High Performance for HCI Workloads with Dell EMC VxRail & Intel Optane Persistent Memory

The Current State

- Persistent memory enables management, flexibility, and scalability.
- ESG validation showed high IOPS and throughput for small and large workloads.
- PMem versus VxRail using all-flash VSAN
- Comparing VxRail with all-flash VSAN using with Intel Optane PMem for persistent memory.

The Solution

- ESG validated performance testing with VxRail using Intel Optane PMem in Memory Mode and App Direct Mode.
- VxRail with Intel Optane PMem offers organizations more transactions, workloads at the core, edge, and cloud.
- The ability to accelerate database processes at low cost with a small amount of PMem capacity delivers significant benefit.

How It Works

- PMem operates as a multi-level memory tier that is persistent, so data is retained during power loss.
- PMem preserves performance and low latency.
- PMem provides a new performance tier that sits above DRAM.

ESG Validation Results

- ESG validated performance fits with the HCI profile of flexibility and agility.
- VxRail with Intel Optane PMem offers organizations more transactions, workloads at the core, edge, and cloud.
- In addition, the ability to start with a small amount of PMem and grow with scalable needs, to gain the deployment and management efficiency benefits that HCI offers.

The Bigger Truth

- Performance-intensive workloads gain the benefits of memory-like performance, persistent storage, and scalability.
- ESG validated performance testing with VxRail using Intel Optane PMem in Memory Mode and App Direct Mode.
- VxRail with Intel Optane PMem offers organizations more transactions, workloads at the core, edge, and cloud.