

open-e JovianDSS

Software Defined Storage

Open-E JovianDSS is a ZFS- and Linux-based Data Storage Software designed especially for enterprise-sized Software Defined Storage environments. With its unique features, the product ensures highest data reliability and integrity with optimal data storage, protection and recovery. The software addresses the needs of Enterprises, Data Centers and Cloud Providers seeking a unified NAS and SAN solution with Off-site Data Protection, consistent Snapshots, Thin Provisioning, Compression, Deduplication and more.

Native backup strategy

Open-E JovianDSS Off-site Data Protection

Open-E JovianDSS combines several technologies to create the Off-site Data Protection feature - a strategy for Backup, Archiving and Disaster Recovery that allows an instant restore of crucial company data in case of an unexpected disaster. It enables consistent Snapshots for VMware virtual machines and asynchronous replication to local or remote destinations. The rotational Snapshots are stored according to a retention-interval plan for flexible data archiving that can be customized to specific user needs. Additionally, Open-E JovianDSS with Off-site Data Protection does not require any backup agent which makes additional third-party backup solutions obsolete.

Suitable for all High Availability storage setups

Open-E JovianDSS enables you to architect High Availability storage environments via SMB/CIFS, NFS and iSCSI protocols. The software is the answer to almost any storage requirement, such as SAN and NAS installations, enterprise virtualization solutions or Big Data cluster environments. High Availability Clusters with Ethernet, SAS or Fibre Channel connections ensure reliability and redundancy by eliminating single points of failure. The Standard HA Cluster Feature Pack (SAS, FC) for Open-E JovianDSS enables High Availability for two server nodes connected to one or more JBODs. With the Advanced Metro HA Cluster Feature Pack (SAS, FC, Ethernet) you can achieve High Availability for two server nodes over Ethernet LAN of up to 80km, using a storage at each location (Dual Storage).

Professional Open-E Partner Network and support

The software, as well as all related licenses and support products, are available through Open-E's experienced Partners, as well as the Open-E Online Store. Users are supported with trained Open-E JovianDSS Certified Engineers to offer customers not only superior performance and usability by the product, but also professional support by best-in-class specialists.



Open-E JovianDSS contains the following Enterprise-grade benefits:

- **High Availability**
Active-Active or Active-Passive dual node HA Cluster for iSCSI / NFS / SMB over Ethernet, Fibre Channel and SAS, user authentication support for SMB in cooperation with Active Directory
- **Data Protection**
Off-site Data Protection, offering built-in backup of everything and instant Disaster Recovery, as well as multiple backup destinations with user-defined Interval-Retention plans
- **Reliability and redundancy**
Atomic Transaction Writes, Data and Metadata Checksumming, Self-Healing, N-Mirrors, up to Triple-Parity, optionally mirrored boot medium
- **Data Optimization**
Very efficient default LZ4 compression and optional In-line Deduplication
- **Data Acceleration**
Dynamic caching between RAM, SSD and HDD, most recent and most frequent (hot data) cache algorithm, random to sequential conversion on writes
- **Data Virtualization**
Default Thin and Over Provisioning with pooled storage model, unlimited and instant Snapshots and Clones
- **Scalability**
Up to about 5PB in single namespace with the ZFS technology on Linux OS
- **Unified storage model**
iSCSI, NFS, SMB/CIFS, OpenStack-Cinder
- **Quick and simple storage management**
Easy-to-use WebGUI with intuitive navigation, Console UI and scriptable CLI / API and REST API
- **Convenient monitoring**
Open-E JovianDSS monitoring system (on WebGUI, SNMP), as well as monitoring with industry-standard platforms like Nagios or Check_MK
- **Flexible technical support options**
Technical support provided by Open-E Partners or directly by Open-E's Support Team
- **Robust storage environments and compatibility**
Open-E JovianDSS Certified Servers - tested, benchmarked and certified in our labs

Open-E JovianDSS specifications

Specifications	Description
Base OS	Linux
File system	ZFS
Architecture	64-bit
Minimum hardware requirements	4 CPU cores 16GB RAM HBA SAS / FC
Connections and storage protocols	Up to 40GbE 40Gbps IP over InfiniBand iSCSI NFS v3 SMB up to 3.0.2 / CIFS
Data integrity and availability	ZFS 256-bit block level checksums Mirror (eq. RAID 10), RAID-Z1, -Z2, (eq. RAID 5, 6), -Z3 Off-site Data Protection (ODP) Active-Active or Active-Passive dual node HA Cluster for iSCSI, NFS and SMB Self-healing against silent data corruption Disk Multipathing
Data optimization	RAM, SSD and HDD hybrid pool Tiered Caching Unlimited Snapshots Unlimited Clones (writable Snapshots) Thin Provisioning Over Provisioning Inline Data Deduplication Inline Compression
Management	WebGUI, Console UI, CLI SNMP and REST API E-mail notification Roll-back to previous configuration
Supported configurations	Single node HA Cluster for NFS, iSCSI and SMB / CIFS Standard (Rack) Advanced (Metro) HA Cluster with disks via SAS, FC and Network Attached Drives Off-site backup unit
Supported environments	VMware, Microsoft, Citrix, Linux, RHEL, MacOS, XEN, OpenStack
Licensing and feature packs	One license per server Additional storage license depending on capacity Open-E JovianDSS Standard HA Cluster Feature Pack (SAS, FC) Open-E JovianDSS Advanced Metro HA Cluster Feature Pack (SAS, FC, Ethernet)

About Open-E

Open-E is a well-established developer of IP-based storage management software. Open-E JovianDSS, Open-E DSS V7 and the free Open-E DSS V7 SOHO are robust, award-winning enterprise storage applications which offer excellent compatibility with industry standards, and are the easiest to use and manage. Additionally, they are some of the most stable

solutions on the market and undisputed price performance leaders. Open-E accounts for over 30,000 installations worldwide and has received numerous industry awards and recognition. Thanks to its reputation, experience and business reliability, Open-E has become the technology partner of choice for industry-leading IT companies.