

Make Your Business Thrive with a Modern SAP HANA[®] Storage Infrastructure



Highlights

- Gives your business a boost by accelerating SAP HANA application performance up to 10 times or more
- Extends the high performance of NVMe[™] flash to shared storage for SAP HANA
- Provides up to 368TB¹ capacity in a 2U unit that allows up to six hosts to attach without a switch

Challenges

- Increasing application demands are pushing SAP HANA environments past the performance capabilities of HDD or SSD storage capabilities
- Increasing SAP HANA transaction wait times which frustrate end users and decrease productivity
- Skyrocketing OPEX costs related to powering, cooling and managing multiple silos of data storage

Solution

Western Digital's OpenFlex™ Data24 NVMe-oF™ Storage Platform will make your business thrive by accelerating transactions, simplifying workflows and reducing costs. With their ability to increase performance, lower costs and increase flexibility at scale, OpenFlex Data24 simplifies the storage and management of business critical SAP HANA data with an all-flash scale-out solution that can meet the TCO requirements of even the strictest environments.

Accelerate Business Operations

SAP HANA software and services are the lifeblood of many businesses performing a wide variety of analytical and transactional operations at the core of the organization. However, the performance of SAP HANA is often tied to its underlying storage infrastructure. Traditional disk-based storage simply can't meet the increasing performance needs of SAP HANA, especially since these environments, workloads and datasets always seem to be increasing in size and importance year after year.

Western Digital's OpenFlex Data24 NVMe-oF Storage Platform enables SAP HANA environments to thrive by extending the high performance of NVMe flash to shared storage. Instead of placing storage in a single SAN with limited connectivity and high network latency, storage is instead distributed among industry standard servers connected to each other and the rest of the network with ultra-high-speed Ethernet. SAP HANA infrastructures built on OpenFlex Data24 benefit from accelerated performance, improved responsiveness and increased agility of your business.

SAP HANA Needs Flash Acceleration

Flash technology has revolutionized the performance of storage systems and NVMe-oF technology extends flash storage to its full potential. The OpenFlex Data24 NVMe-oF Storage Platform provides the flexibility to meet varying requirements depending on data workload and performance requirements and is built to deliver screaming performance in software-defined storage environments. With low latency and consistently high bandwidth, data is accelerated to the speed of flash and is shareable with up to six hosts without a switch.



OpenFlex Data24 NVMe-oF Storage Platform

Reduce Latency To Improve Business Operations

Many customers struggle with performance requirements that cannot be met by traditional storage media. The OpenFlex Data24 is designed to provide customers with the performance needed to accelerate their business workloads by dramatically speeding up I/O operations. Faster I/O allows each server to handle more transactions resulting in the CPU spending less time waiting for data. The increased performance provided by all-flash NVMe storage enables higher workload volumes while using fewer CPU resources—resulting in a reduction of the number of servers needed in your data center. Server resource consolidation means cutting capital and operational costs with fewer servers to power, cool, license and maintain.

Ultrastar[®] DC SN840 NVMe SSDs

At the core of the OpenFlex Data24 NVMe-oF Storage Platform are Western Digital Ultrastar DC SN840 NVMe SSDs. The Ultrastar DC SN840 is a performance NVMe SSD targeting cloud compute and enterprise workloads that require low latency to data and high availability of data. The DC SN840 is Western Digital's 3rd generation of performance NVMe SSD for data center and extends Western Digital's leadership in dual-port architecture by vertically integrating proven flash controllers. Utilizing 96-lyer 3D TLC NAND, it is available in capacities from 1.6TB to 15.36TB in a standard, front-loading 2.5" U.2 form factor.



Ultrastar DC SN840 NVMe SSDs

Conclusion

Running business-critical SAP HANA applications on OpenFlex Data24 NVMe-oF Storage Platforms provides immediate and obvious performance improvement while introducing a whole host of operational, management and data protection benefits. These not only maximize efficiency for IT, but for your business as well, by improving end-user experiences, increasing productivity and reducing storage costs in business intelligence and analytics workloads.

For more information on how the OpenFlex Data24 NVMe-oF Storage Platform can turbo-charge SAP HANA environments and improve business operations, visit westerndigital.com/platforms

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¹One terabyte (TB) is equal to on trillion bytes when referring to storage capacity. Accessible capacity will vary from the stated capacity due to operating environment.