EonStor DS - Data Services

EonStor DS systems support the mission-critical applications of small and medium businesses (SMB). They feature redundant hot-swappable hardware components, CacheSafe technology, and full RAID protection to deliver high fault-tolerant capabilities.

SSD Cache accelerates data access for random read intensive environments and automatically moves a copy of the most frequently accessed data from HDD to lower latency SSDs.

Automated storage tiering mixes different drive types and RAID levels in the same data volume and moves data automatically to optimum storage tiers to increase random read and random write performance based on data hotness.

To protect data from major threats, EonStor DS systems support local and remote replication. By configuring the scheduler in SANWatch, users can automate replication tasks. In the event of human error or data volume failure, differential and full copies of critical data sets can be leveraged to quickly recover data and restart service.

In addition, thin provisioning enables users to optimize capacity utilization and minimize invest-ments in large and underutilized data volumes.

SSD Cache
- Accelerated read performance for hot data
- Up to four SSDs per controller
- Rapid warm up and reduced wear
- Large SSD cache pool capacity: up to 6.4TB

Automated Storage Tiering
- Optimize storage performance and increase ROI by leveraging high speed SSD for expedited access to hot data while using affordable drives such as NL-SAS for archiving purposes

Remote Replication
- Deploy full data copies across storage systems at different sites, either in synchronous or asynchronous mode
- Leverage disk-based remote copies to quickly restart services in the event of source data failures

Self-encrypting drives (SED)
- SED technology offers one of the most airtight data protection methods available in the storage industry, and helps users avoid the high costs and other negative consequences of data loss due to breaches , theft, and other events
- SED via the SANWatch interface is also very easy to use and has no negative impact on system performance

Intelligent Drive Recovery (IDR)
- Including Smarter RAID 6 drive clone/replace, data recovery, and media scan
- IDR avoids time-consuming rebuild and performance-impacting

Local Replication
Snapshot
- Copy-on-write technology to create point-in-time differential copies without disrupting online applications
- Restore deleted files or rollback data volumes in seconds based on space-efficient recovery points

Volume copy/MIrror
- Create independent point-in-time and mirrored full data copies without downtime
- Allow production data to be immediately shared by secondary applications, such as testing and data mining
- Restart service in minutes with minimized data loss when a source data volume fails

Thin Provisioning
- Allocate capacity dynamically to minimize large data volume underutilization and increase the benefit gained from investment in storage

Infortrend

THIN PROVISIONING

Snapshot

Volume Copy/Mirror

Snapshot

LOCAL REPLICATION

REMOTE REPLICATION

SSD Cache

Automated Storage Tiering

	Standard[1]	Advanced (Optional)[2]
Self-Encrypting Drives (SED)		
Unique factory encryption secures data plus makes deletion simple and complete	Yes	-
Intelligent Drive Recovery (IDR)		
Smarter RAID 6 drive clone/replace, data recovery, and media scan included	Yes	-
Local Replication		
Snapshot		
Maximum Number of Snapshot Images for a Source Volume	64	256
Maximum Number of Snapshot Images in a System	128	4,096
Volume Copy/Mirror		
Maximum Number of Source Volumes in a System	16	32
Maximum Number of Replication Pairs for a Source Volume	4	8
Maximum Number of Replication Pairs in a System	64	256
Thin Provisioning		
"Just-in-time" capacity allocation optimizes storage utilization and eliminates allocated but unused storage space		
SSD Cache		
Supports up to four SSDs per controller	-	4
Recommended DIMM capacity per controller for SSD Cache pool	-	2GB DRAM Max. Pool Size:150GB 4GB DRAM Max. Pool Size: 400GB 8GB DRAM Max. Pool Size: 800GB 16GB DRAM Max. Pool Size: 1,600GB 32GB DRAM Max. SSD Cache Pool Size: 3,200GB 64GB DRAM Max. SSD Cache Pool Size: 6,400GB 128GB DRAM Max. SSD Cache Pool Size: 6,400GB
Automated Storage Tiering		
Automated Storage Tiering	-	Yes
Maximum Number of Storage Tiers	-	4
Storage Tiers Based on Drive Type	-	Yes
SSD Support	-	Yes
Storage Tiers Based on RAID Level	-	Yes
Automated Data Migration with Scheduling Options	-	Yes
Remote Replication		
Maximum Number of Source Volumes in a System	-	16
Maximum Number of Replication Pairs for a Source Volume	-	4
Maximum Number of Replication Pairs in a System	-	64

[1.] Standard functions are default available.
[2.] Advanced functions are available with optional license.