

Nominee: Open-E

Nomination title: One Software for Data Storage, Backup & Disaster Recovery

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 – for optimal data storage, protection and recovery. It addresses the needs of enterprise users seeking a unified NAS and SAN solution with thin provisioning, compression and duplication.

Open-E JovianDSS was designed to benefit from all capabilities the ZFS technology offers. The ZFS file system used in Open-E JovianDSS is the most scalable and flexible 128-bit file system. As in ZFS there are no reachable limits, the software allows for unlimited file size as well as unlimited scalability. Thanks to easy and intuitive storage extensions Open-E JovianDSS enables unlimited storage capacity and unlimited compatibility, as the Linux architecture provides Open-E JovianDSS with much better compatibility than competing products based on other operating systems. Moreover, warranted data integrity comes standard, which means that self-healing check-sums, atomic writes and transactional copy-on-write I/O operations eliminate silent data corruption and ‘write-holes’.

Open-E JovianDSS uses shared storage to provide unlimited options to architect HA storage environments. It is the answer to almost any storage requirement, either as a single node, a virtualized HA setup or a Big Data cluster environment. This way, users can benefit from a full-service, Software Defined Storage package which can be customized according to individual needs.

Open-E JovianDSS includes failover functionality for SMB, NFS and iSCSI enabling you to set up High Availability Load-Balanced Storage Clusters that ensure reliability and redundancy through failover in case of a server crash. By using the Open-E JovianDSS Advanced Metro High Availability Cluster Feature Pack, you can create High Availability for two server nodes over Ethernet using a storage at each location (Dual Storage). Since the connection of cluster communication and data mirroring between nodes works over Ethernet, the nodes might be located far from each other as a (stretched) metro storage cluster. It can be 50 miles (80 km) in case of point to point fibre optic connection, or even more when using an additional switch between nodes - provided that network latency will not exceed 5 ms. The Feature Pack also supports configurations of the Open-E JovianDSS Standard HA Cluster Feature Pack. By using the Open-E JovianDSS Standard HA Cluster Feature Pack, you can enable High Availability for two server nodes connected to a single storage, and one or more JBODs.

Another feature of the Open-E JovianDSS Software Defined Storage is the On- and Off-site Data Protection. It provides an innovative strategy for Backup and Disaster Recovery by enabling asynchronous replication to local sites or co-locations. This way, servers with important data can be easily and instantly restored in case of an unexpected disaster. The functionality allows to create consistent snapshots and to asynchronously replicate snapshot deltas to local or remote

destinations. Additionally, replication tasks can be scheduled according to the specific user requirements. Encryption enhances security even further while buffered data replication significantly increases the efficiency.

On- and Off-site Data Protection effectively prevents data loss and minimizes the recovery time with high-speed Disaster Recovery, lowering the RPO and RTO in every backup strategy. The software does not require installing any backup agent.

High Availability Load-balanced Cluster for NFS and iSCSI provides highest data security with failover functionality enabling quick and easy management of all cluster functionalities. Independent VIP (Virtual IP Addresses) feature guarantees no downtime during maintenance, native compression and inline data deduplication drastically reduce physical disk usage while RAM and SSD cache tier hot data between each other to increase performance. Additionally, disk redundancy in Open-E JovianDSS enables mirrors and RAID arrays with up to 3 parity disks ensure data safety and uptime. Hybrid storage pools enable to utilize the I/O performance of SSDs and high capacity of HDDs in a single system.

In most legacy solutions, the limit for snapshots is set to 255. Open-E JovianDSS allows unlimited snapshots and auto-snapshots that can be remotely activated via CLI and enable easy cloning, versioning and backup. Storage and service reports generate automatic and periodic reports to manage the performance of the system and integrate it into SNMP based management solutions.

Thin provisioning in Open-E JovianDSS virtually simulates a bigger volume than is physically available, and allows growing it on the fly without the need to re-format the file-system.

The software also includes VMware vSphere Storage APIs - Array Integration (VAAI) for data acceleration.

These features are directly accessed through an intuitive web-based GUI simplifying the administration of storage servers and eliminating the need of using a complicated command line interface

With Open-E JovianDSS, we continue to provide innovative licensing and pricing for our products. There are no hidden costs as often occur with competitive offerings and customers only need to pay for the capacity they really use.

Each Open-E Partner is equipped with Open-E JovianDSS Certified Engineers who are in close contact with Open-E's teams, ensuring highest quality system designs and fast reaction times. Additionally, technology agreements ensure delivering compatible, interoperable hardware systems.

Open-E JovianDSS should be considered for the award as it provides enterprise users the highest level of performance with unlimited capacity and volume size. Open-E JovianDSS comes complete with advanced features and is built on a Linux platform offering extensive flexibility in choosing the hardware that meets individual business requirements. On- and Off-site Data Protection best-in class provides a strategy for Backup, Archiving and Disaster Recovery. This way, customers are

able to use solutions that require exceptional security and redundancy without compromising performance. The software also comes standard with quick and professional software support in client's respective language. Users can achieve High Availability by joining dual controllers, shared storage, and load balanced clusters. What's more, hardware can be customized according to performance, network and capacity requests. It is the answer to almost any storage requirement, either as a single node, a virtualized high availability setup or a Big Data cluster environment.

Why nominee should win

- **Open-E JovianDSS utilizes all features provided by the ZFS technology to the fullest offering superior stability and performance**
- **It provides unlimited file size, unlimited scalability and compatibility as well as warranted data integrity and usable capacity license for mirrored arrays (RAID 10)**
- **Off-site Data Protection which enables asynchronous replication to local sites or co-locations with consistent snapshots, secure archiving, encryption and buffering.**
- **It contains an easy-to-use WebGUI with intuitive navigation and scriptable CLI/API for quick and simple storage management**
- **High Availability with Advanced Metro High Availability cluster for SMB, NFS and iSCSI**