

# Q&D Construction Averts Data Crisis with Tintri VMstore™



Q&D Construction is a multi-faceted general contractor that works alongside its clients to deliver professional services in all areas of heavy/civil, energy, aviation, and commercial building construction. Based in Northern Nevada, Q&D Construction provides lean, scalable solutions and access to high-level tools, processes and guidance from industry leaders to help clients realize the best possible outcome and value for any project. With over 700 employees using multiple iPhones, iPads, laptop, and desktop computers as well as approximately 30 servers and multiple storage devices, the IT team has a lot to manage.



VMstore

## The Challenge

### Evolving the IT Infrastructure

One of the first challenges Breen faced was understanding how the system he was inheriting was set up on the backend. The network was running on a Citrix platform, which was not Breen's specialty, so he sought insight from Tim Averill at Silicon Sky, an Infrastructure as a Service provider that also offers managed services and was known for its Citrix expertise.

"It was so helpful to bounce ideas off Tim and his team as I figured out how to adapt the current IT environment to the way I pictured moving forward," continued Breen. "At the time we were running HPE Nimble and EMC storage, which are block-based. You have to create individual lines for each server, and it really hampers what you can do, or when you want to make changes, it makes it very difficult."

"Tim finally said, 'Look, we need to look at a new storage unit for you. You really need an NFS storage unit that has the kind of capabilities to advance with what you're trying to do,'" said Breen. Averill then introduced Breen to the Tintri VMstore NVMe-based platform.

Together, Breen and Averill set up a Tintri VMstore unit and after about 30 days Averill asked if he wanted to keep it going. "I said, 'I'm not sending this thing back,'" laughed Breen. "Since then, that unit has never left the building. It's been here ever since. We kept it, signed a contract and paid for it, and have been running with it ever since."

## The Solution

### Putting Tintri to the Test

The biggest testament to the value Tintri provides came when Q&D experienced a ransomware attack and Breen found all the company's data had been encrypted. "The first line of defense for us in that scenario was the Tintri snapshots that we take daily," he said. "It literally took us less than four hours to get the company back up and running, just by restoring from temporary snapshots. We didn't have to revert to long periods of time to restore from offsite backups, or something like that. So that part of it is just huge, that in and of itself paid for itself. Easily."

"When I first started looking at the Tintri, I liked its ability to take snapshots locally, not backing it up on a device, but taking a local snapshot. So that recovery to that snapshot point is almost instantaneous," continued Breen.

The first time he tested the snapshot capability was during the

**"We're a staff of two – James, the IT manager, and me. We are tasked with keeping IT operations running as efficiently as possible. That includes the employee devices but also the corporate network comprised of about 30 servers, multiple storage units as well as the cyber security and disaster recovery protocols."**

*Andy Breen, IT director, Q&D Construction*

## Challenges

Q&D Construction provides professional services in all areas of heavy/civil, energy, aviation, and commercial building construction. Managing the company's IT infrastructure with a small staff and implementing industry-leading technology that provides unmatched disaster recovery capabilities was a requirement.

## Solution

In partnership with SiliconSky, Q&D Construction leveraged Tintri VMstore and Tintri Global Center, to recover from a potentially crippling ransomware attack that was resolved in less than four hours. In addition, the company revolutionized its IT infrastructure, simplifying data management and increasing workload without additional staff.

## Results

- Fortified disaster recovery capabilities
- Streamlined and simplified management from a single interface
- Scalability, availability, and affordability within a user-friendly design

initial test phase, using the company's ERP system which is a critical piece of their workload. At the time it was just over 2TB and Breen was able to recover it from a snapshot in less than five minutes.

"From saying, 'Hey, this this server just crashed' to 'I need to restore it to what it looked like last night at midnight' took me less than one minute. That alone was amazing to be able to do that."

### Ease of Management with Tintri

Since the first test run with the initial Tintri VMstore, Breen has since installed two additional units for a total of three. When asked why he increased the number of VMstores he said, "They are super easy to manage. And I have the Tintri Global Center, so I am able to manage them all from that piece of software. It's great."

With Breen's small staff, when he was still running the Nimble or the EMC storage, he had to deal with individual interfaces with different formats and models, making management more time-consuming and complicated. Having all Tintri units visible through Tintri Global Center (TGC) streamlined the process so that one person could do it.

TGC allows Breen to look at each unit's real time usage for any process. "For example, dedupe. I can see what I'm getting with compression, or where we're sitting on our storage capabilities. It's super easy to tell what storage is allotted to which server and then obviously alerting, and that type of information that is critical for making sure we stay functioning and running as smooth as possible," Breen notes.

## The Results

### Doing More with Less

Since taking on the IT director role nearly a decade ago, the size of the IT staff has consisted of a team of two. According to Breen, the company has more gear deployed, more software running than ever before, but they can do more work with limited personnel. When Breen started Q&D had 17 servers which has increased to 32. The storage capacity was under 7TB, and now Q&D is managing approximately 40TB of storage.

### Outstanding Support

Like any business, Q&D has faced IT challenges, but whether the issues were software or hardware-centric over the years, one thing stood above all else – the support from Tintri has been outstanding. "The way they're designed, we've not had any outages that we've had to deal with," said Breen.

## Case Study

Any issues have been resolved with hot swappable parts, or by swapping out an entire unit and migrating over the data.

"The support from both Tim and Tintri has been great. Like everything else I do for the company, I need to be able to manage it with such a small team. And the Tintris, just everything about it, from the units themselves to the TGC software just make it really simple to use with a really small staff," said Breen.

"Out of all the things that I've helped implement with the company, I think going to Tintri for our data storage was the best decision that was made," Breen concluded.

Experience Carefree Virtual Data Management. Experience Tintri. For more information on how Tintri VMstore can turbo-charge your business success, visit [tintri.com/vmstore](https://tintri.com/vmstore).



# Tintri