

SMB Data Storage: M-Series, HYDRAsTOR

Segue Technologies, Inc.


 The logo for Segue Technologies, Inc. features the word "SEGUE" in white, bold, uppercase letters, followed by three vertical orange bars of varying heights, and a registered trademark symbol (®). Below this, the word "TECHNOLOGIES" is written in orange, bold, uppercase letters. The entire logo is set against a dark blue background.
Customer

- Segue Technologies, Inc.

Industry

- Website and Application Development; IT System Sustainment

Challenges

- Slow backup and restore rates for 100+ servers with Veeam
- High cost maintenance of end of life legacy system
- Struggle to meet client needs of highly available, secure data storage
- Limited data storage capacity for future growth
- Time consuming administration of slow, unreliable system

Solution

- M-series (M-310) Hybrid SAN Storage
- HYDRAsTOR®, Tier 2 deduplication object storage, with Veeam backup integration

Results

- Fast data backup of all 100+ servers--75% time reduction
- Cost effective installation, maintenance, and ongoing support services
- Highly secure, high availability primary and backup data storage
- Performance and capacity scalability for easy future growth
- Simplified management and increased staff productivity

Segue Technologies, Inc.

Segue Technologies® is a digital technology solution provider, delivering full life cycle application development and tailored system sustainment to federal, non-profit, and commercial organizations. Segue specializes in the creation of modern and easy to use interfaces for applications that are critical to their customers' operations and user communities. From business process analysis to solution implementation and maintenance, Segue applies agile project development principles that work in compliance with the operational constraints of their government, enterprise, and military customers.

With personnel located across the USA, for security reasons some Segue projects and services require many of their staff to work onsite within the Pentagon or other government facilities. Segue Technologies' clients include the United States Air Force (USAF), the Department of Defense (DOD), and the National Parks Service.

"This system also benefits our work culture now, for colleagues who prefer to work from home, while traveling, or work offsite after hours"

Recognized as a project development leader, Segue is the recipient of many prestigious awards, including these (honored by Clutch, the B2B research, ratings and review firm): "Top Application Development Company in Washington D.C.", and "Top Web Design Company in Washington D.C.".

Segue government work includes: the design/ build of custom applications, conducting data analytics, performing systems integrations, and working on financial systems, procurement, large data analytics, IT projects, and IT administration—such as data base management for government agencies.

“It was as simple as hooking up the new storage to our existing systems and moving files over. We had no disruption of service, honestly, people didn’t know we’d done it.”

Often required to work efficiently within highly regulated environments, Segue’s development processes are appraised at CMMI Level 3, and supported by an ISO 9001:2015 Quality Management System.

Challenges

Due to Segue’s business growth and clients’ growing data storage needs, the old system had become inadequate, and high storage consumption was further impacted by minimal deduplication rates. Their unreliable data backups were underperforming at such an extremely slow rate, the legacy system was unable to back up the servers within their after-hours backup window.

Jeremy Rochon, Director of IT, explained, “The old disc array actually predated us, so it had totally ‘aged out’, and was expensive to maintain. It was extremely slow—and we were replacing discs every month or two. Moving data took forever, and users were being impacted. With over 100 servers to back up, sometimes we could go a month without fully backing up.”

Segue’s Systems Administrator, Dan Cunningham, confirmed, “The biggest system challenge we had on a regular basis was the speed of our data transfers in our data center. We were not able to meet the backup window, and were getting only 3-4 servers backing up every night.”

Beginning a solution search process, the initial thought was to go to a Cloud solution. After careful evaluation, this would prove to be cost prohibitive for Segue, in addition to requiring new infrastructure for this

move—and besides, Segue had reservations about moving their highly secure business into the Cloud.

Consulting with vendors to replace the system just confused the issue more. With some proposals the price was too high, and other vendors clearly were not interested in working with SMBs (Small, Medium Business), only big data centers. Or, they did have concepts, but did not have the infrastructure experience to know how their proposal would integrate with the Segue system.

“This NEC environment really promotes that individual productivity, which is just another add-on benefit.”

The business needs of Segue Technologies had evolved over the last twenty years. Their storage environment now required increased but highly secure primary and secondary data storage, with high performance, and the system must be dependable, easy to maintain, and work with Veeam software.

Solution

Jeremy Rochon, Director of IT, explained, “We checked into a Cloud solution, but are just not comfortable right now with 100% in-cloud. Then NEC told us, ‘After considering all aspects of your system and your business, we think a hybrid solution would be a better fit for you.’ With an NEC on-premise solution, we could go hybrid, with a hardware and software solution that integrates with our existing infrastructure. We have the flexibility to seamlessly add extra capacity, or go to the cloud later.”

