CITY OF SAFFORD

Unified storage dramatically simplifies administration, virtualization at an affordable cost

Located in southeastern Arizona’s Safford Valley, the City of Safford is surrounded by the Gila and Pinaleno Mountains. Serving 10,000 residents, the Safford city government oversees public works and maintenance, police, fire safety and response, utilities, recreation and many other services.

With a local population growing by 30 percent since the 1990s, the city has needed to deliver more services amid declines in tax revenues due to the economic recession. Like all departments, the city’s IT staff is used to handling heavy workloads with limited resources. Safford’s three IT employees manage purchasing, deployment, and technical support of all computers, storage, printers, A/V systems, pagers, phones, radio and other technologies for the city’s 200 employees.

“We get calls on everything from forgotten passwords to broken printers, PCs and mobile devices in police cruisers,” says Derek Kruger, IT and Communications supervisor, City of Safford. “I’ve had police officers visit my house at night for help with their laptops. The departments also are leaning on us for technologies that will help amplify their impact, even though everyone’s budgets have taken a beating.”

The Safford city government views data storage as a strategic asset, according to Kruger. “We’re not a big corporation, but storage is just as important to us. If our storage goes out, we’ve got a whole city staff waiting for it to get back online. And when it comes to police, electric, water, and other services, online data doesn’t get much more critical.”

SIMPLER THAN EVER UNIFIED STORAGE

Safford’s IT department welcomed the opportunity to beta-test EMC’s new EMC VNXe™. Designed for IT generalists, the VNXe delivers a simple, efficient, and affordable storage solution, while providing application-optimized management and single-click help and support.

The city’s IT staff used VNXe storage for its test and development environment deployed on physical Linux servers and virtual machines virtualized with Microsoft Hyper-V. Applications supported by the VNXe include Microsoft Exchange email and file services.

For storage provisioning and management, Safford IT relied on EMC’s Unisphere™ simplified management software, part of the VNXe solution.
The IT department got a taste for VNXe’s revolutionary efficiency as soon as the shipping box was opened.

“The installation of the VNXe was incredibly simple,” Kruger recalls. “It took an hour to unpack the VNXe and get it racked, run the network cabling, and power up the applications.”

Safford used VNXe’s application optimized wizards to provision storage for its Microsoft applications.

“With Microsoft best practices, we can have storage provisioned for Hyper-V, Exchange or SharePoint with just a simple few clicks,” says Kruger. “It took us 10 minutes to provision a terabyte of storage. After provisioning VNXe storage for our Exchange 2010 servers, the partitions were the correct size for the number of mailboxes selected. Not only did we not want to waste any space, but we also didn’t have to spend hours reading the manual and creating a spreadsheet. EMC has taken all the guesswork out of the storage installation and provisioning processes.”

VNXe’s wizards for Hyper-V also are facilitating Safford’s move to a more virtualized infrastructure, according to Kruger. “We were pleasantly surprised at how well integrated the VNXe is with Hyper-V.”

MORE TIME FOR STRATEGIC PROJECTS

After installation, Safford’s IT team found the VNXe exceedingly easy to use on a day-to-day basis.

“The Unisphere interface and wizard software is very intuitive and simple,” says Kruger. “We got comfortable with Unisphere in five to 10 minutes. The VNXe is definitely the easiest storage device we’ve ever used. When we can save time on administration and spend more time on helping users and departments solve their problems, there’s a substantial strategic benefit.”

The automated diagnostics and one-click tech support built into the VNXe also saved time for the IT staff.
Best practice wizards simplify provisioning for Exchange and other common use cases

“Because we’re hundreds of miles from the nearest urban area, we’re very dependent on the phone and Internet for technical support,” explains Kruger. “With VNXe’s live chat, there’s always an EMC technician to walk me through a problem or take control of my system if it’s beyond my skill set.”

AFFORDABILITY WITH INTEGRATED MANAGEMENT

Another efficiency advantage of VNXe is integration of file-based (CIFS, NFS) and block-based storage (iSCSI) in a single system.

“VNXe can help simplify my infrastructure,” says Kruger. “We’ll be able to administer VNXe from a single pane of glass and spend time on one product versus the three non-EMC storage products we manage now. Standardizing on the VNXe also will reduce my IT spend on devices, controllers, and hard drives.”

To reduce storage costs, SAS high-performance drives will be dedicated to higher-performance applications, like Exchange, while rarely-accessed data, such as cemetery records will reside on much less expensive nearline SAS storage.

“Mixing and matching different speed drives to different applications makes storage more affordable,” says Kruger. “It also provides more flexibility to handle varied workloads.”
STREAMLINED EXPANSION

City of Safford’s test run with EMC was so flawless that IT is moving the VNXe into production. With scalability up to 240 terabytes, the VNXe can easily support Safford’s rapid data growth.

“As a municipality, we hang onto our records for a long time or even forever when it comes to marriage and birth certificates,” says Kruger. “With VNXe’s expandability, I’ll be able grow my storage easily without buying it all upfront.”

Reflecting on the positive beta experience with VNXe, Kruger says, “If you don’t want to spend all your time managing storage, the VNXe hits the sweet spot as far as performance, affordability and usability. All the best practices are baked in so you just point and click and go. And it’s taking care of decisions that reduced our cost per gigabyte while squeezing out the best performance possible.”