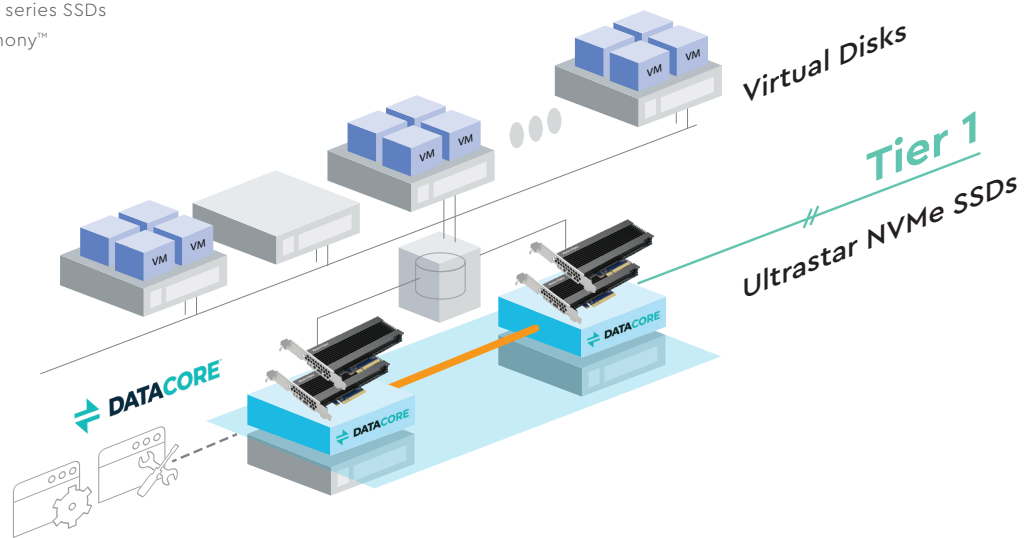


All-Flash Storage Solution



Tier 1: Ultrastar® NVMe™ series SSDs

SW: DataCore SANsymphony™



This is an ideal solution for high-performance all-flash workloads. The solution provides excellent availability and ultra-high performance at a very low TCO.

To create a high performance all-flash NVMe storage solution, it takes just two mirrored server nodes with SATA (OS boot) and NVMe SSDs (data storage). Datacore SANsymphony software runs on two mirrored x86 servers boosted with Ultrastar® NVMe™ SSDs to create a high performance all-flash NVMe-based processing and storage solution.

DataCore Ready servers can contain up to 24x Ultrastar NVMe SSDs as an ultra-high performance NVMe storage pool and 2x Ultrastar SATA SSDs for the Windows Server® operating system. Minimum configuration for the servers is 12x Ultrastar NVMe SSDs, with maximum total capacity of 92TB of NVMe flash storage (fully populated).

The DataCore SANsymphony software requires both DataCore SANsymphony EN-Node licenses (free to request and download) and at maximum 368 Datacore TB Capacity licenses. The actual amount of TB Capacity licenses is dependent on the total managed storage capacity in the configuration.

Note: After reaching full drive bay population of the server chassis in this configuration, further expansion is possible by simply adding additional Ultrastar Data60 and/or 2U24 Flash Storage Platforms to the existing SAS ports and upgrading DataCore TB Capacity license to the new total amount of managed capacity. It is possible to add up to 8 external storage shelves per server in total, ranging up to almost 7PB of managed capacity per server.

¹ One megabyte (MB) is equal to one million bytes, one gigabyte (GB) is equal to 1,000MB (one billion bytes), and one terabyte (TB) is equal to 1,000GB (one trillion bytes) when referring to storage capacity. Accessible capacity will vary from the stated capacity due to formatting, system software, and other factors.

Per Server Configuration (2 Servers needed)

Item	Description	P/N	Qty
Server	DataCore Ready x86 Server		1
CPU	Intel® Xeon® Gold 5120 Processor	Intel Xeon Gold 5120 Processor	2
Memory	16GB PC4-21300 2666MHz DDR4 ECC Registered DIMM	1EX1407	12
System Disk	Ultrastar DC SA210 480GB SATA SSD	OTS1650	2
2.5" SATA/SAS Drive Trays	Tool-less black hot-swap 2.5 HDD drive tray (Red tab)	N/A (server base config)	2
VROC	SVR2U24 Option RAID VROC Premium Key	1EX1177	1
RAID controller for boot devices and expansion	Broadcom 9480-8i8e	SC-9480-8I8E	1
NVMe SSD	Ultrastar DC SN620 NVMe SSD	OTS1844 (3.84TB)	12
HBA for host connection	QLogic 16Gb quad port Fibre Channel HBA	1EX1612	2

Software for 2 Storage Servers

Item	Description	P/N	Qty
Operating System	Windows Server 2016 Standard	OEM SKUs from server vendor	2
DataCore SW	SANsymphony EN-Node license	Free to request and download	2
No RAID overhead	Datacore TB Capacity license (1-year maintenance)	DEN-EWR-S12-050	92
	Datacore TB Capacity license (3-year maintenance)	DEN-EWR-S36-050	92
RAID-1 for data protection within the individual nodes	Datacore TB Capacity license (1-year maintenance)	DEN-EWR-S12-025	46
	Datacore TB Capacity license (3-year maintenance)	DEN-EWR-S36-025	46

Note: Any other RAID usage that would result in other managed net capacity will change the SKU accordingly;

Note: Any already existing EN capacity anywhere else will also change the SKU, depending on the total managed capacity;

Note: Above capacity figure calculation is based on entry capacity configuration for all storage components resulting in 92TB raw capacity;

P/N scheme for Nx Datacore TB Capacity license DEN-EWR-Sxx-yyy is as follows:

N	Total new managed capacity of the customer represented by the servers and the storage capacity added
xx	Maintenance term, i.e. 12 = 1 year / 36 = 3 year.
yyy	Total managed capacity band, after the new capacity is purchased 001 = 1 to 9 TB 010 = 10 to 24 TB 025 = 25 to 49 TB 050 = 50 to 99 TB 100 = 100 to 249 TB 250 = 250 to 499 TB 500 = 500 to 999 TB 01M = 1000 and above

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