Mike Behrmann, Executive VP of Segue, stated, “Working with NEC’s Financial Services, we basically lease to simulate the cloud. It’s a 3-year SMB deal that we can either keep or refresh with more options.”

The NEC solution for Segue started with a dramatic increase to their storage capacity with an M-Series Hybrid Storage Array (M-310), together





with Flash and high density HDDs (Hard Disk Drives). The highly reliable M-Series SAN storage is configured with NEC's Performance Optimizer technology, which automatically distributes bytes of data across SSD's (Solid State Drives) and Spinning Disks, for maximum performance.

"From an executive viewpoint, dealing with NEC was just a tremendous experience--and I don't say that often."
- Mike Behrmann, EVP

NEC's award winning HYDRAsstor was a critical addition to the system, with its scale-out architecture and extremely fast deduplication rates, it delivers optimum backup performance and secure data storage. HYDRAsstor is a proven fit for the data needs of SMB and large enterprises alike, addressing requirements for a high-speed ingest rate, high availability, easy scalability, and highly secure data storage.

HYDRAsstor's unique seamless, non-disruptive scalability allows organizations to scale from a single node up to 165 nodes, all in the same system, with global deduplication. Additionally, three generations of nodes can be added simultaneously in the same grid, eliminating fork lift upgrades and data migrations forever. Performance grows with capacity, as processing is distributed across all nodes, and HYDRAsstor actually leads the industry in performance with its ability to ingest up to 63 terabytes per hour per node. Functioning as a massive Tier 2 bucket, HYDRAsstor's wide industry compatibility and ability to integrate with a wide range of partners such as Veeam, Veritas, NetBackup, Commvault, Oracle and many others, made this solution a perfect fit for Segue's current and future data storage needs.

NEC's intelligent data management software, with self-aware and self-organizing platform, automatically handles the system's data management operations, greatly simplifying system administration.

Working with Veeam, and leveraging NEC's snapshot technology, this NEC storage solution provides efficient data transfer from the M-310 to HYDRAsstor, without impacting the production workload.

Results

"The cutover was without headaches", said System Administrator, Dan Cunningham. "It was as simple as hooking up the new storage to our existing systems and moving files over. We had no disruption of service, honestly, people didn't know we'd done it.

"With NEC, now all our servers are fully backed up within 8 hours! We first thought something was wrong, so we performed tests to restore, but it was all there."

Mr. Rochon confirmed, "We've been backing up all our servers every single night. The NEC unit has been so rock solid, it's been kind of a 'set and forget' kind of system for us. Our array now hits all the points we didn't even know about before. Because of our clientele, a local SAN was the best solution for us, with the speeds we need--and so much more than we imagined could be delivered 'on-prem'! And it was a good value, since we only upgraded what was actually needed."

Working closely with NEC Financial Services, Segue Technologies was able to move forward quickly with the necessary changes, and still retain their infrastructure, making this an extremely cost effective solution.

Mike Behrmann, EVP of Segue, stated, "I felt very confident in what NEC brought to the table, and the performance is just tremendous." Speaking to their increased capabilities, he said, "For the same money, we can now provide our clients with secure primary storage, and backup storage as well, with HYDRAsstor.



Mr. Behrmann added, “This system also benefits our work culture now, for colleagues who prefer to work from home, while traveling, or work offsite after hours; this NEC environment really promotes that individual productivity, which is just another add-on benefit.”

“With an NEC on-premise solution, we could go hybrid, with a hardware and software solution that integrates with our existing infrastructure. We have the flexibility to seamlessly add extra capacity, or go to the cloud later.”

NEC's Relationship with Our Customer

Jeremy Rochon said, “NEC was chosen because they listened to us. They took the time to really understand our business needs, and concerns. You can tell that they actually care about SMBs.” He explained, “Initially, we didn't know much about NEC. Then we met with them, and spoke on the phone with different levels of NEC technicians. Since we were not very 'storage savvy' at that time, we researched, and came back to NEC again and again with emails and calls, and they'd always reply with a fast response. (The longest we waited was 24 hours!) They've really been great to work with.”

Daniel Cunningham, Systems Administrator, agreed, “Even our onsite NEC Installer was informative and helped us with best practices that fit our infrastructure. When our installation was done, we were good to go, with no loose ends; all done and working great. We've been very pleased with the NEC support, both here and offsite.”

“From an executive viewpoint”, stated Mike Behrmann, EVP, “dealing with NEC was just a tremendous experience--and I don't say that often.”

Mr. Rochon, IT Director, confirmed, “The NEC staff will meet with you, they'll figure out what your requirements are, and give you a solution that will work for you—and not try and oversell you. I would absolutely recommend NEC to any company our size.”

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