Cyso migrates all virtual workloads to Tintri

Leading Netherlands-based MSP moves customer VMware environment to Tintri for VM-level visibility and faster application performance.

Industry
- Internet Service Provider

Geography
- The Netherlands

Virtualization environment
- VMware vSphere
- Traditional storage: Dell EqualLogic

VM profile
- Mixed customer workloads

Key challenges
- Limited visibility into virtual environment made it difficult to troubleshoot performance issues.

Tintri solution
- Tintri VMstore™ T850 systems

Primary use case
- The two Tintri T850 systems were set up as independent solutions, with replication from one to another for higher availability and DR.

Business benefits
- Decreased application latencies by 6x
- Simplified storage management
- Increased visibility into storage and VMs
- Improved quality of service for all customers
- Obtained higher ROI compared to existing systems
- Reduced power consumption by 2x

Cyso

Cyso is the leading Dutch provider of managed Internet services, platforms, and infrastructure for the corporate and government markets. Cyso provides custom solutions and management for complex, business critical platforms and applications for a wide range of financial institutions, IT professionals, ISPs, government agencies, and software vendors. Approximately 80% of Cyso's 2,500 customers are based in the Netherlands, with an additional 400 clients located around the world.

Life before Tintri

Cyso operates out of two geographically separated data centers in Amsterdam. "The majority of our customers utilize our enterprise VMware setups running on Dell EqualLogic SAN boxes," noted Tjebbe de Winter, technical IT director at Cyso. "We also provide hybrid solutions for some of our organizations that have specific hardware needs."

Cyso's IT team was struggling with limited visibility into its VMware virtual environment. "Our virtual and storage environments are two different worlds, from a technical point of view," de Winter explained. "A VMware administrator doesn't typically have the same skill set as a storage administrator. Since they don't speak the same language, it can cause a knowledge gap between the two different roles."

The existing Dell environment was providing insufficient visibility into the virtual infrastructure. "With a traditional solution like EqualLogic, you can only see the performance of a single volume. But within each volume, you can have 30 to 50 virtual machines," noted de Winter. "When you have an issue in a multi-tenant environment, it can be quite tedious to find out which customer's workload is causing the problem and understand its impact on other customers."

Performance was also inadequate in the previous environment. "Dell EqualLogic is a spindle-optimized solution," de Winter shared. "But spinning disks have limited performance and our customers were demanding more IO for their workloads. We needed to find a solution that would give us better insight per VM in order to eliminate the noisy neighbor problem, and also provide higher performance for all customer environments. The Dell EqualLogic systems are easy to set up and maintain, but lack the VM centric approach and the below 2-3ms read latency performance. We wanted to find a solution that was as user-friendly and easy to operate as the Dell systems, but would also deliver more visibility and higher performance."

> "By moving to Tintri, our read latencies dropped from 10-50ms to just 1.5ms—that's six times faster than on our old Dell EqualLogic platform."

Tjebbe de Winter, Technical Director, Cyso

Searching for a Better Solution

"We talked to nearly every storage vendor in the market," de Winter admitted. "It's difficult to make choices today because there are so many storage companies out there now and major changes happening every six months."

The first time de Winter saw the Tintri solution was at an OpenStack summit in the Netherlands in 2015. "We were very impressed with how well the Tintri offering works with VMware. Tintri was more than willing to set up a proof of concept demo for us, but we chose to dive right in based on the excellent feedback we received from other Tintri customers."

de Winter also called Tintri tech support before making his decision. "We wanted to see how the support organization was set up—what kinds of people were on the support team, and if they were trained by marketing or by technical experts. That review give us enough confidence to buy and install the solution without running a POC."

A Quick Migration

Cyso bought two Tintri VMstore T850 systems and installed them at both data centers in 2016. "It was a very fast installation and a quick migration," de Winter reported. "Within three weeks of receiving the systems, we were in production and all VMs were migrated. Tintri uses NFS, making it easy to have our current Dell environment coexist with the Tintri solution. Because EqualLogic is iSCSI-based, it's easy to combine with NFS. It's much easier than having two different iSCSI vendors combined in one set up."

The two Tintri T850 systems were set up as independent solutions. "We can now replicate from one Tintri to another. That's an option our customers can sign up for, but it's not something we do by default, since not every customer needs it," de Winter explained. "We also build a lot of solutions where we split the workload up between our two data center locations to ensure that data availability is being taken care of at an application level, not at the storage level. Before Tintri, we were unable to deliver storage replication per VM. We are now planning to offer that level of service to all of our clients in the near future."

Faster Performance and Lower Power Consumption

"By moving to Tintri, performance improved substantially," de Winter reported. "Our Dell storage was able to provide 1 to 2 ms writes, but the read latencies were quite high. By moving to Tintri, read latencies dropped from 10-20ms to just 1.5ms—that's six times faster than our old platform."

"Since we are a fully managed hosting provider, we do all of the optimization for our customers," de Winter said. "Everything is highly optimized, but we do have a few customers with high performance requirements. All of those customers have been very enthusiastic about the gain in peak load they can handle now that we have much faster storage with Tintri. Plus, they got all of this faster performance for free, which also made them very happy!"

Better Visibility Leads to Higher Service Levels

"The Tintri systems eliminate a lot of management time and it's much easier to detect performance issues in our environment with the VM-level visibility," said de Winter. "Since moving to Tintri, we have already detected a few issues with our virtual machines that we didn't notice until now. Being able to proactively detect and resolve issues quickly has enabled us to improve quality of service for all of our customers."

Lower TCO and Power Consumption

"Tintri wasn't the cheapest solution that we looked at from purely a CapEx perspective, but when we did the math on the operational side, it was by far the most economical option," de Winter admitted. "The OpEx benefits and the amount of insight and detail we get into our environment provided a better ROI than the Dell EqualLogic platform. In addition, power is very expensive in Europe. The Tintri systems are very efficient, enabling us to reduce our power consumption by 2x."

 Tintri

Global HQ
303 Ravendale Dr.
Mountain View, CA 94043
United States
+1 650-810-8200
info@tintri.com

EMEA HQ
Fountain House 10th Fl
130 Fenchurch Street
London EC3M 5DJ
+44 (0) 203 053 0853
emea@tintri.com

APAC HQ
9 Temasek Boulevard
Suntec Tower 2, #09-01
Singapore 038989
+65 6407 1359
apac@tintri.com

Japan HQ
Level 6, Kishimoto Building
2-2-1 Marunouchi, Chiyoda-ku,
Tokyo 100-0005 Japan
+81 (3) 6213-5400
info.japan@tintri.com

www.tintri.com