



SUCCESS STORY
Government



CITY OF ALEXANDRIA | PROBLEM SOLVED

To provide city employees with high-performance virtual desktops, the City of Alexandria, Louisiana, hosted them on a NetApp® EF-Series all-flash array.

A Flash-Enabled Hub for High-Performance Civic Training and Engineering

After moving about half of its computer users to virtual desktops, the City of Alexandria, Louisiana, realized it needed a storage solution that ensured faster access to pertinent information and maintained high-performance for CAD applications while saving the city money.

Another NetApp solution delivered by:

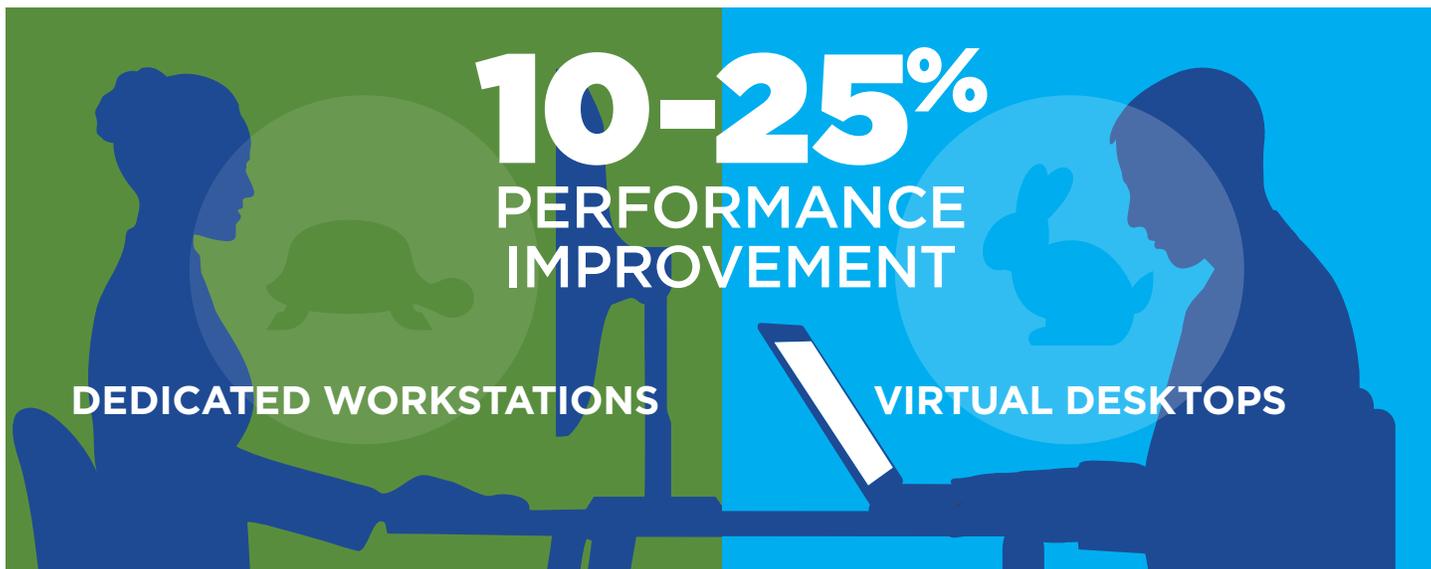


Helps ensure that cloud platform resources meet the need for **scalability and agile delivery**

Provides a **technical foundation** for asset and data lifecycle management

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WHERE LOUISIANA COMES TOGETHER

The City of Alexandria, Louisiana, is the principal city of a metropolitan area that is home to more than 47,000 residents. The parish seat of Rapides Parish, Alexandria lies on the south bank of the Red River in almost the exact geographic center of the state. Since its founding in the early 1800s, the city has been a crossroads of transportation, trade, and agriculture.

CHALLENGE

Improving access to civic information

Alexandria's central location makes it a natural hub not only for cultural events and festivals, but also for education and training. For instance, the Alexandria Regional Police Academy attracts cadets from 9 local parish sheriff's offices and 45 municipal police departments across Louisiana. They gather for classes at the academy, which also provides peace officer's training to

the Alexandria Police Department (APD). Quick access to course materials is important to the cadets as well as academy instructors to meet training requirements. However, they experienced delays when logging in and using the classroom computers. Systems also had to be manually reimaged for each new class, which put high demand on the IT team.

In addition, civil engineers who work on the city's infrastructure needed more powerful workstations to keep pace with the demands of their CAD/CAM engineering applications. System requirements for CAD/CAM applications require these systems to be purchased with robust graphics, processing and memory capacities. Routine replacements placed a strain on the city's IT budget.

