

Dispersed Storage® Products

Massive Scalability. Data Longevity. Security and Reliability. Three components work together to build Dispersed Storage Networks (dsNets) by storing data slices instead of full copies.

1



Accesser®

Dispersed Storage Router that slices, disperses and retrieves data throughout the network. One or more Accessers can be deployed in a single dsNet.

2



Slicestor®

Dispersed Storage Servers that store the slices. Multiple Slicestors can be deployed in a single rack in a datacenter or be distributed around the globe.

3



dsNet™ Manager

Dispersed Storage Network Manager that provides comprehensive insight into fault management, performance monitoring, and storage provisioning.

Cleversafe's dsNets have been designed from the ground up to be massively scalable and address today's challenges of growing digital assets. Lower acquisition costs and expansion capabilities make dsNets ideal for solving your growing storage needs.

Accesser®

Easy Access and Application Integration

Using iSCSI, the dsNet appears as a network device on the desktop, enabling users to transparently store and retrieve files. The dsNet easily integrates with many existing backup and archiving applications.

Pluggable Interfaces

Cleversafe offers iSCSI and a straight block interface. Future releases will support webDAV, FTP, NFS, and CIFS (SMB).

Reliable and Secure Information Dispersal Algorithms (IDAs)

The Accesser utilizes IDAs to split data into slices in such a way that it can be bit-perfectly reconstructed without all the slices.

Lower Bandwidth Requirements

Cleversafe's Accesser addresses the challenges of high storage overheads and bandwidth requirements by changing the very way data are stored.

Slicestor®

Increased Reliability

Our IDA-based configurations can achieve more than 99.999999999999999% of reliability. Just dial up or down the level of reliability that your business requirements need.

Scalability

A dsNet is capable of supporting an unlimited number of Slicestors. Scaling the system to accommodate growing storage requirements is simple and painless.

Flexible Locations

Slicestors can be deployed in a single rack or geographically distributed around the world. This flexibility addresses availability and redundancy as well as alleviating space and location constraints.

Unparalleled Security

With Information Dispersal, the more slices produced the more secure and reliable the system becomes; each slice ends up representing a smaller and smaller fraction of the original data.

dsNet™ Manager

User-friendly Access Anywhere

Browser-based application provides comprehensive and intuitive insight into all aspects of the storage system. Management dashboard provides relevant and timely views.

Easy Setup and Configuration

Automated storage discovery makes setting up and monitoring the dsNet a snap. Easy deployment and provisioning tools streamline efforts of storage administrators.

Fault Management and Performance Monitoring

Alert console provides visibility into performance and health issues so that administrators have the information they need to solve problems while ensuring data are still available.

Monitoring and Statistics

The Manager provides up to the minute dsNet statistics such as:

- Usable and raw capacity
- Read/write statistics
- Memory and CPU utilized network statistics

This allows quicker and more accurate analysis of the system and networks.

Specifications

Capacity

Slicestor Raw Capacity	4 TB
-------------------------------	------

Processors, Memory and Storage

Accesser	Intel QC XEON 5355 2.66GHz, 1333MHz FSB, 8M cache 4 × 1 GB FB DDR2 667MHz REG ECC SDRAM 1 × 250 GB 7200RPM Enterprise Class SATA
Slicestor	Intel DC E1200 1.6GHz, 800MHz FSB, 512KB cache 2 × 1 GB UNB DDR2 800MHz NON-ECC SDRAM 4 × 1 TB 7200RPM Enterprise Class SATA
Manager	Intel E6400 2.13GHz, 1066MHz FSB, 2M cache 2 × 1 GB UNB DDR2 667MHz REG ECC SDRAM 1 × 250 GB 7200RPM Enterprise Class SATA

Software

All Appliances	OPERATING SYSTEM ClevOS – Cleversafe Linux OS variant optimized for information dispersal SUPPORTED CLIENTS Linux Open iSCSI Initiator Microsoft iSCSI Initiator v2.06
Software Features	<ul style="list-style-type: none"> • Dispersed Storage protocol and configuration to meet reliability requirements • Cyclical Redundancy Check and/or Digital Signature to ensure data integrity • Pluggable authentication • Optional AES encryption for slices
Management	<ul style="list-style-type: none"> • Separate out of band management process polling core components of a dsNet • Web-based configuration and management • Standard reporting and interfaces into higher management framework
Protocols	<ul style="list-style-type: none"> • Standard iSCSI target presentation • Block based interface

Network Interface

Accesser	2 × Gigabit Ethernet Ports
Slicestor	2 × Gigabit Ethernet Ports
Manager	2 × Gigabit Ethernet Ports

Physical Planning

Accesser	FORM FACTOR 1u rack mounted DIMENSIONS (W×H×D) 17" × 1.7" × 26.8" WEIGHT 41 lbs (18.6 kg) POWER 650W redundant hot-swap; 100/240AC power
Slicestor	FORM FACTOR 1u rack mounted DIMENSIONS (W×H×D) 17" × 1.7" × 19.8" WEIGHT 40 lbs (18.6 kg) POWER 300W; 100/240AC power
Manager	FORM FACTOR 1u rack mounted DIMENSIONS (W×H×D) 17" × 1.7" × 26.8" WEIGHT 40 lbs (18.6 kg) POWER 650W redundant hot-swap; 100/240AC power

Environment

Operating Temperature	10 to 35°C (50 to 95°F)
Operating Humidity	8% to 90% (non-condensing)
Non-Operating Temperature	-40 to 70°C (-40 to 158°F)
Non-Operating Humidity	5% to 95% (non-condensing)

Standards Compliance

Compliance	RoHS
Regulatory Approval	FCC Class A, VCCI, CE, UL

