

Nominee: ISE 700 series hybrid storage arrays by X-IO Technologies

Nomination title: ISE 700 Series Storage Arrays

X-IO's ISE 700 series hybrid storage arrays are the only true hybrid storage systems to fuse Flash (SSD) and Hard Disk Drives (HDD) together as a single pool of storage, creating the ideal balance of price, performance and capacity.

Right now, the storage market is yearning to be challenged – from IT budgets continually being cut, to data endlessly growing – X-IO's ISE 700 series hybrid storage arrays aim to deliver the Low Total Cost of Ownership (TCO) and capacity needed in almost every market in the global economy. X-IO is calling for anyone implementing storage to start questioning the status quo. With over two decades of experience, X-IO is stressing the importance of vendors who can provide systems that achieve 100% storage capacity utilisation, whilst retaining the best performance – this is at the heart of the ISE 700 series.

The ISE 700 series hybrid storage arrays use patented Continuous Adaptive Data Placement (CADP) software to analyse the behaviour of application I/O and place hotspot data onto flash memory in real time. This enables measurable performance gains to be achieved. The series has been designed specifically for performance-driven applications that require enterprise-class reliability. With four sizes, 7.2TB, 14.4TB, 21.6TB and 28.8TB they can be adapted by businesses to suit individual and varying data needs. The ISE 700 series also benefit from a five-year hardware warranty, with no service call out charges, lowering costs throughout the products lifecycle.

About CAPD

X-IO's algorithms analyse the I/O behaviour of application placing frequently accessed or 'hot data' onto faster SSD memory only if measurable performance gains will be achieved. If this is not the case the CADP technology will keep the data on high-performance HDD, to ensure the more expensive SSD resource is fully optimised and available for performance-driven data. Leveraging X-IO's patented CADP technology, ISE 700 series storage arrays require no tiering policies or manual intervention. This zero-touch approach also delivers and ensures the performance of the device which has been proven to over five years.

Features

An X-IO ISE 700 series hybrid storage array has a number of unique features that set it apart from its competitors:

1. It's performance driven. It is a Fibre Channel-based 3U storage system with over 28TB of usable capacity supporting SAS HDD and Enterprise MLC SSD. It provides true split-second active-active failover for high availability.
2. It uses Continuous Adaptive Data Placement (CADP) technology to provide uninterrupted management of data placement between SSD and HDD devices in real time.
3. It solves core issues for high performance cloud storage by providing predictability in both performance and cost.
4. It decreases the level of manual configuration and intervention needed, offering self start, automatic tuning, phone-home support and automated drive recovery.
5. It benefits from no capacity based charges and a five-year hardware warranty as well as low Total Cost of Ownership (TCO). X-IO is the only storage company willing to stand by its reliability claim with this guarantee. X-IO's 700 series also delivers low power and cooling requirements, lowering costs throughout its lifecycle.

Product Value & Performance

1. Usability

Data warehousing and business intelligence operations are unlocking the value of data at ever-increasing rates, but are hindered by limited storage performance, often relating to Total Cost of Ownership (TCO). The performance demands for virtual desktops and other business applications are so high that storage equipment can comprise 50% or more of the initial solution cost.

An ISE 700 series hybrid storage array provides customers with unmatched value in price and performance for even the most demanding applications. It enables businesses to utilise cloud computing, get three times the number of users on a virtual environment, increase revenue, run database reports that complete in 1/10th the time, move gigabytes of data constantly through the data warehouse, or support thousands of VDI sessions.

2. Value for money

ISE 700 series storage arrays are cost-effective and have incredibly high performance for fluctuating workloads, analytics and reporting. In fact, the ISE 700 series outperforms systems that are up to ten times more expensive due to the effective partnership between SSD and HDD.

3. High performance storage at unrivalled price / performance levels

An ISE 700 series hybrid storage array achieves up to 300,000 IOPS in a single 3U system supporting up to 28.8TB systems, providing an ideal balance of price, performance, capacity and reliability. It has been specifically designed for applications that require enterprise-class reliability, low-latency and high performance.

4. History

Leveraging over 10 years of integration as Seagate and proprietary usage of the HDD, X-IO achieves 2 – 4x the performance of other enterprise, mission critical HDD, far extending beyond the capabilities of low duty cycle SATA.

5. Capacity utilisation

ISE 700 series hybrid storage arrays enable 100% capacity utilisation without the performance issues of traditional systems, which typically hit a performance wall when storage capacity reaches 50-70%.

6. Zero-touch storage

IT staff do not need to manage ISE 700 series hybrid storage arrays as data workloads change throughout the days, weeks, and years, as the unique CADP software continuously manages hot data for ongoing performance improvements.

7. The only five-year warranty in storage

ISE 700 series hybrid storage arrays are backed by a no cost, five-year hardware warranty. X-IO is the only storage vendor to stand by its solutions and offer a guarantee of this length.

8. Application acceleration

ISE 700 series hybrid storage arrays can support thousands of virtual desktops with optimal performance and capacity. Additionally, the ISE 700 series breaks the performance bottleneck often found in the virtual data centre, resulting in far greater consolidation ratios of virtual-to-physical servers.

9. Fast forever

ISE 700 series hybrid storage arrays provide high performance throughout its complete lifecycle due to the way it handles vibration, heat dissipation, data placement and drive reliability. Disk drives within ISE 700 series storage arrays are treated as large, self-healing drives and work congruently, resulting in higher performance and reliability.

With a foundation based on reliability, performance and scalability, X-IO's Intelligent Storage Element (ISE) radically optimises price and operational efficiency. Backed by years of development and research, X-IO's ISE solves real-life storage problems and ensures business continuity of mission critical applications. X-IO's disruptive storage technology delivers greater efficiency to customers using less equipment and at a lower cost.

Stuart Hartley, Storage Architect, Kingfisher, explained: “In addition to being the only solution that could deliver the performance we needed, X-IO’s unique ‘Zero Touch’ approach and five-year warranty also significantly reduced our storage costs. Compared to the other storage vendors it was a saving of 40% over the five years. This means we can continue to grow, safe in the knowledge that we are fully supported by a high performance storage solution.”

Earlier this year, after a second tender process, Kingfisher added two X-IO ISE 700 series storage arrays, which use a combination of enterprise SSD and HDD to create a hybrid solution, to support the company’s virtualised desktop infrastructure programme (VDI). Although the VDI programme is only in its infancy with 2,000 desktops installed, X-IO’s hybrid storage solution has already proved invaluable by lowering response times and service call productivity.

Why nominee should win

X-IO’s ISE 700 series hybrid storage arrays...

- Are competitive a cost per TB basis – in fact capital cost is a fraction of all-flash arrays in the marketplace.
- Provide high performance, which is maintained by only using enterprise-class SAS HDD and SSDs. It can deliver up to 2x to 10x performance of traditional storage solutions for high performance applications.
- Never waste SSD resources, capacity is always cost effective and its performance is never compromised - offering 100% capacity utilisation.
- Reduce database query times by up to 20x.
- Deliver superior reliability amplified by a five-year warranty.