

# City Increases Efficiency through Desktop Virtualization



City of Jacksonville implements Cisco Virtual Experience Infrastructure (VXI) to expand virtual environment access.

## Executive Summary

### City of Jacksonville, Information Technology Services Department

- **Industry:** State and Local Government
- **Location:** Jacksonville, North Carolina
- **Number of Employees:** 7

### CHALLENGE

- Support city's growing needs with minimal number of IT workers
- Expand and open second operations center for city support
- Upgrade infrastructure to support growing dependency on IT services department

### SOLUTION

- Implement VXI to deliver virtual workspaces that unify virtual desktops, voice, and video
- Update servers to leverage new virtualization infrastructure

### RESULTS

- Support of over 400 virtual desktops across city's public service departments
- Increased online services for city residents and employees
- Improved security of virtual environment

## Challenge

The City of Jacksonville is the 14th largest city in North Carolina, and is home to more than 70,000 residents. The city's Information Technology Services (ITS) department provides citywide support for all computer, phone, security, and geographic information systems through its operations center for over 500 end users. The department also analyzes and implements the electronic needs of all Jacksonville city operations, and utilizes a number of programs to facilitate all that the city does for its residents and employees.

As the city's workers became more and more dependent on the ITS department, Jacksonville's IT director Earl Bunting, along with other city officials, decided it was time to refresh the department's infrastructure to help ensure that operations and employee support remained fully functional at all times. "We wanted to find a way to increase our bandwidth while making the most of the infrastructure we already had," says Bunting. "We knew we had to upgrade some of our infrastructure, but we didn't want to start from scratch."

In addition to an upgrade, the city planned to open a second operations center to continue to provide support for public service locations such as City Hall and the police department. One of the major concerns with opening the second operations center was making sure that the two centers worked in conjunction with one another, and that there would be no downtime during the establishment of the second center. Bunting says, "Our goal was to be proactive. We wanted to make sure that our department was set up in the most effective and efficient manner so that we could respond and meet the needs of the city."

## Solution

Jacksonville turned to Cisco, with whom it has been working since the installation of a voice over IP (VoIP) system 10 years ago, for a solution that would help the city install virtual workspaces in its operation centers. "Cisco came in and discussed a number of solutions for us, and together we decided what would make the most sense," says Bunting. "Since we had worked with Cisco before, we trusted the team's input and had a lot of faith in them."

After discussing a variety of options, Jacksonville decided to upgrade to a Cisco® Virtualization Experience Infrastructure (VXI), which not only is cost-effective, but also can support Jacksonville's virtual environment in their operations centers. Cisco VXI leveraging Citrix XenDesktop is an approach that goes beyond traditional virtual desktops to deliver next-generation virtual workspaces by unifying virtual desktops, voice, and video. VXI can create an optimal balance that allows users

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**Earl Bunting**

IT Director, Information Technology  
Services Department, City of  
Jacksonville

more mobility, flexibility, and choice, and helps IT departments, such as Jacksonville's ITS department, centralize desktop infrastructure. “More city employees are relying on personal devices during work,” says Bunting. “We needed a way to address this trend while making sure we were maintaining a secure environment and still meeting the needs of Jacksonville.”

Jacksonville purchased Cisco Unified Computing System™ (UCS™) 5100 blade server chassis, as the data center underpinning for VXI, which also provided a flexible architecture for both the original operation center the city was running and the second center that the city opened during the upgrade. Cisco UCS serves as a core building block for VXI, because it provides simplified operations for greater agility while offering greater scalability, uncompromised performance with reduced maintenance. “The blade servers were a great addition to our upgrade,” says Bunting. “They fit perfectly within our budget for networker and server life cycles.” The servers incorporate a unified fabric and fabric-extender technology, which not only allows the server to be more energy efficient, but requires no independent management, allowing city IT workers to devote more time to city employee support and other tasks.

## Results

Since the upgrade, Jacksonville has successfully set up the second operation center, which has improved efficiency for both the ITS department and city workers. Jacksonville's VXI solution enabled city employees to become more mobile and access work materials and city resources from anywhere, anytime. “Once we moved to a VXI solution, we saw an immediate increase with the number of city employees logging in,” says Bunting. The ITS department has since improved its management and administration of all PCs, and has set up employee's mobile phones so that they can access their work when away from the office, allowing city departments to provide consistent service to Jacksonville citizens.

While Jacksonville citizens and employees have seen a number of benefits from the upgrade, the ITS department has also been able to function more effectively. The Cisco VXI solution has allowed the seven-member team to more quickly to address any application changes while helping ensure a consistency among the virtual workspaces. Cisco VXI has also helped Jacksonville's virtual environment become more secure. “Our IT department no longer has to waste time monitoring for threats,” says Bunting. “VXI has made our environment increasingly secure and protected us from the growing number of online threats that comes with such a large number of users.”

Cisco VXI provides a solid foundation for Jacksonville's next-generation virtual workspace, and will continue to as the city evolves its systems to meet employee

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## Product List

### CISCO VXI

- Cisco UCS 5100 Blade Server Chassis
- Cisco UCS B-Series Blade Server
- Cisco Unified Communications Manager
- Cisco Unified Contact Center Express
- Cisco Unity® Connect
- Cisco UCS C210 M2
- Cisco DMS Show and Share Server

and resident needs. Since deployment, Jacksonville has received positive feedback from workers of all levels, who have praised VXI and the results seen all around the IT community. "One of our biggest issues was that we were unable to support a virtual environment. People needed a way to access materials," says Bunting. "Cisco not only helped us overcome that issue by allowing us to support over 400 virtual desktops, but it also helped us prepare our centers to easily transition during future upgrades and establish ourselves as an example for other cities."

## For More Information

To find out more about the Cisco Virtualization Experience Infrastructure, go to: <http://www.cisco.com/go/vxi>.

