



TAROX ParX R424s G5



TAROX ParX R424s G5 is a high-performing and scalable Open Storage system. Combined with Open-E JovianDSS, the server offers an excellent price-performance ratio, and a set of Software Defined Storage features for highest data protection and integrity.

In regards to hardware, the server includes a single processor system with Intel® Xeon® E5-1600v3 which delivers even more performance, increased power efficiency and an easy integration in virtual storage environments.

TAROX ParX R424s G5 is especially recommended for:

- **Databases**
- **File servers**
- **Web servers**

Apart from the sophisticated hardware and software, the TAROX ParX R424s G5 is well-supported through the cooperation of TAROX and Open-E, from the initial setup and throughout daily business.

- › **Guaranteed data protection**
- › **Enhanced storage performance**
- › **Hardware independence**
- › **Simplified management**
- › **Data integrity check**
- › **Data compression**
- › **In-line data deduplication**
- › **Tiered RAM and SSD Cache**

TAROX ParX R424s G5 storage solution for Open-E JovianDSS

Open Storage solution with impressive performance



Guaranteed data protection

Data is your most important resource. This is why the Open-E JovianDSS-based TAROX ParX R424s G5 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 TAROX ParX R424s G5 has to offer. Open-E JovianDSS-based TAROX ParX R424s G5 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, TAROX ParX R424s G5 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 Open-E JovianDSS we benefit from the best hardware compatibility on the market and the TAROX ParX R424s G5 uses hardware components which are ideal for performance, reliability and compatibility. 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.

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 TAROX ParX R424s G5 with Open-E JovianDSS, barely involving actions of a storage administrator.

Data integrity check

The TAROX ParX R424s G5 storage system effectively detects data corruption, as even minor integrity violations could cause loss of data. TAROX ParX R424s G5 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.

Data compression

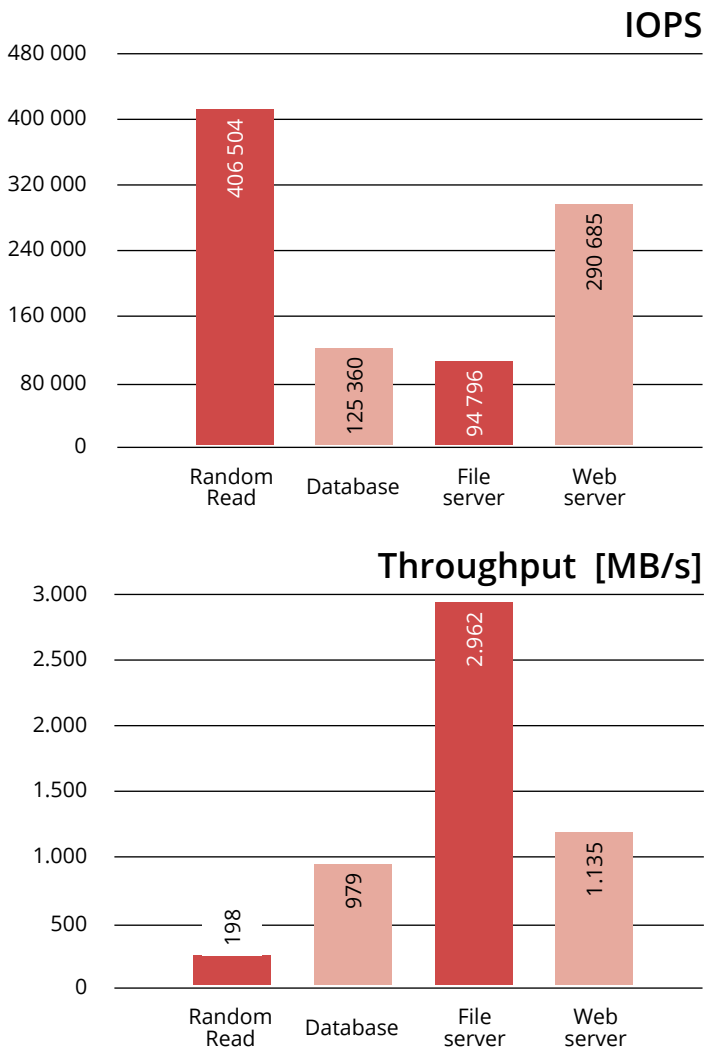
The Open-E JovianDSS-based TAROX ParX R424s G5 offers data compression for minimizing your storage capacity usage. Smaller data blocks means that the system can read and write quicker, ultimately boosting performance and taking less space on your storage. In TAROX ParX R424s G5 you will find resource-friendly compression protocols (lz4) with low system resource utilization at medium compression rates, but also protocols that are able to achieve very high rates for archiving or backup (as gzip-9). Compression in combination with deduplication, virtualization or high availability solutions further reduce acquisition costs, power and cooling costs, and rack space throughout the system lifecycle.

In-line data deduplication

The in-line deduplication feature of Open-E JovianDSS-based TAROX ParX R424s G5 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 TAROX ParX R424s G5 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

The Open-E JovianDSS-based TAROX ParX R424s G5 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 SDD Cache. In TAROX ParX R424s G5 data is always saved on HDDs and only Hot Data is stored in RAM and SSD to ensure data safety and increase performance.



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Hardware information:

	Default configuration
CPU	2 x Intel® Xeon® Processor E5-1650 v3 3.20 GHz
RAM	4 x 16GB
RAW capacity	7.2TB
Read cache	2 x 400GB
Write log	2 x 100GB
Hard drive interface	SAS
Network interface	2 x QLogic 10Gbit
Form factor	19"
Weight	29kg
Power	2 x 1280W
Power consumption	Idle: 19W Load: 1200W
Fan	Redundant



IT-Technologie made im Ruhrgebiet

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 TAROX

TAROX is a leading IT supplier for integrated solutions and consistent product portfolios aimed at SMB customers in Germany, Austria and Switzerland. The company's teams support system houses and retailers with solutions for their B2B and government customers. The know-how of TAROX' Smart Business concept is a combination of its five areas of expertise: machines, distribution, consulting, data and services.

Comprehensive services are provided through manufacturing of own brands, distribution of selected products by world-leading suppliers, and providing complete solutions. This service portfolio is backed by 20 years of experience in combining the perfect hardware and software for customer environments.

The main goal at all times is to provide the relevant information at a reasonable price-performance ratio to ensure smooth business procedures and enhance the value of solutions. Many awards and certifications verify the exceptional reliability of TAROX as well as the satisfaction of their customers, suppliers and industry experts.

The standards of quality at TAROX demand the deployment of suitable systems to provide state-of-the-art IT environments for SMB users. Close contact to the SMB market is the main reason for the specialists at TAROX to develop innovative technology tailored to the specific needs of their clients. Both of the company's CEOs are vouching for this quality.

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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.