NUTANIX

EDGE
SOLUTIONS & CONSULTING

Competitive Brief

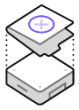
Top 10 Things Customers Should Know about VMware ESA vs Nutanix HCI

1. **New unproven architecture.** VMware has introduced an alternative cache-less architecture called Express Storage Architecture (ESA). VMware OSA refers to the old architecture which requires cache disks to provide performance but was a single point of failure. The introduction of VMware ESA further confirms that the Nutanix cache-less and distributed design is the right approach.

2. **High-Cost Hardware Entry Point.** Configurations are limited to newer infrastructure with a minimum configuration for compute is 32 cores and 512GB of memory. ESA forces customers to only use VXRail ReadyNode hardware.

3. **Migration Risk.** The implementation of the new ESA platform will necessitate meticulous planning, thorough testing, and a well-executed migration strategy to guarantee a seamless transition and minimize operational disruptions. It is essential to approach the transition with caution and adhere to best practices to ensure a successful implementation

4. **No in place upgrade.** VMware ESA requires a forklift upgrade, there is NO in-place upgrade from the OSA to ESA (OSA to OSA and ESA to ESA can still be performed). The new ESA cannot make use of hybrid hardware configurations, NVMe only. VMware only supports greenfield deployments of vSAN ESA.



5. **ESA and OSA Platforms vs Nutanix Platform.** Customer will be forced to running two platforms to provide cost efficiencies to internal business units as one size does not fit all. This will create two silos for customers to manage and maintain while they sunset either the old OSA or during the migration.

6. **File Services SILO.** ESA does not support file services, which would leave customer with either running an OSA Cluster or procuring a new Storage Solution to cater for Files and Object data.

7. **Costly Fault Domain.** ESA best practices are very similar to vSAN Fault Domain configurations where data traffic travels east-west across multiple racks in the data center. In general, low-latency and high bandwidth network topologies are recommended for optimal performance. This will require multiple TOR switches to create rack aware fault domains.

8. **Predefined building modules.** ESA customers should strive for a relatively symmetrical cluster, this recommendation for cluster symmetry is very similar to using the Original Storage Architecture. Nutanix empowers customers with the flexibility to select from a range of node options, including Storage Only, Compute Only, and HCI nodes. This enables organizations to customize their deployments to align with their unique needs, optimizing resource allocation to best suit their workloads.

9. **Expensive Networking Overhead.** The utilization of the ESA NVMe storage solution necessitates a minimum of 25Gbe networking, while achieving near device-level performance requires 100Gb NICs, potentially increasing the cost of the solution, as VMware suggests employing TOR switches with either 25/100Gbe..

10. **Storage Efficiency.** ESA makes claims a 4x improvement in compression, using ESA compression feature to receive as high as an 8:1 compression ratio for every 4KB block written. The compression can also be Toggled by storage Policy. Nutanix has been providing customers with the option to leverage data efficiency features such as deduplication, compression, and erasure coding using a toggle mechanism. Nutanix recognizes that these features can bring significant savings for customers by reducing storage requirements and optimizing resource utilization.

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