DELL Technologies

Dell PowerStore vs Hitachi EX90 Arrays

Dell PowerStore		Hitachi EX90 Arrays
Run VMware ESXi hosted apps via AppsON technology[1] Dell PowerStore with AppsON[1] offers the only purpose-built array with a built-in VMware ESXi hypervisor.[2]		**No VMware ESXi support to host apps locally** No option to deploy apps on the array.
Anytime Upgrade,[3] Industry's most flexible program for controller upgrades[4] Optional controller upgrade program offers choice of next gen, higher model or discounted additional new controller.[5] No subscription renewal required.		**No controller upgrade program** Everflex is a CAPEX/OPEX solution with no program for controller investment protection. Upgrades require data migration.
Scale-up & Scale-out Scale-out up to four arrays across almost all models with up to 3.5 PB of raw storage in 384 drives managed as a cluster.[6]		**No Scale-out, limited scale-up** No scale-out capabilities. Scale-up to 96 drives only on highest end model, each array is isolated and managed separately and no data-in-place upgrades.
Always on, intelligent hardware-assisted data reduction with average 4:1 guarantee[7] Always on deduplication and compression that works proactively to optimize capacity and performance.[8]		**Hitachi's Adaptive Data Reduction is not hardware-assisted, impacting performance** Hitachi's ADR must use controller resources, degrading performance. Optional post-process mode reduces impact but requires temporary capacity.
Unified storage with Block, Native File, and vVols support File,[9] block and vVols in a single, unified and easy-to-manage platform.		**No Native File support** File services require minimum of two 3U HNAS gateway servers adding space, cost, and complexity.
End-to-end NVMe and SCM Leverage NMVe Flash and SCM drives as persistent storage for your highest performance workloads with NVMe-oF host connectivity.		**SCM not yet supported, no NVMe-oF** NVMe scalability is limited to 24 drives in lower models. No current SCM or NVMe-oF support.
Increased flexibility and performance with Dynamic Resiliency Engine (DRE) and distributed sparing Expand with as few as one drive. Spare space is distributed across all drives. DRE optimizes data placement, maximizes performance and quickly resumes protection after failure as all drives are actively rebuilding the data.		**Traditional RAID groups and dedicated spares** Must grow capacity in RAID groups, LUNs from RAID groups create potential hot spots. During a drive rebuild, only the drives in the affected RAID group are active; remaining drives in the other RAID groups are not involved in the rebuild process.

1. Available on PowerStore X models only. 2. Based on Dell analysis of publicly available information on current solutions from mainstream storage vendors, April 2020. 3. Anytime Upgrade is available for purchase with PowerStore at POS only and requires a ProSupport or ProSupport Plus contract with a 3, 4, or 5-year term. Upgrades available 180 days after invoice. 4. Based on Dell analysis, April 2020 using publicly available data to compare the highest available program/subscription offers for controller upgrades. Anytime Upgrade is available for purchase with PowerStore at POS only and requires a ProSupport or ProSupport Plus contract with a 3, 4, or 5-year term. Upgrades available 180 days after invoice. 5. Anytime Upgrades Select provides next gen controller from Anytime Upgrades Standard, plus choice of in-family upgrade or scale-out discount toward second appliance solution, availability may vary by model. Dell ProDeploy Plus is required for scale-out deployment. 6. Not available on PowerStore 500. 7. 4:1 average rate guaranteed across customer applications. Rates for individual applications may vary. See Future-Proof Program terms and conditions for details. 8. Based on a Principled Technologies report commissioned by Dell EMC, "Enable Greater Data Reduction and Storage Performance with Dell EMC PowerStore 7000 Series Storage Arrays," compared to HPE Primera A670, August 2020. Actual results may vary. See the full report here. 9. Available on PowerStore T models only. Comparison based on publicly available information, July 2021.