



# Open-E Data Storage Software DSS V6

**Open-E Data Storage Software (DSS) V6** is a unified file and block-level storage management Operating System, providing support for multiple 1GbE, 10GbE, Fibre Channel and Infiniband network interfaces. Open-E DSS V6 offers NAS, iSCSI and Fibre Channel (both target and initiator) functionality in a single application.

Open-E DSS V6 is a cost-effective, reliable storage platform with many usage models including file sharing, backup and recovery, storage consolidation, and disaster recovery features.

Open-E DSS V6 is designed for simplicity and the ease-of-use demanded by SMB users, along with the advanced features required by Enterprise users. Solutions such as Automatic Failover for high availability clusters, Remote Replication for disaster recovery and multiple scheduled Snapshots for data protection are now cost-effectively available to businesses of all sizes.

# **Open-E DSS V6 Key Benefits**



**New features** such as NAS (NFS) Failover and SSD-Cached RAID Support



Simple to use **GUI based management** enables administrators to more efficiently manage the protection of data and storage



**High stability** and best-in-class performance for optimal reliability



**Exceptional cost-effectiveness** which means enterprise functionality without the enterprise costs



Secure disk based backup and recovery functions, along with Snapshot capability enable fast and reliable **backup and restore** of your data



IP based storage management combines **NAS** and iSCSI functionality for centralized storage and storage consolidation



Easy to implement remote **Replication**, at block or volume level, enables cost-effective disaster recovery

Open-E DSS V6 is a robust, sixth generation IP-storage operating system offered by Open-E. With over 20,000 customer installations since 2003, Open-E DSS V6 is a stable, field-proven storage platform on which you can rely for deploying your company's business-critical data.



#### **Advanced Data Protection Capabilities**

The placement of valuable data on an Open-E DSS V6 powered server provides comprehensive and cost-effective data protection. Open-E DSS V6 integrates critical features such as Data and Volume Replication, Snapshot Copy, Automatic Failover, and Backup and Restore for proactive and comprehensive protection of all stored information.

#### **Integrated Data and Volume Replication**

Open-E DSS V6 provides asynchronous Data Replication (NAS) and Synchronous Volume Replication (iSCSI, NAS, Fibre Channel) to replicate critical company data to a secondary server in case of a failure or disaster. Open-E DSS V6 supports multi-master, Asynchronous Data Replication with scheduling, Synchronous iSCSI / NAS / FC Volume Replication and bandwidth throttling. This ensures 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 V6 Snapshot Copy provides an instantaneous pointin-time copy of data using robust copy-on-write functionality. Snapshots can then be used for fast restore of data in case of human or application error and enable scheduled data replication and incremental backup.

#### **Automatic Failover for NAS (NFS) and iSCSI**

Open-E DSS V6 supports Automatic Failover by using virtual IP Addresses via the iSCSI and NFS protocol. In the event of either a failure or scheduled maintenance of the primary server, Open-E DSS V6 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 critical business environments.

#### **Intelligent Backup and Restore**

Open-E DSS V6 integrates an intelligent backup and restore application for reliable and cost-effective data protection. Thanks to API based script-controlled snapshots administrators can make consistent backups of running databases without special backup agents. Support for creating Virtual Tapes virtualizes disk storage in place of tape hardware and enables much faster backup and restore operations. Open-E DSS V6 also supports industry leading backup software agents including BackupExec®, BrightStor®, Retroclient® and others.

#### **ADMINISTRATION**

Web-based Graphical User Interface Improved design and speed of the GUI Secure Administration Access

Tuning Tools

Remote Access for Console

Multiple Management Levels Automated Update of OS

Rollback to Previous OS

Task Manager

User Interface in German or English

Schedule Manager

#### **NETWORK MANAGEMENT**

Single Network Interface Card Support Multiple Network Interface Card Support

Teaming/Bonding (including Adapter Fault Tolerance)

10 Gb Ethernet Support Infiniband Support

Jumbo Frames Support

#### STORAGE MANAGEMENT

Software iSCSI Initiator

Software RAID 0, 1, 5, 6 with E-Mail Notification Degraded Mode for S/W RAID 1, 5, 6

