

## Harness the power of Splunk with Dell EMC storage

Splunk makes it simple to collect, analyze and act upon the untapped value of the data generated by infrastructure, security solutions and business applications – unlocking the insights to drive operational performance and business results. But many organizations find it complex and time consuming to design, architect, test and validate configurations for Splunk. Dell Technologies and Splunk have partnered to make adopting Splunk simpler by engineering a portfolio of purpose-built Splunk solutions with non-disruptive scalability and performance optimized for Splunk workloads.

### Dell EMC Storage Products

#### PowerScale



#### ECS



#### PowerMax



### Solution Highlights

- Harness machine data, making it accessible, usable and valuable to everyone
- Simplify deployment with solutions that reduce the time, effort and resources required
- Scale with ease using solutions that can scale capacity and compute independently or together
- Monitor, analyze and visualize data across large-scale customer deployments
- Optimized shared storage, maximizing tiering capabilities
- Simplify operations by implementing SmartStore to decouple compute from storage, while supporting the S3 protocol
- Enable powerful data services which extend the investment and provide a compelling TCO

### Turn the data landscape into meaningful business outcomes

As we enter the data decade, the combination of massive amounts of data and technology innovation are transforming businesses into disruptive, digital powerhouses. To unlock the value of data and fully capitalize on opportunities, IT organizations must adapt their approach to infrastructure and rethink how they store, process, and analyze their data. Companies look to provide the same levels of simplicity and agility as public cloud, not only to capitalize on their data and respond quicker to changing business demands, but also to enable developers to deliver new applications and services more rapidly.

This landscape has three major trends that influence IT to become more agile:

- **Data Diversity:** new types of data are introduced and co-exist with the prior ones (Block, File, Object, Containers, etc.).
- **Infrastructure Diversity:** most organizations find that no single infrastructure can address all the requirements of the diverse data landscape, which often creates siloes of IT resources that are managed and consumed independently.
- **Dynamic Operations:** organizations must operate with the same agility, economics, and flexible consumption models as public cloud, to address the ever-expanding demands of their data and the business.

In order to navigate this constantly evolving landscape of technologies, Splunk is unique in its ability to help increase operational velocity, predict future outcomes for a wide range of IT, security and business scenarios, and take action to drive tangible business outcomes.

### Splunk and Dell EMC storage key benefits

By leveraging the Splunk platform with innovative infrastructure from Dell Technologies – PowerScale, ECS, and PowerMax – you are taking advantage of Splunk’s market-leading Operational Intelligence capabilities while utilizing enterprise features within a mature and flexible shared storage infrastructure. With Splunk and Dell Technologies, customers can:

- Identify and resolve issues and reduce costly escalations
- Proactively detect and investigate security incidents
- Ensure reliability, business continuity, and availability with shared storage
- Enable powerful data services which extend the investment and provide a compelling TCO
- Implement SmartStore data path model, to decouple compute from storage while supporting the S3 protocol. Hot/cache is still tier 0, but tiering can now be from it directly to a SmartStore target like Dell EMC ECS
- Cost-effective and independent scaling of compute and storage
- Monitor systems, infrastructure, and key performance indicators in real time

## Dell EMC PowerScale

Dell EMC PowerScale and Isilon nodes powered by OneFS 9.0, allows high-speed ingest of Splunk data and it includes native HDFS integration helping avoid the need to invest in a separate Hadoop infrastructure and eliminate the time and expense of moving large data sets.

- **Share data with Hadoop:** Maintain a single copy of the data across Splunk Cold/Frozen bucket and Hadoop without the need to migrate the data from one platform to another.
- **Powerful data services:** Dell EMC SnapshotIQ provides a simple, scalable, and flexible way to enable enterprise-class, point-in-time data protection and recovery for scale-out storage.
- **Bottomless cold bucket:** An Isilon cluster creates a unified pool of highly efficient storage, with a proven 85% storage utilization rate. Without the need to over-provision storage capacity or performance, scale-out Splunk environments to 50 PB in a single file system and tier Splunk workloads across shared storage without the need for migrations.
- **Reduced storage footprint:** PowerScale powered by OneFS 9.0, allows organizations to start with smaller footprint and lower cost of entry for their Splunk workloads, ensuring seamless upgrades and backwards compatibility to existing legacy Isilon nodes, while providing high performance density, with NVMe and 100Gbps.

## Dell EMC ECS

ECS delivers the scale and enterprise features required to consolidate storage platforms and form the storage foundation of your modern business. ECS enables a wide range of use-cases and offers a number of benefits to streamline storage infrastructure through its robust set of enterprise features and capabilities.

- **Streamline storage infrastructure:** Built with a scale-out, geo-distributed architecture, ECS makes it easy to keep pace with capacity demands. Ensure data integrity and compliance, with native protection capabilities and advanced retention and indexing features. Manage ECS with ease using built-in, enterprise capabilities.
- **Gain new insights:** With customizable monitoring, alerting, notification capabilities, and native Grafana support, ECS keeps track of system performance and events. Using advanced metadata search and geo-caching features, ECS helps you locate the right data at the speed your business demands, wherever it resides.
- **Empower next-gen solutions:** With infinite scalability and enterprise-grade efficiency, ECS delivers the performance required for nearly any object-based workload. ECS enables development teams to both modernize existing legacy apps without re-platforming them and develop cloud-native, S3-based apps without locking into a public cloud vendor.

## Dell EMC PowerMax

PowerMax fundamentally changes the way Splunk environments, especially the Hot/Warm tiers, are managed from performance, efficiency and ease of use perspective. With up to 15M IOPS<sup>1</sup> and 350 GB/s throughput<sup>2</sup>, PowerMax provides extreme performance with less than 100µs latency<sup>3</sup> at any scale and virtually eliminates all storage tuning requirements.

- **Extreme performance with µ-second latency:** Get lightning fast for all types of searches, including SuperSparse and Rare Searches, faster time to first event, more concurrent searches/users, and time range searches.
- **Scalability:** Seamless scale for performance and capacity, support massive scale for both user & data growth, and implement Splunk deployments at web-scale/cloud-scale & beyond.
- **Optimal infrastructure with ease-of-use:** Independently scale compute & storage, with zero storage silos and infrastructure sprawl, flexibility (control reliability/performance based on requirement), security (self-encrypting drives, security certifications), and consolidation (one storage infrastructure for all business-critical applications).
- **Availability / Reliability:** Designed with up to six-nines of availability, eliminate Index rebuilds, and improved BC/DR with Sync/Async replication options.
- **Exceptional storage efficiency:** Reduce copies of data/index with lower Replication & Search Factors (RF/SF), inline compression of Index files, and inline deduplication for Clustered Indices.



To learn more about our offerings visit our website  
[DellTechnologies.com/StorageforDataAnalytics](https://DellTechnologies.com/StorageforDataAnalytics)

<sup>1</sup>Based on Dell EMC internal analysis of Random Read Hits Max IOs Per Second (Within a single array on 2 floor tiles) for the PowerMax 8000, July 2019. Actual performance will vary.

<sup>2</sup>Based on Dell EMC internal analysis of Random Read Hits Max GB per Second (Within a single array) for the PowerMax 8000, July 2019. Actual performance will vary.

<sup>3</sup>Based on Dell EMC internal analysis using the Random Read benchmark for a single PowerMax 8000 array, July 2019. Actual response time will vary.