

Nominated Company: X-IO

Nomination Title: X-IO Hyper-ISE

Hyper - ISE is a new class of storage system that achieves up to 300,000 IOPS in a single 3U sized system. It is the only true enterprise grade hybrid storage system to fuse flash memory and hard disk drives as a single pool of storage, creating the ideal balance of price, performance, and capacity. Hyper-ISE uses unique, patented Continuous Adaptive Data Placement (CADP) software which is a breakthrough technology that changes the economics of storage by enabling Hyper-ISE storage systems to provide the best price/performance/capacity ratios of any storage system in the industry. The solution has been designed specifically for performance-driven applications that require enterprise-class reliability. With 3 sizes; 7.2TB, 14.4TB and 21.6TB the solution provides a range of options. It provides customers with the ideal balance of price, performance, capacity and reliability through the perfect combination of flash and HDD.

More about CAPD

X-IO's patented CADP algorithms analyse the behaviour of application I/O and place hot data onto flash only if measurable performance gains will be achieved. Otherwise, CADP will keep the data on high-performance hard drives, ensuring that the more expensive flash resources are fully optimised and available for performance-driven data. Leveraging X-IO's patented CADP, the Hyper-ISE requires no tiering policies or manual intervention and, with its improved performance life spans, delivers on the promise of performance-when-full, and without drop-off over its lifetime.

What are your product's / solution's key distinguishing features and/or USP?

Hyper-ISE's patented CAPD technology provides uninterrupted management of data placement between flash and HDD devices in real time.

Hyper-ISE is performance driven. It is a Fibre Channel-based storage system supporting SAS hard disk drives and enterprise class MLC flash. It provides true split-second active-active failover for high availability.

This solution is cost-effective and has incredibly high performance for fluctuating workloads, analytics and reporting (such as VDI and OLTP). In fact, Hyper-ISE outperforms systems that are up to ten times more expensive through the effective partnership between flash and HDD. In real life terms, the solution delivers the same performance as all flash arrays but for a third of the costs.

Hyper-ISE solves core issue for high performance cloud storage by providing predictability in performance and cost.

Finally, Hyper-ISE is backed by low TCO with zero-touch maintenance and a 5-year hardware warranty. X-IO is the only storage company willing to stand by its reliability claim.

Key features include:

- Hyper - ISE is uniquely designed to scale so that no matter how many ISE units are added to increase capacity, full storage performance is maintained.
- Reducing database query times by up to 20x.

- Extending consolidation benefits of server virtualisation, achieving 50:1 virtual-to-physical ratios.
- Maintaining high performance levels by only using enterprise-class SAS hard disk drives and flash.
- Flash resources are never wasted, performance is never compromised, and capacity is always cost effective.
- Delivers 2x to 10x performance of traditional storage solutions for high performance applications
- Capital cost is a fraction of all-flash arrays in the marketplace

What tangible impact has your product/solution had on the market and your customers?

IT professionals have a limited number of options when it comes to increasing IOPS. The traditional method is to add more disk drives to storage systems and “wide stripe” those disks. This approach is extremely expensive, as a greater number of disk drives are required to store data. Another option is to implement flash or solid state disk drives, however many users have found the potential performance benefits falling short of expectations, especially at the cost it demands. The recent trend includes storage systems with automated tiering software however these solutions typically use simple policies that place the most active data onto the fastest and most expensive tier. However just because data is active does not mean it requires high performance. Performance always comes at a price, which is why it is essential to optimise resources based on the needs of the application.

Hyper-ISE provides customers with unmatched value in price/performance for the most demanding applications. It enables businesses embrace cloud computing, deliver 3x the number of users on the 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.

What are the major differentiators between your product/solution and those of your primary competitors?

High Performance Storage at unrivalled price / performance levels

Hyper - ISE achieves up to 300,000 IOPS in a single 3U sized system. It provides an ideal balance of price, performance, capacity, and reliability. It is designed specifically for applications that require enterprise-class reliability, low-latency and high performance.

Hyper-ISE enables 100% capacity utilisation without the performance issues of traditional systems which typically hit a performance wall when utilisation reaches 50-70% of storage capacity.

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

The Only 5-Year Warranty in Storage

Hyper-ISE is backed by a no cost, 5-year hardware warranty. X-IO is the only storage company willing to stand by its reliability claim.

Application Acceleration:

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

Fast Forever

Hyper - ISE provides high performance throughout the complete lifecycle due to the way it handles vibration, heat dissipation, data placement and drive reliability. Disk drives within Hyper-ISE are treated as a large, self-healing drive and work congruently, resulting in higher performance and reliability.

Price, performance, capacity, and reliability are linked; Hyper-ISE was designed to provide an ideal balance of all four over time and through its entire lifecycle.

Why nominee should win

- Hyper-ISE's patented CAPD technology provides uninterrupted management of data placement between flash and HDD devices in real time.
- Hyper-ISE has a low TCO with zero-touch maintenance and free 5-year hardware warranty.
- Hyper-ISE outperforms systems up to four times more expensive by creating the perfect partnership between flash and HDD.
- Significantly improves database application performance, enabling customers to avoid huge infrastructure investments.
- Extends consolidation benefits of server virtualisation, achieving up to 50:1 virtual-to-physical ratios.