S.M.A.R.T. with E-Mail Notification

Single and Multiple Hardware RAID Controller Support

Multiple FibreChannel HBA Support (initiator mode)

Multiple FibreChannel HBA Support (target mode)

Support for Logical Volumes over 16 TB

Multiple Snapshots (multiple active snapshots per one LV at a time)

Multiple Logical Volumes and Groups Online Logical Volume Expansion Support for Online Capacity Expansion

Built-in, SNMP based monitoring system

#### STORAGE MANAGEMENT / REPLICATIONS

Synchronous Volume Replication over LAN with iSCSI Failover Synchronous Volume Replication over LAN with NAS (NFS) Failover\*\*\*\* Data Replication over LAN

Data Replication over WAN

#### **MONITORING**

Hardware Monitoring

SNMP v2, v3 E-mail Notification

Log Function

#### HARDWARE SUPPORT

**NEW!** SSD-Cached RAID Support Multiple CPU Support (32x) UPS and Network UPS Support SPECIFIC NAS FUNCTIONALITY

NEW! NFS Failover\*/\*\*\*

Windows Active Directory / Primary Domain Controller

Support for Network Information Service (NIS) Internal and External LDAP
File System with Journaling Support

User and Group Quota Control

Antivirus

SUPPORTED NETWORK CLIENTS
Microsoft Windows, Linux, UNIX, Mac OS 8.0, 9.0, X

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\*

SCSI-3 Persistent Reservation Support

#### **BACKUP UTILITY**

Local Backup

Integrated Backup System

Virtual Tapes

Support for Tape Libraries, Autoloaders Tape Retention Time

WORM Support (Write Once Read Many)

NDMP v3.0 Support (Network Data Management Protocol)\*\*

USB Storage Support for Dynamic Disk

Backup-Agents (Backup Exec®, Retrospect®, BrightStor®)

#### **OTHER**

Installable Version

Improved, Modular Software Architecture

Help feature with search and index

Extended save and restore settings

Connection Status

Session Management

Initially Supported Storage Capacity 4/8/16\*\*\*/Unlimited (TB)

## **New Features of Open-E DSS V6**

#### NAS (NFS) Failover

If the primary storage server fails, the secondary one automatically takes over seamlessly and storage clients continue to operate without noticing the failure.

SSD-Cached RAID support

With the addition of SSD a significant I/O performance boost is provided. Currently Adaptec maxCache™ and LSI MegaRAID CacheCade™ are supported.

NEW!

#### Software RAID with **Hardware RAID Functionality**

The integrated software RAID in Open-E DSS V6 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, 5 and 6 - with support for Hot Plug or Hot Spare.

#### Compatibility and easy Installation

Open-EDSS V6 recognizes most industry-standard hardware and automatically installs drivers (\*\*\*\*\*) for SAS and RAID controllers, FC-HBAs, and Ethernet cards. Additionally, Open-E DSS V6 is a complete operating system that easily installs on any server. Users have said that Open-E DSS V6 is one of the easiest to install software storage solutions on the market.

## Optimized OS Performance

Independent tests have shown that Open-E DSS V6 offers one of the highest data throughput and performance levels of any product on the market. This makes Open-E DSS V6 especially suitable for network environments with many clients or for storage applications requiring high data throughput and I/O such as server virtualization, video editing and streaming, IPTV and others.

#### Secure Updates

To optimize the software update process, the system retains copies of one or more previous software versions. In the unlikely event of an update failure the storage system can be easily rolled back to the former version.

## **Designed for Integration into Heterogeneous Networks**

Integration of Open-E DSS V6 into heterogeneous network environments takes no more than a few minutes. Built-in-, Active Directory Services integration, NIS and External or Internal LDAP support allows for easy implementation with existing IT infrastructures. Additionally, Open-E DSS V6 includes support for heterogeneous protocols such as SMB/CIFS, HTTPS, NFS, AppleTalk, FTP, FTPS, and FTP over SSH, allowing data to be easily shared among different platforms.

\*\*\*\*\* For supported hardware, please visit www.open-e.com/service-and-support/product-compatibility