What is the AFA.next?

AFA.next is a storage solution provided by StorONE and built entirely with Intel products. It uses an Intel appliance that automatically tiers data between an Intel® Optane™ storage layer for high-performance and Intel QLC layer for high capacity. The result is a solution that outperforms traditional all-flash arrays yet costs significantly less.

AFA.n demonstrates Intel® Optane™’s unique performance advantages, which utilizes StorONE-S1 technology to deliver over 300K Write IOPS and 1.2 Million Read IOPS from just three Intel® Optane™ drives (one of the three is for data protection). S1 also automatically moves older data sequentially to the QLC and increasing the QLC’s endurance by 10x.

How did StorONE make Intel® Optane™ a mainstream enterprise storage solution?

StorONE-SI technology is the only solution on the market with the capability to extract 90% of Intel® Optane™ performance specification. Other storage solutions deliver less than 20% of the Intel specification, which means they need twelve drives to achieve the same performance results that S1 delivers in three. The lack of efficiency makes Intel® Optane™ too expensive for an enterprise storage use case, which forces vendors to use Intel® Optane™ as a single drive cache.

Even with a cache solution, other vendors have an additional DRAM cache before the Intel® Optane™ cache. This method eliminates much, if not all, of Intel® Optane™’s high-performance, write speed advantage, adds extra cost of the DRAM and increases the risk of losing data. StorONE writes directly to Intel® Optane™ (DirectWrite) using Intel® Optane™ in its proper form - storage and not cache.

Summary

S1’s excellent per drive performance makes using Intel® Optane™ storage practical for the enterprise. It enables applications to fully benefit from Intel® Optane™’s write performance advantage as well as its superb read performance. S1 also supports all enterprise use cases, provides complete data protection, and delivers storage services without performance impact.

With S1:AFA.n, customers get the full benefit of three or four Intel® Optane™ drives instead of a system with one used as cache. At the same time, the combined solution is less expensive than other all-flash arrays on the market. It enables customers to reduce costs throughout the data center by using a storage system that allows them to scale their VMware, Oracle, MS-SQL, and MySQL environments further than they ever thought possible. The solution can pay for itself by reducing enterprise software licensing costs dramatically.