

Accelerating Splunk

The Benefits of Apeiron Splunk Appliances

Companies and other organizations using Splunk® Enterprise, or planning Splunk deployments, can achieve one order of magnitude (10x) better indexer performance and nearly two orders of magnitude (100x) better search head performance using Apeiron™ Splunk Appliances than Splunk reference architecture that assumes traditional controller-based SAN or NAS.

Why Apeiron for Splunk

The innovation of Apeiron storage systems, storage networks, and server systems with NVMe over Ethernet technology accelerate Splunk performance to levels not possible using current enterprise data center information technology (IT) architectures.

IT environments reliant on NAS (Network Attached Storage), SAN (Storage Area Networking), virtualization, cloud, or hyper-convergence products include inherent architectural and technological obstacles that limit the potential of Splunk.

Apeiron uniquely provides a future-proof solution that addresses the needs of Splunk deployments today and offers the ability to scale to unlimited levels of Splunk performance and capacity.

The Apeiron Splunk Appliances offer a proven solution for optimizing Splunk that is available now and has been independently tested, validated, and audited to accelerate Splunk to levels far beyond what is possible using alternatives following Splunk reference

architecture and reference machine guidelines that assume traditional controller-based SAN or NAS.

Apeiron Splunk Appliance

Apeiron Splunk Appliances (ASAs) are pre-configured hardware platforms including indexers, search heads, and storage interconnected by a 40Gbit Ethernet fabric. ASAs are expertly designed for both distributed and single-instance Splunk Enterprise and Splunk premium solutions deployments.

Unlike Splunk reference architecture and reference machines, Apeiron Splunk Appliances leverage NVMe over Ethernet technology to maximize performance and simplify capacity planning and deployment.



Apeiron Splunk Appliance (ASA)

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ASAs are available in a variety of models to support different levels of ingesting rate and retention period requirements, and scale simply with the addition of Apeiron indexers, search heads, and storage.

Apeiron Splunk Appliances provide significant capital expense (CAPEX) and operating expense (OPEX) savings that lower the total cost of ownership (TCO) for Splunk.

ASA Indexer Performance

A direct comparison of Apeiron and Splunk reference architecture reveals an ASA indexer outperforms a Splunk indexer reference machine by 7x to 8x—up to 9x when the reference machine is virtualized. This is an improvement approaching one order of magnitude.

Splunk Reference Architecture	Apeiron Splunk Appliance (ASA)
Up to 100 GB/day	Up to 750 GB/day (7.5x better)

Splunk Enterprise Indexer Performance

ASA Search Head Performance

An Apeiron Splunk Appliance search head outperforms a Splunk search head reference machine by a factor of up to 50x. Third-party testing by a global IT solution provider that was independently audited by the Enterprise Strategy Group (ESG) found ASA search performance advantages of up to 88x.

Splunk Reference Architecture

Apeiron Splunk Appliance (ASA)

Up to 50,000 events per second for dense searches

Up to 500,000 events per second for dense searches (10x better)

Up to 5,000 events per second for sparse searches

Up to 50,000 events per second for sparse searches (10x better)

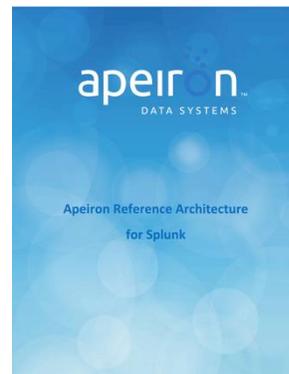
Up to 1/2 bucket per second for super-sparse searches

Up to 25 buckets per second for super-sparse searches (50x better)

Splunk Enterprise Search Head Performance

Apeiron Reference Architecture for Splunk

Apeiron has developed a guide—the *Apeiron Reference Architecture for Splunk*—explaining how to accelerate Splunk environments with Apeiron Splunk Appliances.



Apeiron Reference Architecture for Splunk

Contact Apeiron Data Systems at +1.800-701-0243 or info@apeirondata.com to request a copy of the guide.