# Open-E Data Storage Software DSS V7

# Open-E Data Storage Software (DSS) V7

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 V7 offers NAS, iSCSI and Fibre Channel (both target and initiator) functionality in a single application.

Open-E DSS V7 is a robust, award-winning enterprise storage application which offers excellent compatibility with industry standards, a wide variety of supported hardware, and is easiest to use and manage. Additionally, it is one of the most stable solutions on the market and an undisputed price performance leader. Open-E counts for over 27,000 installations in Fortune 500 organizations world-wide in over 100 countries for over a decade.

Open-E DSS V7 is designed for simplicity and ease-of-use, as demanded by SMB users, along with the advanced features required by Enterprise users. These features include solutions such as the new Active-Active Failover for iSCSI Volumes in high availability clusters, Remote Replication for disaster recovery and multiple scheduled Snapshots for data protection.

# **Open-E DSS V7 Key Benefits**



Robust, Award-Winning Storage Application Supports both legacy and modern hardware, popular backup software and appliance API.



Excellent Compatibility with Industry Standards Full iSCSI, Fibre Channel and NAS support, network client protocols supporting all popular operating systems (Windows, Mac, Linux), and backup agents.



### **Easiest to Use and Manage**

Easy configuration with wizard, task and schedule manager, e-mail notifications, automated OS updates and rollbacks.



#### The Most Stable

Based on Linux industry proven for its stability, the most stable journaling file system runs on its own independent OS making purchase of host OS unnecessary.



#### **Price Performance Leader**

Greatest storage features for an affordable price.



# **NEW:** Double Performance with Active-Active Failover for iSCSI Volumes

With Open-E's new DSS V7 Active-Active iSCSI Failover Feature Pack you can double the performance of your storage system, increase sequential read and write performance by 100% and shorten switching time almost twice - when compared to Active-Passive. Additionally, you can better utilize your network resources since the read, write and replication traffic can be balanced on both nodes. Active-Active iSCSI Failover feature enables you to simultaneously run volumes in the active mode on both cluster nodes. If one node fails, the other one takes over automatically and all application services continue to run without interruption. Once the failed node is available again, the administrator can move back the activity of selected volumes.

# **Advanced Data Protection Capabilities**

The placement of valuable data on an Open-E DSS V7 powered server provides comprehensive and cost-effective data protection. Open-E DSS V7 integrates critical features such as Data and Volume Replication, Snapshot Copy, Automatic Failover, and agents-based Backup and Restore for proactive and comprehensive protection of all stored information.

# **Integrated Data and Volume Replication**

Open-E DSS V7 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 V7 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- and file-based replication technologies.

# Snapshot

Open-E DSS V7 Snapshot Copy provides an instantaneous pointin-time copy of data using robust copy-on-write functionality. Snapshots can then be used to fast restore data in case of human or application error and to enable scheduled data replication and incremental backup.

#### ADMINISTRATION

- Unlimited number of users
- Tips as a user guide
- NEW! Web-based, Multi Language GUI with Status Icons
- Secure Administration Access
- Tuning Tools
- Remote Access for Console
- Multiple Management Levels Automated Update and Rollback to Previous OS
- Task Manager
- » Schedule Manager

#### **NETWORK MANAGEMENT**

- **DHCP Client**
- Single and Multiple Network Interface Card Support
- Teaming / Bonding (including Adapter Fault Tolerance) 10 Gb Ethernet Support
- Infiniband Support
- **Proxy Settings**
- » IP sec
- Jumbo Frames Support
- » Static Routing Manager

#### STORAGE MANAGEMENT

- VMware Virtual NIC and Para-Virtual SCSI to run as Virtual Storage Server
- Software and Hardware 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
- Hardware RAID Controller Support
- FibreChannel HBA Support (initiator and 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
- Built-in LSI RAID Manager
- » Support for Automatic Session Reassignment (ASR) for FC and iSCSI protocols
- SSD Caching Support

#### STORAGE MANAGEMENT / REPLICATIONS

- Synchronous Volume Replication over LAN
- Data (file) Replication over LAN and WAN
- Fast initial Volume Synchronization
- » Volume Replication Tuning

#### MONITORING

- Hardware Monitoring
- » SNMP v2, v3
- » E-mail Notification
- » Log Function

#### HARDWARE SUPPORT

- SSD-Cached RAID Support (LSI or Adaptec) **NEW!** Multiple CPU Support (up to 128)
  UPS and Network UPS Support

- » Liquid Crystal Display (LCD) Panel Support

#### **SPECIFIC NAS FUNCTIONALITY**

- Windows Active Directory / Primary Domain Controller
- Support for Network Information Service (NIS)
- Internal and External LDAP
- » ADS and NIS User / Group ID Synchronization
- File System with Journaling Support
- User and Group Quota Control

#### SUPPORTED NETWORK CLIENTS

» Microsoft Windows, Linux, UNIX, Mac OS 8.0-10.5.8, X

#### SUPPORTED NETWORK FILE PROTOCOLS

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

#### SPECIFIC ISCSI FUNCTIONALITY

- NEW! Active-Active iSCSI Failover (seperate Feature Pack)
- **NEW!** Improved Active-Passive Failover Configuration **NEW!** Improved iSCSI Failover Configuration
- IP Address Restrictions for a Target
- **CHAP User Management**
- MPIO Support

BACKUP UTILITY

- » SCSI-3 Persistent Reservation Support » Session Management
- » WORM Support (Write Once Read Many)
- NDMP v3.0 Support (Network Data Management Protocol)\*\* » Backup-Agents (Backup Exec®, Retrospect®, BrightStor®)

- Setup Wizard
- Extended save and restore settings
- » Connection Status
- » Remote Support (on demand)
- » Initially Supported Storage Capacity 4/8/16\*\*\*/Unlimited (TB)

# **NEW Features of Open-E DSS V7**

## Active-Active Failover for iSCSI Volumes

(separate license key) for enabling Active-Active mode on two cluster nodes simultaneously in order to ensure better load balancing and an improved overall performance.

# **Improved Active-Passive Failover** functionality

# Improved iSCSI Failover Configuration

for a fast and comfortable failover setup in high availability environments.

**New improved GUI with Status Icons** for an easy overview of implemented hardware.

**Increased number of supported CPUs** 

Full focus on 64-bit Architecture

# **Software RAID with Hardware RAID Functionality**

The integrated software RAID in Open-E DSS V7 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-E DSS V7 recognizes most industry-standard hardware and automatically installs drivers (\*\*\*\*) for SAS and RAID controllers, FC-HBAs, and 1 and 10Gb Ethernet cards. Additionally, Open-E DSS V7 is a complete operating system that easily installs on any server. Users have said that Open-E DSS V7 is one of the easiest to install software storage solutions on the market.

# Optimized OS Performance

Independent tests have shown that Open-E DSS V7 offers one of the highest data throughput and performance levels of any product on the market. This makes Open-E DSS V7 especially suitable for network environments with many clients or for storage applications requiring high data throughput and I/O such as server virtualization, cloud computing, video editing and streaming, IPTV and others.

# Designed for Integration into **Heterogeneous Networks**

Integration of Open-E DSS V7 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 V7 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