



## CC Storageline 380 G9

With CC Storageline 380 G9 based on Open-E JovianDSS, businesses can implement Software-defined Storage and virtualization in IT environments. The solution is dedicated for the SMB sector and delivers continuous availability, high performance and simplified management.

Suitable applications:

- Virtual Desktop Infrastructure (VDI)
- Backup
- Microsoft / SQL servers
- Databases

As the requirements for I/O performance are growing constantly, in CC Storageline 380 G9 you will find SSD caching. Typical SAS HDDs are quickly overexerted because they have much lower I/O per second when compared to SSDs.

On the other hand, full-SSD storage systems have lower capacity and are very expensive. With SSD caching, organizations have the possibility to combine advantages of SSDs (high I/O performance and low latency) with HDDs (high capacity) in one system. This means, that CC Storageline 380 G9 can adapt to many different customer needs.

ComputerCentrum provides professional support with Open-E JovianDSS Certified Engineers and for each project they work in close collaboration with customers: from consulting through deployment and finalization of the project. Even short-term changes during project execution can be easily implemented. The long-standing partnership of ComputerCentrum and Open-E helps customers to achieve their storage goals.



- › Guaranteed data protection
- › Enhanced storage performance
- › Flexible scalability
- › Simplified management
- › Data integrity check
- › In-line data deduplication
- › Tiered RAM and SSD Cache
- › Unlimited number of snapshots and clones

# CC Storageline 380 G9

## High performance with latest technology

### Guaranteed data protection

Data is your most important resource. This is why the Open-E JovianDSS-based CC Storageline 380 G9 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.

### Flexible scalability

The CC Storageline 380 G9 will let you experience unlimited flexibility and minimize unappreciated downtime. Open-E JovianDSS uses a 128-bit file system that includes unlimited snapshots for easy backup, unlimited clones for easy duplication, unlimited capacity 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.

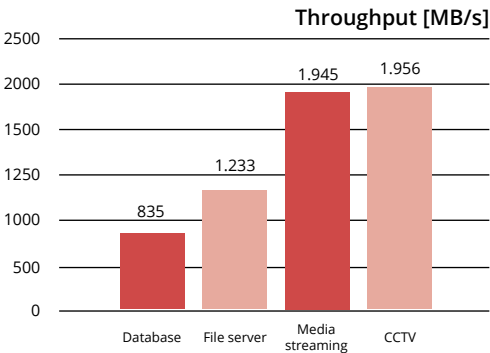
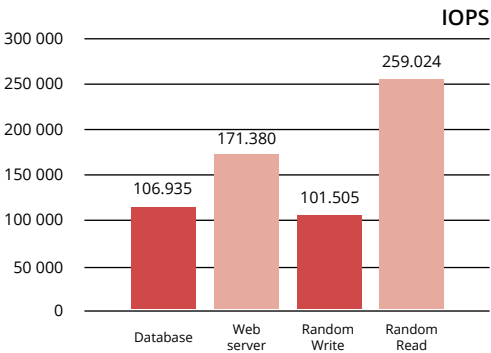


### Enhanced storage performance

Nowadays, enterprise storage has to provide big capacity while also being fast, affordable and include reliable support. This is exactly what CC Storageline 380 G9 has to offer. Open-E JovianDSS-based CC Storageline 380 G9 is an innovative hybrid storage system fusing 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, CC Storageline 380 G9 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.

### Simplified management

Managing Open-E JovianDSS and its extensive features is easy and intuitive compared to many competing solutions on the market. The WebGUI provides a quick overview and management of all storage resources and features. After extensive analyses of storage usage and user interaction the clicks per step in each functionality have been reduced to a minimum, i.e. in creating iSCSI targets or when expanding the size of your storage. This way, you are able to quickly and easily manage CC Storageline 380 G9 with Open-E JovianDSS, barely involving actions of a storage administrator.



# Performance, flexibility and reliability in one solution

## Protect your data, protect your assets

### Data integrity check

The CC Storageline 380 G9 storage system effectively detects data corruption, as even minor integrity violations could cause loss of data. CC Storageline 380 G9 ensures reliability by check-summing individual blocks of data and once faulty blocks have been detected they are automatically rewritten. If the same error is found several times the data blocks are moved to different parts of the HDD. Each read/write is checked automatically plus you can schedule to perform checks on not accessed blocks. All actions are done in atomic writes to ensure consistency of your data and to reduce data loss, even during power cuts.

### In-line data deduplication

The in-line deduplication feature of Open-E JovianDSS-based CC Storageline 380 G9 removes redundant data and minimizes your storage capacity usage. The software checks each block for redundancy in the system, and if it finds a match the new block isn't written; instead, a shortcut leading to the original block is created. Such a system can reach a deduplication ratio of 3:1 or more, which means that if you place 3TB of data on CC Storageline 380 G9 it will only use 1TB of physical disc space. This feature is especially interesting for highly repetitive data, i.e. in VDI, server virtualization or backup, where much higher deduplication ratios can be reached.

### Tiered RAM and SSD cache

Open-E JovianDSS-based CC Storageline 380 G9 works as a tiered storage environment - 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 CC Storageline 380 G9 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 Open-E JovianDSS-based CC Storageline 380 G9 allows an unlimited number of snapshots and clones - greatly simplifying backups, replications and data recreation in case of accidental deletes or viruses. Snapshots are read-only points-in-time and allow for easy roll-back. They are a must-have option for effective disaster recovery scenarios and in CC Storageline 380 G9 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 scale out for virtual networks instantly and without duplicating data.



# CC Storageline 380 G9

## Hardware information:

	Default configuration	Options
CPU	Intel® Xeon® Processor E5-2620 v3 2.40GHz	Second CPU kit
RAM	64GB DDR4 RAM	Up to 768GB DDR4 RAM
RAW capacity	3,6TB	Scalable capacity
Read cache	240GB	Scalable capacity
Write log	240GB	Scalable capacity
Hard drive interface	SAS 6Gb/s	-
Network interface	4 x 1GbE NIC 2 x 10GbE NIC	Scalable bandwidth
Form factor	2U rack (17.54" x 26.75" x 3.44")	-
Weight	18,3kg	-
Power	740W redundant power supplies platinum level (94%)	-
Power consumption	Idle: 88,9W Load: 169,9W	-
Fan	3 x redundant and hot-swap cooling fans	-

## About ComputerCentrum

ComputerCentrum was founded in 1999 as a modern and future-driven company. Today, ComputerCentrum operates from the new location at Hüllhorst, Germany with a qualified sales and service team. As a corporation for IT and information technology we are supporting our business partners in regards to technical as well as commercial matters. Professional and individual consulting, solution-oriented services, delivery of efficient solutions and reliable maintenance of your IT environment is our basis for a trustful and close collaboration.

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## 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/>

## 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.