



TWP Open-E JovianDSS System

Company data continues to explode and having absolute control over your valuable content and access is more critical than ever. That's why organizations are building private clouds with TWP Open-E JovianDSS System powered by Open-E JovianDSS - a storage solution that leverages security, virtualization and cost benefits.

With TWP Open-E JovianDSS System you won't find yourself locked into proprietary storage platforms that can't be easily expanded or upgraded. By using selected commodity hardware in combination with a professional storage software operating system, we are able to create a professional storage solution for a reasonable price - without sacrificing quality or performance.

- Private cloud solution
- Easy-to-deploy
- Best value for a reasonable price
- Recommended for VDI

We recommend this easy to deploy solution particularly for VDI. In addition to offering enhanced data protection, VDI improves IT efficiency by reducing overall administrative and management tasks. Unlike traditional infrastructures, TWP Open-E JovianDSS System allows the integration with VMware, Citrix and Microsoft Hyper-V environments.

- Optimized for Private Cloud
- Guaranteed data protection
- Enhanced storage performance
- Hardware independence
- Flexible scalability
- Thin provisioning
- Tiered RAM and SSD Cache
- Unlimited number of snapshots and clones

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Guaranteed data protection

Data is your most important resource. This is why the JovianDSS based **TWP Open-E JovianDSS System** includes several mechanisms for data protection. Automatic and scheduled multi-layer data integrity checks ensure data consistency, while unlimited Snapshots and Clones make it easy to implement a disaster protection strategy and to instantly roll back to a previous point-in-time. At the same time a scheduled self-healing mechanism fixes malfunctions and automatically restores full data redundancy in the system. Even when a disk fails, the software-based spare function offers one disk to several RAID arrays, saving you money on extra hardware without compromising data safety.

Enhanced storage performance

Nowadays, enterprise storage has to provide big capacity; while also being fast, affordable and include reliable support. This is exactly what **TWP Open-E JovianDSS System** has to offer. It is an innovative Hybrid Storage System which fuses the capacity of HDDs with the performance of SSDs in a single solution that offers high performance while lowering cost. Additionally, by leveraging capacity optimization technologies and advanced tiered SSD and RAM caching, **TWP Open-E JovianDSS System** provides an overall efficiency boost and increased cache performance. On top of that, powerful tuning tools allow the system to optimize on I/O heavy databases or high throughput video editing equally well and predefined profiles save annoying testing time.

Hardware independence

Commodity hardware can save you a significant amount of money and allows you to customize a server system specific to your needs. But you need to be an expert if you want to create a solution which is perfectly adapted to the requirements of your environment. With the **TWP Open-E JovianDSS System** we benefit from the best component compatibility on the market. This way we can choose the hardware you need – depending on price, performance, quality and availability – and you won't waste money on unnecessary components. True hardware independence.

Flexible scalability

The **TWP Open-E JovianDSS System** will let you experience unlimited flexibility and minimize unappreciated downtime. JovianDSS uses a 128-bit file system that includes unlimited snapshots for easy backup, unlimited clones for sharing Snapshot content - with volume sizes up to one Zetabyte, as well as unlimited amount of disks which can be increased on the fly without effort by using thin provisioning. There are no limitations and you may easily control the total cost of ownership and expand your storage infrastructure as data grows.



Perfect Storage for Private Clouds

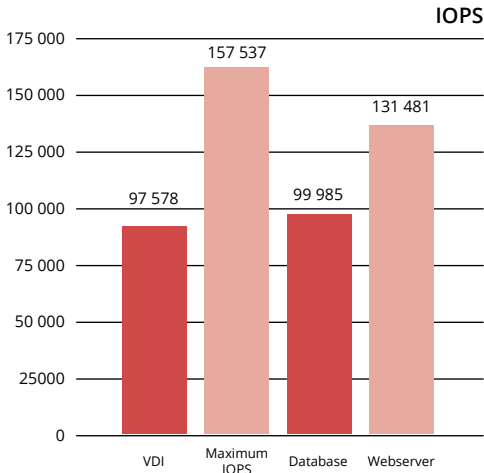


Optimized for Private Cloud

A private cloud combines flexibility and scalability of a public cloud with the isolation and security required by many large organizations, since the storage system is located at your desired location. It is an ideal solution for service providers (MSPs), independent software vendors (ISVs), and resellers that manage resources for their end users. With **TWP Open-E JovianDSS System** you get to design your own redundant environments and can easily distribute access to resources across various teams in your organization. It is a very secure solution that gives you total control over your data and allows you to grow as your company grows.

Thin provisioning

TWP Open-E JovianDSS System uses thin provisioning to improve your storage utilization by allocating just the exact amount of server space at the time it is required. You'll eliminate the cost of unused storage space and never again have to pre-allocate storage up front and buy too much hardware. In **TWP Open-E JovianDSS System** there is no need for evaluating storage requirements and take the risk of rebuilding the entire system when it runs out of space. With this system it is easy to manage storage capacity and set notifications when physical space shrinks. This is a highly scalable solution, just add physical disks as your data grows.

