Atlantic Metro Communications Simplifies Management with Tintri VMstore™

VMstore

Atlantic Metro Communications is a managed infrastructure service provider that delivers high-quality innovative IT solutions to enterprise businesses. More than 300 customers-including Fortune 500 enterprises, legal forms, web startups, media, retail, and advertising agencies-have chosen Atlantic Metro for the confidence that comes with its high-performing, customer-focused infrastructure and support systems. Atlantic Metro provides a wide range of services to its clients, including cloud computing, nationwide network connectivity, and secure data centers.

The Challenge: Poor Performance and Management Complexity

Atlantic Metro's IT team had been trying to solve several issues in the traditional storage environment. "The first challenge was the inadequate performance of our Windows 2012 R2 RDS Farm running on NetApp using a NFS datastore," explained Keith Pratola, VCAP Certified Senior Cloud Architect at Atlantic Metro. "The latency on the NetApp systems just kept increasing. The other challenge was the complexity of managing NetApp LUNs using iSCSI. Management of the NFS volumes was easy, and VAAI helped reduce some of the work the ESXi servers normally perform. But even when we added a hybrid shelf using SSD Flash Pool caching, and also a local SSD to the ESXi hosts while enabling VMware Flash Read Cache, the performance was still subpar and difficult to manage. One of the biggest drawbacks with NetApp's WAFL file system is that you lose performance as you exceed 80% capacity. We were paying a lot for capacity we couldn't even use."

Atlantic Metro's IT team was spending far too much time managing the NetApp storage systems. "I found myself creating multiple LUNs to try and separate our MS SOL, Oracle, and other applications," noted Pratola. "Having to manage so many LUNs for all of the different workloads was an inefficient use of my time. And even though we configured them correctly, some of the LUNs were still experiencing latency issues. I thought that using VMware VVols might help, but after some experimentation and research, I came to the conclusion it really wasn't ready for primetime yet. It also wasn't compatible with our existing NetApp systems in 7-mode. I knew it was time to look for a better storage solution that could meet our performance and manageability needs."

The Solution: Tintri VMstore T820

"Everyone was talking about VVols at VMworld last year," Pratola reported. He reached out to his to technology advisor and supplier, Myriad Supply, to get a robust picture of what the landscape of solutions looked like. "Given the highly virtualized nature of Atlantic Metro's environment and the burden managing iSCSI LUNs had become, the list of manufacturers with an enterprise-ready NFS solution was very short," says Rick Kenney, one of Myriad Supply's VMware VCP certified engineers. "Factoring in a need to integrate with the existing compute environment made that list even shorter. The VMstore technology was developed long before VVols but had similar advantages. It was the perfect solution for their mixed load environment, so we spoke with Keith and they decided to give it a try."

The difference between standard infrastructure and Intelligent Infrastructure was immediately evident. Pratola was very impressed with the VM-aware architecture and performance in the demo. "With VMstore, 99% of all reads and writes land on the flash," he explained. "But you also get a lot of cost-effective extra capacity with the mechanical hard drives. Our decision to go with VMstore was based on the fact that we can not only get SSD performance, we also get the capacity we need at a low cost. We really liked the VM-awareness with the snapshots, cloning, and other features that VMstore offers. We quickly made the decision to purchase the VMstore T820 system. Storage wasn't actually in our current budget, but we wanted it so much that we made it happen."

Challenges

- Inadequate performance from existing storage systems
- High complexity, difficulty managing LUNs

Solution

- Tintri VMstore T820

Results

- Eliminated twenty hours of storage management per month
- Shortened deployment time from days to less than an hour
- Performance equivalent to all-flash systems at much a lower cost

Tintri
Intelligent Infrastructure

The Results: Simplified Deployment and Management with Better Performance

Pratola reported that the deployment was amazingly easy. "We set up all of the networking before the Tintri reps came out," he explained. "It was very simple to connect the VMstore system to our network. Labeling the cables actually took longer than hooking it up, going through the prompts, and entering the IP information. The physical install and configuration took a mere thirty minutes."

Pratola did need to schedule a small amount of time to install the NFS plug-in on the ESXi host hypervisor and install the plug-in for vCenter. "Even with the VMware configurations, it was less than twenty-four hours before we were production ready. The NetApp environment is much more complex, and we needed their help to install it because of the additional cabling. It always took several days before we were ready for production with the NetApp."

"The biggest benefit of VMstore by far is the performance increase," noted Pratola. "Once we launched the VMstore system, our Windows 2012 R2 RDS Farm immediately performed better and users were no longer complaining about experiencing inconsistent performance."

The VMstore systems are also very easy to manage. "We don't have a dedicated storage admin, so storage management always falls into my hands," Pratola admitted. "We ran our NetApp environment two different ways: we used NFS-which I love and is easy to work with-but we also used LUNs. That's where management becomes a nightmare. I was spending twenty hours each month just working on the NetApp storage, making changes to the LUNs, reclaiming space, and moving stuff around to improve performance. With VMstore, we are no longer managing storage. We are only managing the virtual machines."

"We provide business continuity and disaster recovery services for many of our customers," Pratola said. "At the moment, we are using other vendors' technologies for replication. As soon as our budget allows, we absolutely want to use the VMstore systems. We already have a demo unit in place and have been testing VMstore replication for several weeks. It is simply phenomenal. It works a lot better than any other replication system we have ever tested."

Pratola was also impressed with the price/performance ratio of VMstore. "The relatively low cost is another huge benefit," he noted. "When you talk to the other storage companies about performance, they try to sell you their expensive all-flash. Why do I need all-flash when less than 50% of our data is actually used constantly? It seemed like a big waste to me. That's what makes VMstore special. You get the high performance of SSDs-which is not the same as the 'SSD caching' you get with Oracle's ZFS-and also get the capacity of SATA / NL-SAS drives, but at a much lower price point. Unlike with ZFS, I don't need to try and fine-tune the VMstore systems to get the best performance."

"The VMstore file system was built from the ground up by one of the inventors of RAID. Tintri has some of the best and brightest architects in the business that have created an absolutely amazing product."

"With VMstore we are no longer managing storage, we are only managing the virtual machines. Tintri has some of the best and brightest architects in the business that have created an absolutely amazing product."

Keith Pratola, Senior Cloud Architect, Atlantic Metro Communications

Experience Different! For more information on how Tintri VMstore can turbo-charge your business success through a simple, Intelligent Infrastructure, visit tintri.com/vmstore.

Tintri
Intelligent Infrastructure

| @tintri | **www.tintri.com** | info@tintri.com |

VMS-CS076-0520-01