



The City of Lewiston Relies on Tintri Storage

Tintri Eliminates all Application Latencies and Simplifies Storage Management for Key City Services

The City of Lewiston

Lewiston is the second-largest city in the northern Idaho region and the seat of Nez Perce County. As of the 2013 U.S. census, the population of Lewiston was approximately 32,400. Eric Scott is the information systems manager for the City of Lewiston.

There are only five of us in the City IT department," Scott reported. "In addition to me, there's one network administrator, a systems administrator, and two IT helpdesk personnel that provide PC support for all of our end users. We manage all of the IT infrastructure for multiple City departments in multiple locations, including all of our financial services, utility billing, and purchasing systems, which keeps us rather busy." The City of Lewiston operates from two datacenters with Dell servers, an aging EMC SAN, and two Dell EqualLogic TS4100 arrays that are co-located and replicated to each other for disaster recovery.

IT Challenges

The City of Lewiston's IT team was getting ready to replace the Dell storage system. "We were seeing very high latencies with our ERP solution and our engineering servers," noted Scott. "At times, this persistent issue was putting us into the danger level. We conducted a thorough analysis of all system components, and found some problems with our network switching and a few other things that we were able to clean up. But even with those minor improvements, it became obvious that the biggest issue was our storage infrastructure. The SAN that we were on just wasn't able to reach the level of performance that we needed for our City applications and services."

Searching for a New Storage Solution

Scott and his colleague, Danny Santiago, Systems Administrator, started looking for a more powerful storage solution that could fix the City's critical latency issues. "We first saw the Tintri arrays at an industry trade show," Scott reported. "Since we had an EMC SAN that was at end-of-life, we started our search by contacting EMC to see what new options they had. We also looked at Nimble and attended a few other vendors' webinars. In all, we looked at five or six different storage solutions. I then attended the Tintricity seminar at VMworld, and I was really excited about what I saw. After hearing other testimonials, we quickly made the decision to give Tintri a try and we're really glad we did!"

Choosing Tintri

"It was originally a very tight race," Santiago admitted. "What really pushed the decision over the edge for me was the fact that Tintri is very compatible with the VMware virtualization environment. It's not just a dumb storage unit, it knows exactly what virtual machine it is running on and how that VM is performing. With that granular level of visibility, we can instantly diagnose any performance issues. Tintri can tell us if it's a network latency issue, an operating system latency, or a storage latency from just one intuitive console. None of the competitors' solutions could do that."

Industry

- City Government

Geography

- Lewiston, Idaho

Website

- www.cityoflewiston.org

Virtualization environment

- VMware® vSphere™
- Traditional storage: Dell EqualLogic TS 4100s, EMC SAN

VM profile

- Microsoft SQL, Munis ERP solution, file shares, AutoCAD software, and VMware VDI

Key challenges

- Inadequate performance of existing storage systems was causing high latencies in the City's key ERP and engineering applications.

Tintri solution

- Tintri VMstore™ T620 arrays

Primary use case

- Tintri is now being used for over 90% of the City's applications and services.

Business benefits

- Reduced application latencies from 400ms to just nanoseconds
- Achieved speedy, 5-minute deployment with the new array
- Simplified storage administration
- Enabled easy scalability

"I totally agree with Danny," Scott added. "Tintri gives us a much deeper level of analytics into our infrastructure. It was very painful in the past to understand where the latencies were. We had to look at multiple consoles to see into the vSphere environment, we had to look at all of the hosts and numbers, and then use a bunch of different tools to figure out where the latencies were. Whereas with Tintri, everything we need to know is right there, and it's very easy to see. We had a 30-day proof of concept scheduled on the Tintri unit, but we knew within a week that it could do everything that was promised, and more."

Tintri Deployment

The City of Lewiston purchased its first Tintri T620 in 2014. "We would love to get an additional Tintri for disaster recovery, but we have to wait for a bit more IT budget before we proceed," Santiago noted. "We are now running our MS SQL, our ERP solution that is very read- and write-intensive, our file shares, and our engineering VM on Tintri. We will be moving our MS Exchange environment and VDI desktops over soon. When we are done migrating, over 90% of our servers will be running on Tintri."

The Tintri deployment was remarkably fast and simple, according to Santiago. "It took us longer to put the Tintri unit into the rack than to do the setup. Once we had it installed, it was up and running in less than five minutes."

Easy Management

"The Tintri units are very easy to manage," according to Santiago. "The first week we had it in place, I would log into the Tintri admin console every morning and watch the web interface for hours just to see how it was performing. I haven't logged into it at all since the end of the second week. Tintri manages itself so well that I don't worry about storage anymore."

"Danny used to spend his entire day managing our old storage environment and moving stuff around to keep the latencies down," Scott added. "He doesn't have to do that anymore, he can now focus on more important and interesting things. Danny used to come to work with a stressed-out look on his face and worry all day long about all of the storage issues. Ever since the Tintri installation, he just walks around with a big grin on his face!"

Eliminating all Application Latencies

"Disk latencies on our ERP server used to average over 15ms and would spike up to 400ms," Scott reported. "That amount of latency is really noticeable to end users and is totally unacceptable for our applications. Now that we are on the Tintri box, the lag is only measured in nanoseconds. Latency has simply become a 'non-issue' for us. If we ever have any latency in our applications now, it isn't caused by the storage, it's the Windows operating system and all of the tasks it is running."

Loving Auto Support

"We had a power glitch in our data center the first week we were running on Tintri," Scott reported. "Within milliseconds, the Tintri box automatically opened up a support ticket because it noticed that one of the redundant power supplies had lost power. The replacement power supply was already sitting in our datacenter when we arrived at work the next day. All of this occurred without us having to do a thing, since the Tintri firmware has built-in monitors that continuously monitor the unit. We were extremely impressed with the fast auto support ticket and speedy response to the issue."

Summary

"When we were getting ready to do the POC, I asked our Tintri rep if we could just send it back if it didn't work," Santiago said. "He said he would check, but no one had ever sent one back before! We were skeptical of his claim, since there is no such thing as a magical IT product that always works, but we were proven wrong. Tintri works exactly as promised. Once we put it in, we never looked back!"

Scott also enjoys serving as a reference for Tintri when asked. "Every time I see anyone in IT, I tell them about Tintri Storage," he admitted. "When you find a technology solution that solves all of your problems that easily, you just have to tell others about it – it's actually fun to spread the word."

"When you find a technology solution that solves all of your problems that easily, you just have to tell others about it – it's actually fun to spread the word!"

Eric Scott,
Information Systems Manager,
City of Lewiston



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

EMEA Headquarters
27-28 Clements Lane
London EC4N 7AE
United Kingdom
+44 (0) 203 053 0853
emea@tintri.com

APAC Headquarters
Level 18
101 Collins Street
Melbourne 3000 Vic
+61 3 9653 9610
apac@tintri.com

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