



# open-e DSS SAN Storage Virtualisation

## Open-E® Data Storage Server (DSS™)

### ADMINISTRATION

Web-based Graphical User Interface  
Remote Access for Console  
Automated Updating of OS  
Task Manager and Schedule Manager

### NETWORK MANAGEMENT

DHCP Client  
Multiple Network Interface Card Support  
Teaming/Bonding (including Adapter Fault Tolerance)  
10 Gb Ethernet Support  
Proxy settings  
IP-sec  
Jumbo Frames Support

### STORAGE MANAGEMENT

Software iSCSI Initiator  
Software RAID 0, 1, 5, 6 with E-Mail Notification  
Multiple Hardware RAID Controller Support  
Multiple FibreChannel HBA Support (initiator & target mode)  
Support for over 2TB Physical and Logical Volumes  
Support for over 16TB Logical Volumes (in 64-bit mode)  
Multiple Snapshot  
Online Logical Volume Expansion  
Support for Online Capacity Expansion  
Volume Replication

### MONITORING

Hardware Monitoring  
SNMP v2, v3  
E-Mail Notification

### HARDWARE SUPPORT

Multiple CPU Support (32x)  
UPS and Network UPS Support

### SPECIFIC NAS FUNCTIONALITY

Data Replication  
Windows Active Directory  
Support for Network Information Service  
Internal and External LDAP  
ADS & NIS User Synchronisation  
File System with Journaling Support  
User and Group Quota Control

### SUPPORTED NETWORK CLIENTS

Microsoft Windows, Linux, Unix, Mac OS 8.0, 9.0, X, 10.4

### SUPPORTED NETWORK FILE PROTOCOL

SMB/CIFS, FTP, Secure FTP, HTTP, Apple Talk, NFS v2, v3

### SPECIFIC iSCSI FUNCTIONALITY

IP Address Restrictions for a Target  
CHAP User Management  
MPIO Support  
iSCSI Failover\*\*

### BACKUP and RESTORE

Local Backup  
Integrated Backup System  
NAS Data Replication  
Virtual Tapes  
Support for Tape Libraries, Auto-loader  
Tape Retention Time  
**NEW!** WORM support (Write



is a unified file and block-level storage management software application, with support for IP (GbE and 10GbE), Fibre Channel and Infiniband network interfaces. DSS offers NAS, iSCSI and Fibre Channel (both target and initiator) functionality in a single application.

Open-E DSS is a cost-effective, reliable storage platform with many usage models including file sharing, backup and recovery, storage consolidation, and disaster recovery.

Open-E DSS is designed with both the simplicity and ease-of-use demanded by SMB users, and the advanced features required by Enterprise users. Cost effective solutions such as Automatic Failover for high availability clusters, Remote Replication for disaster recovery and multiple scheduled Snapshots for data protection are now available to businesses of all sizes.



***DSS is a robust, fourth generation IP-storage software offering from Open-E. With over 10,000 customer installations since 2003, DSS is a stable, field-proven storage platform on which you can trust for deploying your company's business-critical data.***

### Advanced Data Protection Capabilities

The centralisation of valuable data on an Open-E DSS server provides comprehensive and cost-effective data protection. Open-E DSS integrates, at no additional cost, critical features such as, Data and Volume Replication, Snapshot Copy, Automatic Failover and Backup and Restore applications for proactive and comprehensive protection of all stored information.

### Integrated Data and Volume Replication

DSS Data and Volume Replication provide asynchronous and synchronous replication to copy critical company data to a secondary site in case of a disaster. Open-E DSS supports multi-master Data Replication with scheduling, synchronous iSCSI Volume Replication and bandwidth throttling. This increases data availability by creating multiple copies of data on remote servers over local area networks (LANs) or wide area networks (WANs) using the integrated block-based replication technologies.

### Snapshot

Open-E DSS Snapshot Copy provides an instantaneous point-in-time copy of data using a robust copy-on-write functionality. Snapshots can then be used for fast backup and restore of data in case of a loss of a server, human error or natural disaster.

## Automatic Failover

Open-E DSS supports Automatic Failover by using virtual IP addresses via the iSCSI protocol. In the event of either a failure or a scheduled maintenance of the primary server, Open-E DSS can be configured to automatically switch over to a secondary storage server. The Automatic Failover function enhances the fault tolerance level, a key requirement for many business critical environments.

## Intelligent Backup and Restore

Open-E DSS integrates intelligent backup and restore applications for reliable and cost-effective data protection. Support for Virtual Tapes (VT) virtualises disk storage as tape hardware and enables the integration of Open-E DSS with existing archiving policies. DSS also supports industry leading backup software including Veritas, CA, ARCserve and others.

## Network Data Management Protocol (NDMP)

Open-E DSS also features a simple implementation of NDMP. NDMP uses a common data format and architecture for backup and recovery of network file servers, speeding up the process and ensuring interoperability between vendors.

## WORM (Write Once, Read Many)

Open-E DSS also supports WORM technology, allowing data to be permanently written to disk. The data is then read only and can be read any number of times. To prevent accidental modification, data cannot be erased. WORM is a critical feature for many organizations including government agencies and large enterprises.

## Antivirus Software

The Open-E DSS integrated Antivirus software will protect the storage against viruses by scanning for viruses at predefined points in time. Also, files transferred via the SMB/CIFS protocol can be scanned during the write process to the storage device.

## Centralised Management

Open-E DSS includes an easy to use management GUI that provides a centralised view of all data under management. The GUI gives you a view to manage Data Replication, Volume Replication, Backup processes and Snapshot Copy. The GUI enables administrators to more efficiently manage the protection of data and storage across all IT resources.

## Software RAID with Hardware RAID Functionality

The integrated software RAID in Open-E DSS offers many advanced features, which were previously available only on hardware RAID controllers. Today, without additional or dedicated hardware, you can benefit from RAID 0, 1 or even higher performance RAID 5 and 6 (comparable with hardware RAID controllers), with software support for Hot Plug or Hot Spare (in one RAID array).

## OS Reliability and Security

Open-E DSS is a complete operating system that easily installs on any server. Users have said that Open-E DSS one of the easiest to install software storage solutions on the market. Additionally, Open-E Data Storage Server recognises most industry-standard hardware and automatically installs drivers (\*) of SAS and RAID controllers, FC-HBAs and Ethernet cards.

## Optimised OS Performance

Independent tests have shown that the Open-E storage software offers one of the highest data throughput and performance of any product on the market. This makes Open-E DSS especially suitable for network environments with many clients or for storage applications requiring high data throughput and I/O such as video editing and streaming, IPTV and others.

## Secure Updating

To optimise the updating process of Open-E DSS the USB-DOM contains a shadow copy of the OS. In case of an update failure the storage system can be easily switched to the former version of the Open-E DSS.

## Designed for Integration into Heterogeneous Networks

Integration of Open-E DSS into heterogeneous network environment is straight forward. Built-in Windows Domain, NIS or LDAP support allows for easy expansion of the existing IT infrastructure. Additionally, DSS includes heterogeneous support for protocols such as SMB/CIFS, HTTP, NFS, Apple-Talk, FTP and Secure FTP, allowing data to be easily shared among different platforms.

## Seamless Integration and Heterogeneous Support

Open-E DSS provides native integration with Windows® Active Directory, including Group Policy Objects (GPO) and synchronisation of UIDs/GIDs between NAS and NIS Domain.

**For further information on what Storage Virtualisation can do for your business call our storage team today on**

**01344 870062**

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