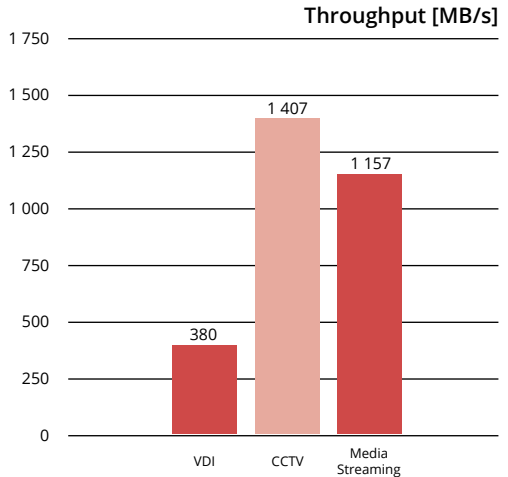


Tiered RAM and SSD Cache

JovianDSS based **TWP Open-E JovianDSS System** works as a tiered storage solution - dramatically speeding up access to frequently accessed files. It uses a caching algorithm to cache "often used" and "recently used" data separately, and provides the best performance for your storage by tiering hot data between RAM and SSD Cache. In **TWP Open-E JovianDSS System** data is always saved on HDDs and only Hot Data is stored in RAM and SSD, to ensure data safety and increase performance.

Unlimited number of snapshots and clones

Every **TWP Open-E JovianDSS System** allows an unlimited number of snapshots and clones - greatly simplifying back-ups, replications and data recreation in case of accidental deletes and viruses. Snapshots are read-only points in time and allow to easily roll-back. They are a must-have option for effective disaster recovery scenarios and in **TWP Open-E JovianDSS System** you may schedule snapshots for months, weeks, hours or even minutes. Whereas, a clone is a writable copy of a snapshot and allows to easily duplicate virtual machines and provides scalability for virtual networks - instantly and without the necessity of coping data.



Details

Hardware information

	Default configuration	Options
CPU	2 x Intel® Xeon®E5-2640V2 8-core Processor 2.0GHz	All Intel® Xeon® E5-2600-V2 Certified CPU's
RAM	8 x Certified 16GB DDR3 1600mhz ECC Registered	up to 1TB DDR3 1333mhz ECC Registered
RAW Capacity	6 TB	up to 72TB Raw Capacity (7200RPM) up to 14.4TB Raw Capacity (10K) up to 6TB Raw Capacity (15k)
Read Cache	400 GB	All Intel® DC 3700 Serie SSD's
Write Log	200 GB	All Intel® DC 3700 Serie SSD's
Hard drive Interface	SAS 6 Gb/s	-
Network Interface	4 x Intel i350 Gigabit Ethernet port 2 x Intel X520 SFP+ port	4 expansion slots available for: Intel i350-T2/T4 gigabit card Intel X520-DA2 Dual 10GB card Other brands like Mellanox, Chelsio can be added if needed.
Form Factor	2U Rack (16.93" x 27.95" x 3.44")	-
Weight	35KG	-
Power	2 x Supermicro 920W AC-DC Platinum Certified power supplies	-
Fan	3 x Redundant and hot-swap cooling fans	-
Power Consumption	Idle: 280 W Load: 360 W	-

About TWP

TWP Computers BV is specialized in (rack mount) servers and storage solutions. Based in Amsterdam, we are located near the most important data centers in The Netherlands. Our customers consist of internet providers, hosting companies, universities and IT related businesses in Europe and the USA. Founded in 1993, TWP Computers BV has many years of experience and is a reliable partner in the IT industry. TWP Computers BV is official distributor of Supermicro, Intel Platinum Partner and Silver Partner of Open-E. Because of our large stock we can ship servers and equipment within a couple of hours to any datacenter in The Netherlands. Next day delivery is offered for most European destinations.

About Open-E

Open-E is a well-established developer of IP-based storage management software. Open-E JovianDSS and Open-E DSS V7 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 27,000 installations world-wide and has received numerous industry awards and recognition. Thanks to our reputation, experience and business reliability, Open-E has become the technology partner of choice for industry-leading IT companies.

For further information about Open-E, its products and partners, visit <http://www.open-e.com/>

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About the Open-E JovianDSS Server Certification

Open-E JovianDSS delivers software-defined storage which results in a wide variety of different hardware requirements such as performance range, capacity capability, and connectivity. To ensure compatibility and robust storage environments, all selected partners offer storage systems which are tested, benchmarked and certified by Open-E. This way, customers are able to use solutions that require exceptional security and redundancy, without compromising performance.