



Suffolk is the largest city in Virginia by area and the eleventh largest in the country. As of the 2014 census, the population was 86,606. The City of Suffolk's information technology department maintains and manages all hardware and software infrastructure and services, including the City's intranet and Internet sites (E-government, virtual private networks, social media); applications (financial, budgeting/payroll, human resources, public safety, planning and community development, public works and utilities, treasurer, revenue services, parks and recreation); networks (Email, security, storage, LAN/WAN connectivity, wireless); GIS (geospatial data); and all telecommunications (voice, cable, video conference, VOIP) services.

The Challenge: Poor Application Performance

The City of Suffolk made the decision to replace its Dell EqualLogic storage in 2014. "Our environment had grown very quickly from a storage standpoint, but also in the number of virtual servers we supported," noted Charlie Harcum, Network Manager for the City of Suffolk. "The old Dell environment just couldn't deliver the performance needed by our end users. It became obvious that we needed to find a more powerful, enterprise-level storage alternative."

Since the City of Suffolk had outgrown its EqualLogic storage and needed more capacity, they needed to find a new solution quickly.

The Solution: Tintri VMstore T850 and T880

Harcum admitted that he actually had never heard of VMstore at that point. "We looked at solutions from all of the traditional storage providers, including NetApp, EMC, and HP's LeftHand systems. We also talked to Dell about upgrading from the EqualLogic systems to the Compellent platform, but we quickly narrowed the decision down to just NetApp and EMC."

The City of Suffolk had undergone a fairly large infrastructure replacement project in early 2015. "We have a great relationship with infrastructure, our technology services and solutions provider," Harcum said. "Their entire team is very competent, from sales to management, and also the engineers. Mike Halpern, infrastructure's senior sales executive, was the first one that mentioned VMstore to us. He referred us to one of the technical professionals in his organization who had a great deal of experience with NetApp, EMC, and Tintri, as well as many other storage providers. He told us that VMstore was an amazing solution, and would be a great fit for our needs. Since infrastructure can resell any other storage platforms, we trusted their unbiased advice."

"We pride ourselves in our deep network of hardware, software, and services partners which allows us to develop solutions for a wide variety of government institutions," said Halpern. "Leveraging VMstore's trusted solution and drawing on our own public sector experience, we were able to equip the City of Suffolk to meet the growing network demands that are facing government agencies in today's digital age."

After watching a WebEx demo, Harcum and his team decided to try a free demo of the VMstore system. "We wanted to see for ourselves what it could do," noted Harcum. "We also noticed that VMstore was getting a lot of positive press, and read some very enthusiastic customer testimonials on several of the storage blogs. All of the reports were so positive, they were actually a bit hard to believe."

Another driving force in the decision to purchase VMstore was that the City of Suffolk was getting ready to launch a new VDI initiative. "VMstore is the perfect platform for VDI," Harcum said. "That helped us convince our management that the VMstore system was the one we needed to buy."

Challenges

- Inadequate performance with existing storage systems
- Expanding VM environment needed more robust storage solution

Solution

- Tintri VMstore T850 and T880

Results

- Simplified management
- Improved performance
- Drastically reduced rack space from 36RU to 4RU
- Ability to deploy VDI

The Result: Rapid Deployment, Ease of Management, Savings in Power and Space

The difference between standard infrastructure and Intelligent Infrastructure was immediately evident to the City of Suffolk. "Once we got the demo box in here and got our hands on it, we believed all of the great testimonials we were hearing," Harcum reported. "I immediately had full confidence in the solution. Tintri told us it would take just fifteen minutes to set up, and they were right. Over the next couple days, our entire environment was running smoothly off of the demo box."

The City of Suffolk purchased one Tintri VMstore T850 and one Tintri VMstore T880 system. They are currently installed in the same data center, but one will eventually be moved to a second data center. The City of Suffolk is now running VMware, SQL Server, and several other workloads on VMstore. "We initially purchased VMstore just for the VDI project, but it is so easy to work with and provides such good high-performance, we are using it for nearly all of our workloads."

Harcum was also impressed with the deceptively small size of the VMstore systems. "We replaced 36RU of Dell equipment with just one 4RU VMstore device, which brought us significant savings in power costs and data center space," he reported.

"The VMstore systems are extremely easy to use," Harcum said. "Unlike our old environment, we don't have to create LUNS or manage volumes anymore for our storage and VMware environments. We just have the one VMstore system, we move things to it, and it just runs. The user interface is very intuitive and the level of visibility is amazing. It's nice to see data usage across the entire environment in one single pane. We can see our rate of data change per day, and per VM. We couldn't do that prior to VMstore."

Managing the Dell EqualLogic systems was very time-consuming, Harcum explained. "There were a lot of manual tasks as far as setting up the snapshots, making sure there was enough snapshot reserve space, and making sure it was replicating to the other data center. I was probably in there managing that environment at least twice a day for sixty to ninety minutes, working with the LUNs, figuring out which VMs were on each LUN, trying to figure out the rate of change that was happening so I could match that up with larger LUNs. Once we moved everything onto VMstore, life got simpler. I actually forget we have storage in there anymore! I pop my head into the data center every now and then just to make sure it's still there. VMstore has enabled our team to work on more strategic IT projects."

The City of Suffolk purchased one legacy system at the same time they purchased the two new VMstore systems. "We thought we needed the traditional system for a few of our remaining physical server workloads," Harcum said. "But I am embarrassed to say that months later, we are still in the process of implementing that unit! The VMstore systems were installed in less than an hour. We are now 85 to 90% virtualized. There are just a few physical servers hanging around for our telephone services and our police department. But once we virtualize those systems, VMstore will be our default storage platform going forward."

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Charlie Harcum, Network Manager, City of Suffolk

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