The city needed to reduce costs and improve system performance at the academy and for its engineering and IT staff. "In local government, IT budgets are always a challenge,"

"The city will save over \$650 thousand over the next 10 years by moving to virtual desktops, and NetApp EF560 made that a viable solution."

Greg Able
Information Systems Manager,
City of Alexandria

says Greg Able, information systems manager for the City of Alexandria. “We’re expected to innovate, and we saw virtual desktops as a way to provide better performance and greater flexibility at a lower overall cost.”

SOLUTION

Flash storage for high-performance virtual desktops

To give its police academy, civil engineers, and other employees faster access to information, the city moved approximately half of its 895 computer users to VMware based virtual desktops with thin clients. The city added NVIDIA K2 GRID cards to its servers to boost performance for heavy-hitting applications such as AutoCAD. However, it needed a way to remove storage bottlenecks and allow the servers to work to their full potential.

“With more than 400 virtual desktop users on spinning drives, we weren’t getting the performance we needed,” says Keith Staples, systems analyst. “We had to find a new storage solution quickly, so that our users could get full value from virtual desktop computing.”

The city turned to CMA Technology Solutions, its technology advisor and a NetApp partner, for advice. “We trust CMA, and we’re confident in their recommendations because they stay on top of the latest technology,” says Staples. “To deliver

microsecond response times for our virtual desktops, CMA recommended a NetApp EF-Series all-flash array.”

With assistance from CMA, the city deployed a NetApp EF560 all-flash array in a Fibre Channel SAN configuration. It also deployed NetApp E-Series storage as a high-density solution to consolidate police department data and support an upcoming body-worn camera initiative for police.

BUSINESS BENEFITS

Faster, more flexible information access

By migrating virtual desktops to NetApp EF-Series, the city is enhancing productivity and work experiences for users by providing rapid information access for the police academy. This enables smoother city operations, better training, and ultimately more effective law enforcement.

“Moving our police academy to virtual desktops on NetApp EF-Series was the right solution for us,” says Able. “Cadets don’t have to wait for course materials. The desktops are ready to go as soon as they log on, reclaiming valuable time for learning.”

Better performance than dedicated workstations

Storage bottlenecks are a thing of the past for the city. In fact,

BUSINESS BENEFITS

- Allows IT to be more responsive and recompose virtual desktop pools up to six times more quickly
- Accelerates performance of applications by up to 25% compared to dedicated workstations
- Reclaims time for learning at statewide police academy with virtual desktops, helping to improve law enforcement throughout Louisiana
- Enables city engineers to be mobile and access high-performance AutoCAD workstations from the field

performance for CAD/CAM applications actually improved on virtual desktops versus physical workstations.

“To dispel any uncertainty, we had all the engineers come into our conference room and did a side-by-side comparison of the virtual desktops versus dedicated CAD workstations,” says Staples. “We were able to show them a 10% to

25% performance improvement with AutoCAD running on the virtual desktops. 

City engineers can now access virtual desktops from the field using mobile devices, eliminating back-and-forth trips to the office when working on water supply projects and other critical infrastructure initiatives. Because compute and storage resources can be applied on the back end, engineers have the highest performing CAD workstations.

The new environment also enables IT staff to be more responsive to users. "I haven't had to touch the NetApp EF-Series array since we put

it in," says Staples. "It just runs, and we get great performance. We can recompose virtual desktop pools six times faster, so we are able to deliver better service to our users."

Saving over \$650 thousand over 10 years

In addition to technical advances, the solution is helping the city make the most of its IT budget as older desktop PCs are retired and replaced with virtual desktops, enabling less frequent hardware refresh cycles. "The city will save over \$650 thousand over the next 10 years by moving to virtual desktops,  and NetApp EF560 made that a viable solution," says Able.

LEARN MORE

www.netapp.com/us/products/storage-systems/ef-series

SOLUTION COMPONENTS

NETAPP PRODUCTS

NetApp all-flash EF560 System (virtual desktops)

NetApp E2700 system (police data and bodycam video)

NetApp SANtricity® operating system

ENVIRONMENT

Applications: Autodesk AutoCAD, police and fire applications

Server virtualization: VMware vSphere 6.0

Desktop virtualization: VMware Horizon View 7

Hardware Acceleration: NVIDIA GRID K2

PROTOCOL

FC-SAN

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 NETAPP.COM/CONTACT

+1 877 263 8277



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