## **D¢LL**Technologies

# IT modernization sets up a data-driven future

The City of Amarillo, Texas, accelerated a much-needed IT modernization with hyperconverged infrastructure and virtual desktop infrastructure (VDI), improving departmental performance, employee productivity and citizen services delivery.







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#### **Richard Gagnon**

CIO, City of Amarillo, Texas

### Organization needs

Amarillo's aged IT infrastructure was complicated and costly to operate and maintain, with widespread security vulnerabilities. Departments and employees worked with such a patchwork of different technologies that they were not as effective or productive as they could be, which ultimately affected the quality of citizen services.

#### Organization results

- · Cut first-responder response times by 60%.
- Saved \$800,000 in police car hardware costs.
- Set up a 75-person call center in 1.5 days.
- Consolidated 7 storage platforms to 1.
- Improved end-point and data center management and security.

### Solutions at a glance

- Dell EMC VxRail Hyperconverged Infrastructure
- Dell EMC Data Protection and Backup Solutions
- Dell Financial Services
- VMware Horizon
- VMware Professional Services

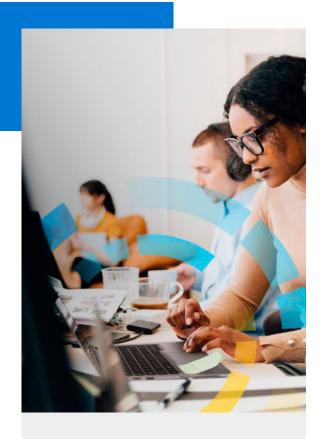
With 200,000 people, the City of Amarillo—in the heart of the vast and isolated expanse of the Texas Panhandle—operates with a wider scope than its size might suggest. That's because it serves the needs not only of its own citizens but also people traveling for healthcare, entertainment and other services from eastern New Mexico, western Oklahoma and southern Colorado.

Richard Gagnon, the city's chief information officer, assumed his post in 2016, after a stellar career as a high-ranking executive with three global high-tech companies. An Amarillo resident himself, he had previously joined the City of Amarillo when the city decided to upgrade its operational leadership with private-sector talent. "That's when I decided I could afford to downshift and work in the community I call home," he says. "I'd been all about driving profitability, but had to learn what makes good government work, especially innovation."

#### Clarifying the road ahead

Gagnon's first day on the job was an eye-opener. "I walked into my office that first day to find a Windows 7 PC with a 19-inch monitor and Office 2007 waiting for me," he recalls, describing the state of the city's information technology at the time. "We literally had to start at Layer 1 and get a new networking infrastructure in place. The network was large and flat with Layer 3 firewalls, all of it extremely vulnerable to security breaches. We also had seven different types of storage, so data was everywhere. And our public-safety officers badly needed a laptop refresh in their vehicles."

If those challenges weren't enough, the city's 49 departments, from public safety and health to water treatment and waste collection, were all operating on different IT roadmaps. "Being a private-sector guy, I faced a lot of internal skepticism about the changes needed and my urgency to enact them," Gagnon says. "But I have to hand it to my IT team. Keeping all this legacy infrastructure operating meant they had to really stretch their resourcefulness and creativity."



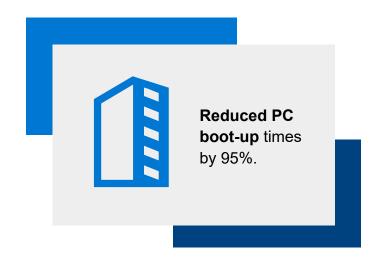
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#### Broad portfolio, attractive financing

For assistance, Gagnon sought competitive bids and chose Dell Technologies as Amarillo's IT modernization partner for both the city's comprehensive portfolio of hardware, software and services as well as an attractive lease arrangement from Dell Financial Services that would help to minimize its capital expenditures.

Gagnon especially liked the potential benefits of deploying the Dell EMC VxRail hyperconverged infrastructure (HCI), powered by Dell EMC PowerEdge servers, VMware HCI software and VxRail HCI System Software. The combination consolidates compute, storage and virtualization with end-to-end automated lifecycle management.

The pairing of the Dell EMC HCI with a facilitated acquisition model is the hallmark of Dell Technologies On Demand. It provided the City of Amarillo with a comprehensive solution to its needs, eliminating what would otherwise be a substantial upfront capital expense and also saving procurement and finance staff time to find a financing source.

In all, the city installed 29 nodes in various cluster configurations for different workloads. Among them are VDI, public-safety functions and disaster recovery. The latter utilizes Dell EMC Data Protection and Backup Solutions to automate data backup and restoration. VMware Professional Services was chosen to help implement VDI using VMware Horizon.

#### VDI's biggest benefits

VDI has been a big win for the city in several ways. One, it simplified the overall management of client endpoints for several thousand city workers, which improved their productivity by cutting boot-up times from 10 minutes to just 36 seconds. Two, the city deployed VDI in its refresh of laptops in police cruisers and other first-responder vehicles. "We saved \$800,000 in hardware-refresh costs for our police cars by making our VMware Horizon VDI a mobile solution supported by VxRail," Gagnon says.

VDI's third advantage emerged when all but essential city employees had to start working from home almost overnight, in keeping with the city's own shelter-in-place mandates since the onset of the 2020 pandemic.

"Of course, large numbers of employees remained essential workers, but for those who could work from home, we were able to stand them up practically overnight, which would've been impossible before our IT modernization," Gagnon says. "In fact, we spun up a 75-person virtual call center for remote public-health clinics in just a day and a half using our VxRail-supported VDI."



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# Simplified data and device management

The modernization effort has helped Amarillo simplify data management by reducing its seven storage platforms to just one: VxRail HCI. And the HCI approach saves data center space and IT staff time—especially with its intelligent lifecycle management that automates nondisruptive upgrades, patches, and node additions and retirements—while keeping VxRail clusters in continuously validated states.

"Desktop management is a breeze with the VMware Horizon VDI, and we'll save weeks of data center staff time each year with the automated VxRail upgrades," Gagnon says. "We've hardened our security many times over, too, including special protections against ransomware."

As the city's IT modernization continues—with all but a few legacy applications now running on the VxRail HCI—Gagnon and his team have shifted more into consulting roles. They're working with their fellow departments to align roadmaps, consolidate governance and start using data analytics to optimize performance and improve services delivery.

For example, Gagnon's team is working with the police department to analyze its dispatch data to better optimize first-response measures. "Our analysts at the police department cut our 911 response times by 60 percent, thanks in part to the analytics made possible by our VxRail-enabled IT modernization," he says. "That's a huge benefit to the community's public safety."

Looking ahead, Gagnon sees many more opportunities to enhance Amarillo's operations using VxRail. Among them, he envisions tying in edge-computing devices and taking advantage of the Dell Technologies Cloud Platform, VMware Cloud Foundation on VxRail. "Our next big moves are around expanding automation, both for operations and security, and our use of analytics," he says. "We want to be a data-driven city, and our VxRail modernization is helping to get us there."

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