Tintri Drives Storage Efficiency for RAM Hand-to-Hand Couriers

Tintri Cuts Storage Installation Time from 2 Hours to 5 Minutes, Provides Higher Performance, and Simplifies Storage Management

Overview

RAM is the leading courier, warehousing, and distribution service provider for thousands of customers across South Africa. RAM also provides efficient worldwide delivery courier services through its large network of international partners. With a workforce of over 2,600 employees at 41 hubs, RAM has earned its high reputation as South Africa's most trusted logistics company.

Cutting-edge track and satellite trace equipment, coupled with a sophisticated IT platform, enables RAM to offer a number of value-added solutions to its clients. These innovative solutions provide RAM customers with the ability to know where their parcels are at any given time, and to know exactly when they will be delivered.

Key Customer Challenges

Lance Soller is the executive head of IT at RAM Hand-to-Hand Couriers. When asked to describe his role at the courier company, he replied, "I manage all of IT infrastructure and services at RAM. Broadly speaking – if it has power – it's my responsibility."

RAM upgraded from its inexpensive iSCSI SANs to faster iSCSI storage several years ago. "The old iSCSI SAN was quite affordable, but not powerful enough for our national operations," Soller reported. "The upgrade helped a bit, but it took the new supplier's own engineers three months to get the system running optimally so we could start using the cluster. I don't want to invest in any infrastructure that takes such a long period of time to get working correctly."

Ram's IT environment is now 95% virtualized on VMware vSphere. "We do a lot of testing on our virtual servers," Soller explained. "Even with the upgrade to a faster iSCSI solution, several of our developers told me they were getting faster performance on their desktops – copying from one drive to another."

Soller and his team tried to troubleshoot the performance problems, starting with the VMware environment. "We couldn't pinpoint the source of the slowdowns," noted Soller. "Towards the middle of last year, we started replacing nodes in our VMware cluster to see if that would fix the issues. We also upgraded from VMware ESX 3 to vSphere 5.1 with new nodes connected to the same storage. But we still weren't seeing that much of a performance increase with our SQL servers. It became apparent that storage was the bottleneck in our virtualized environment."

Industry
- Automotive & Transport

Website
- www.ramgroup.co.za

Virtualization environment
- VMware vSphere 5.1
- Arista Switches (7050 series stack)
- Number of VMs: 72 and growing

VM profile
- Mostly 2008 server and 2012 server with 4 Linux servers
- Virtualized applications: Tier 1 apps like Exchange 2010 and SQL 2012 Accounting software and Proof of Deliver images system amongst others

Key challenges
- Existing storage performance was inadequate
- Configuring the traditional storage arrays took three months
- Storage management was too complex, requiring specialized skill sets

Tintri solution
- Four Tintri VMstore™ T650

Primary use case
- Tracking shipment and delivery of millions of packages annually
- Storing and retrieving 7 years of PODs (proof of delivery form) images for all customer shipments

Business Benefits
- Reduced storage installation from two hours to five minutes
- Increased storage performance, eliminating all complaints from development team
- Cut the time to clone VMs from hours to seconds
- Simplified storage administration, eliminating the need for a dedicated storage admin

The Tintri Solution

Soller started searching for a new storage platform and quickly narrowed the contenders to EMC, NetApp, and Tintri. He contacted several existing Tintri customers to hear about their experiences with the Tintri arrays. "I spoke to a good friend who works for one of South Africa's largest financial companies. His company had just migrated from HP storage to Tintri, and he was very enthusiastic about the results he was getting. Financial reports that used to take 3-4 days to complete on their HP storage, were now taking just 1-2 hours with Tintri. Based on all of the good things I was hearing, I knew it was time to give Tintri a try."

Faster Installation and Better Performance

RAM bought its first Tintri T650 array in June of 2014. "I wanted to see what kind of performance I could get on the T650 before adding multiple units," reported Stoller. "I have already moved four of our main SQL servers onto Tintri. It didn't take long to see the value of Tintri. The environment is performing so well, I am now ready to purchase several more Tintri arrays."

"It used to take two hours just to install our traditional iSCSI storage arrays," Soller noted. "In contrast, the Tintri installation took all of about five minutes. I am actually exaggerating when I say five minutes – I am sure it was a lot less! I was virtually 'dumbstruck' watching our local guy install the Tintri. He just created the IP address, plugged it in, connected it to the network, and we were in business."

Soller has been very impressed with the speed of the Tintri array. "I haven't received any complaints about slow performance from our users since we deployed Tintri," Soller said. "We moved everything over to Tintri during the middle of a billing run, something I could never could have done with the old system. I used VMware vMotion to move the servers over onto Tintri overnight. The next morning I asked our users how everything was running, and they answered 'everything's great!' Migrating to Tintri was just that fast and that simple."

"The Tintri units are able to easily handle the heavy load of our SQL environment," Soller reported. "I looked at the IOPS while the Tintri system was performing some very IO-intensive tasks. It wasn't even breaking a sweat. The old storage systems used to really struggle to accomplish those same tasks."

"The performance of our SQL servers is absolutely critical to our operations," Soller said. "In terms of our service level agreements, we not only have to have everything delivered within a specific timeframe, we must keep images of all PODs (proof of delivery forms) on the net as well. We store seven years' of these images online, and they have to be available 24x7. Before Tintri, accessing our POD data in support of our customers was quite an intensive process, now it's exponentially quicker."

Simpler Management

"The traditional iSCSI storage was also very difficult to manage", Soller reported. "Our previous storage platform required specific skills that were not part of my team's expertise. In contrast, the Tintri is extremely simple to manage and operate. To create a clone of a VM, it's almost instantaneous, as opposed to waiting hours for it to be done on the old arrays. With Tintri, I don't need a dedicated storage admin anymore. Our IT team can be reassigned to more strategic tasks, not just babysitting the storage."

Summary

"I spoke to several Tintri customers during our evaluation process," Soller concluded. "Not a single one had anything bad to say about Tintri. With any other storage system, you can always find someone that has had a bad experience and a lot of complaints. Tintri customers are happy customers. And since we deployed Tintri, I can ensure that all of our RAM Hand-to-Hand Couriers customers are happy as well!"