DELL Technologies

Dell PowerMax vs. HPE Alletra 9000

Dell PowerMax 2500 / 8500		HPE Alletra 9000
World's most secure mission critical storage[1] Security includes Hardware Root of Trust, Secure Boot Chain of Trust, security anomaly detection, RBAC, and FIPS 140-2 validation.		**Lacks some security features** Security includes FIPS 140-2 validation and RBAC. No Hardware Root of Trust, Secure Boot Chain of Trust, or security anomaly detection.
Massive consolidation Block, File, vVols, Mainframe, & IBMi storage.		**Limited consolidation** No Mainframe or native IBMi, File services requires an external gateway server adding costs and complexity.
Multi-Controller, scale-out and up Up to 16 active nodes, 576 CPU cores and 384 NVMe SSDs. Up to 256 front end host connectivity ports[2].		**Much less scalability than PowerMax** Only up to 4 active nodes, 160 CPU cores, 240 NVMe SSDs. Up to 48 front end host connectivity ports.
Fast Dynamic Fabric interconnect Scale performance and capacity independently over fast 100Gb NVMe InfiniBand, max node count not required for max capacity. Any node to any drive.		**Mixed interconnect** Combo of 32Gb PCIe & 100GbE NVMe RDMA. Max node count required for max capacity. Cluster interconnect transfers data between nodes.
High Efficiency Trusted data services Global inline data reduction, available with 4:1 DDR guarantee for Open Systems, 3:1 for mainframe[3]. Simultaneous active/active metro sync replication with 3rd site async.		**Data services that slow performance** Inline data reduction, available DRR guarantee varies per workload. No mainframe support. Active/active metro sync replication, active/standby with 3rd site async.
NVMe/TCP host connectivity with auto discovery Achieve great performance with NVMe/TCP and the industry's first automated end-to-end NVMe/TCP deployment[4] utility for storage resource automation. Dell SmartFabric storage Software (SFSS) for NVMe/TCP provides automated discovery.		**No support for NVMe/TCP** Support for NVMe/FC but no support for NVMe/TCP.

[1] Based on Dell internal analysis of cybersecurity capabilities of Dell PowerMax versus cyber security capabilities of competitive mainstream arrays supporting open systems and mainframe storage, February 2022.
[2] Based on PowerMax 8500.
[3] Storage Data Reduction Guarantee: Requires customer signature and purchase of ProSupport Plus or ProSupport with Mission Critical. Applicable products include All-Flash Storage products only. See Terms and Conditions.
[4] Based on Dell analysis comparing primary PowerMax NVMe/TCP tool (SFSS) usages vs competitive storage solutions, March 2022.

Comparisons based on Dell analysis of publicly available data as of July 2022.