Major Financial Institution Deploys SoftIron® HyperDrive® Storage Solution

One of the World’s Largest Central Banks Chooses SoftIron’s HyperDrive Storage to Reliably Archive Valuable Economic Data for Self-Service HPC Analytics.

One of the largest financial organizations in the world had already recognized the power of Ceph as a distributed, open-source, scale-out storage platform catering to their high-bandwidth research needs, however, their current storage cluster was on the brink of failure and falling into disrepair. They needed a partner who understood their needs and could offer them a solution that was easy to implement and could meet the HPC demands of their economists. SoftIron was the obvious choice with HyperDrive: a Ceph-optimized storage solution that could be seamlessly integrated and enhance their existing Ceph environment, as well as an offering that gave them total end-to-end support for both the hardware and the software.

Challenges
Performance, throughput, security, resiliency, and support were critical factors in the institution’s decision to choose SoftIron as their Ceph storage partner, using HyperDrive storage appliances.

Performance & Throughput
The organization needed more than 400 TB of storage capacity with better throughput than 6G/second read and 4G/second write, for their high-performance analytics research. Having just built a new 25 GbE network, the organization was looking for a solution that could utilize the bandwidth and move data faster than the standard 10 GbE network spinning disk technology typically runs on.

Resiliency
They wanted to take full advantage of Ceph’s functionality that they weren’t able to successfully achieve in the past. For example, removing a failed node in the cluster without crashing the cluster, a feature that is unique to Ceph when architected properly, but which can be challenging to achieve without task-specific hardware.

Support & Management
They were frustrated with the lack of adequate support from their incumbent vendor and were looking for a partner who could not only help to realize the full promise of Ceph, but could work with them to improve their Ceph experience and deliver better results as their requirements evolved.

Security
Security and provenance were final critical factors as a major financial organization dealing with sensitive data with global impact. After a rigorous evaluation of their options, the institution chose SoftIron as the partner of choice.
SoftIron & HyperDrive – Delivering the Full Potential & Power of Ceph.

SoftIron’s HyperDrive portfolio of enterprise storage appliances offers an easy-to-deploy system specifically architected for Ceph and is optimized at every level of the technology stack to deliver efficiency, performance, and reliability. Built with the task-specific purpose of maximizing the capabilities of Ceph, HyperDrive storage appliances deliver the best that Ceph can offer.

› HyperDrive harnesses wire-speed performance, offering up to 44% faster read and write speeds vs. traditional commodity hardware.

› HyperDrive is designed and built on a monolithic high-speed backplane designed to operate at up to 6 terabits per second so you get perfect data transmission at wire speed, with wire-free reliability.

› Because we build and support the whole stack, end-to-end, you will never be caught in the middle of a vendor blame game.

› HyperDrive is 100% optimized for Ceph and easily handles object, block, and file: a flexibility that separates it from other SDS choices.

› The inherent resilience of Ceph, when architected correctly, means zero lost data and zero downtime.

› SoftIron not only controls the entire design and build process, but designs and manufactures and assembles all products in-house, from the ground up, including electronics sub-assemblies offering 100% transparency for secure provenance. There are no third party ODMs (Original Design Manufacturers) and we have authorship, ownership, and total responsibility for all code that goes on our appliances.

Take the Next Step

Is your data center being impacted by power and space constraints? Is archaic and inflexible infrastructure adding bottlenecks to your processing requirements? Or, is performance being hampered by legacy storage solutions that are not keeping up with the complex and evolving requirements of modern-day workloads? Take HyperDrive for a test drive and discover what a secure, task-specific storage solution can do for your organization. Visit softiron.com for more information, or book a discovery call to talk to one of our Solutions Architects at bit.ly/SoftIronDemoRequest

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KEY BENEFITS FOR FINANCIAL SERVICES

› Increased performance with a wire-speed appliance

› Increased capacity with a high density, 1U form factor appliance

› Interoperability, flexibility and resiliency with Ceph

› Versatility, scalability and hybrid cloud compatibility

› Full, end-to-end support for hardware and software

› Increased resiliency with no downtime time due to loss of nodes

› Comprehensive storage management with Storage Manager

› Security and peace of mind with SoftIron’s unique Secure Provenance

TASK-SPECIFIC HYPERDRIVE OFFERS

› Scalable, wire-speed storage solutions

› Category defining management system

› Double your data density

› Total Ceph interoperability

› Floorspace requirements halved

› Super-efficient: from less than 100W under full load

› Low heat output reduces cooling needs

› Radically reduced data center costs

› Full-stack hardware and software support

› Secure Provenance

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SoftIron® is the world-leader in task-specific appliances for scale-out data center solutions. Their superior, purpose-built hardware is designed, developed, and assembled in California, and they are the only manufacturer to offer auditable provenance. SoftIron’s HyperDrive® software-defined, enterprise storage portfolio runs at wire-speed and is custom-designed to optimize Ceph. HyperSwitch™ is their line of next-generation, top-of-rack switches built to maximize the performance and flexibility of SONiC. HyperCast™ is their high-density, concurrent 4K transcoding solution, for multi-screen, multi-format delivery. SoftIron unlocks greater business value for enterprises by delivering best-in-class products, free from software and hardware lock-in. For more information visit softiron.com

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