greater than 99.999% reliability across millions of deployed systems.

Using NetApp Dynamic Disk Pools (DDP) technology, the exceptional performance of the E2800 is negligibly affected during disk failures. DDP technology performs much faster data recovery from disk failures and eliminates the need to immediately replace failed disk drives.

NetApp E2800 storage systems also support advanced data security features, including media erasure and full hardware disk encryption. The NetApp SANtricity storage management system not only configures these features, it also manages encryption keys for each disk in the entire pool of NetApp storage systems.

Simplified Deployment and Access to Data

The NetApp Converged Infrastructure Solution for Splunk's prevalidated reference architecture can help you simplify deployment and accelerate time to insight from months to weeks. The solution's modular design and simple management tools make it easy to configure and scale without adding management complexity.

The E2800 offers multiple form factors and drive technology options to meet your requirements, from an entry-level 2U, 12-drive disk shelf to an ultradense 4U, 60-drive disk shelf. With the E2800's flexible configuration options, including all-flash as well as hybrid SSD and HDD, you build just one architecture to support a multitiered data model. This feature is particularly suited for Splunk's hot, warm, and cold tiers.

“With the significant amount of machine-generated data captured every day, we rely on NetApp E-Series to deploy Splunk solutions for monitoring and troubleshooting the multiple platforms in our environment.”

Roy Shiladitya, Head of Information Technology
ING DIRECT Australia

For more information

- NetApp E2800:
www.netapp.com/us/products/storage-systems/hybrid-flash-array/e2800.aspx
- NetApp Professional Services:
www.netapp.com/us/services-support/services/professional-services.aspx

About Splunk

Splunk offers the leading platform for Operational Intelligence. It enables the curious to look closely at what others ignore—machine data—and find what others never see: insights that can help make your company more productive, profitable, competitive, and secure. What can you do with Splunk? Just ask.

About NetApp

NetApp is the data authority for hybrid cloud. We provide a full range of hybrid cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with our partners, we empower global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation and optimize their operations. For more information, visit www.netapp.com. #DataDriven