

Exceeding a city's expectations for its IT

With people relying on essential services ranging from utilities to police and fire, the City of Monroe in North Carolina modernized its IT infrastructure to ensure delivery 24x7

Customer profile



City Government | United States



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Assistant Director, IT Department,
City of Monroe, North Carolina

Business needs

Located within the fast-growing Charlotte metropolitan area, Monroe had to find a way to stay ahead of the city’s expanding IT requirements. This would ensure that residents and businesses have access to a wide range of critical city services and public utilities such as water, electricity and gas.

Business results

- Provides the high performance and reliability to deliver city services 24x7
- Consolidated servers in co-located data centers by 60%
- Significantly reduced power and cooling costs
- Deployed and in production in as little as two hours
- Ability to dynamically reallocate compute and storage resources without disruption
- Support for multiple future generations of processor technologies, storage types and connectivity options

Solutions at a glance

- Dell EMC PowerEdge MX7000 modular chassis
- Dell EMC PowerEdge MX740c compute sleds
- Dell EMC PowerEdge MX5016s storage sleds
- Dell EMC OpenManage Enterprise-Modular
- VMware vSphere

Monroe is a suburb of Charlotte, North Carolina—one of the fastest-growing cities in the nation and second largest metro area in the Southeastern U.S. With rapidly increasing technology requirements due to Monroe's growth, the city's IT team faced a major challenge. It needed to continually deploy new applications and automate systems and functions—including critical data analytics capabilities—while maintaining the same data center footprint to avoid a prohibitively costly expansion.

Running the city 24x7

Monroe's IT department supports the city's systems and applications running 24 hours a day. Fire and police services. Collecting taxes and fees. Managing Monroe's public portal. All of this must be constantly available for residents and businesses.

To meet its IT requirements and accommodate growth, the city modernized its IT infrastructure with the help of the Dell EMC PowerEdge MX kinetic infrastructure.

"Two of our biggest driving factors are the need for superior performance and scalability," says Josh Hyatt, assistant director of Monroe's IT department. "With PowerEdge MX, applications run a lot faster and processor workloads have greatly improved."

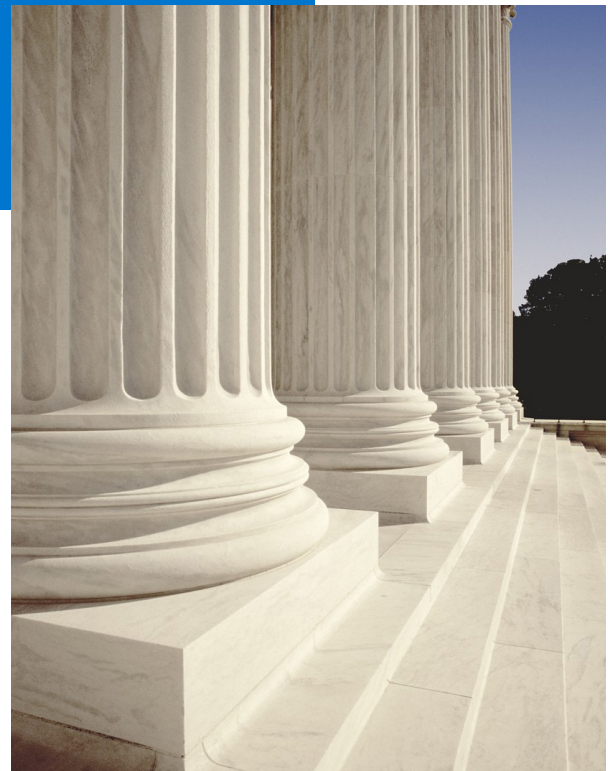
Monroe is unique in that it supplies city and many county users with all utilities—electricity, natural gas and water. This significantly escalates performance demands on its systems—such as running sophisticated automation for predictive analytics to track and identify potential outages.

The result? With PowerEdge MX, Monroe experiences fewer outages, and has the ability to solve problems remotely—reducing costs by minimizing the number of times a truck and crew must be dispatched.

Nothing else like PowerEdge MX

The dynamic, modular kinetic infrastructure of the PowerEdge MX provides exceptional redundancy, reliability and scalability for an array of applications and workloads in a VMware virtualized environment. This includes a Geographic Information System (GIS) to more efficiently support utility outage management and maintenance and SQL databases for timely insights into the status of operations.

The future-forward, no-midplane design of the PowerEdge MX not only isolates potential failures for even higher reliability, but it also enhances flexibility and scalability by allowing the city's IT team to upgrade storage and networking fabric without bringing down the chassis for midplane replacement.



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“When we did our due diligence, there was nothing else like it,” Hyatt explains. “With Dell EMC PowerEdge MX, we can make upgrades without replacing the chassis.”

He continues, “PowerEdge MX enabled us to meet our needs without expanding our footprint. We’ve consolidated our physical servers, significantly reducing costs. Besides minimizing sprawl, we were also able to standardize on a single trusted platform.”

Off to a fast start

Dell EMC OpenManage Enterprise Modular and the Integrated Dell Remote Access Controller (iDRAC) embedded with every PowerEdge MX server streamlines deployment and simplifies management by automating tasks and providing alarms and alerts about unexpected events and agent-free updates.

“With the help of OpenManage, we went from being completely cold to having our PowerEdge MX servers up and running within two hours,” remarks Hyatt.

“The templates make it easier to spot problems—without a lot of time-consuming training. As soon as we log in, we can see if there are any alerts that need to be addressed.”

Further, Monroe’s IT team relies on Dell EMC Live Optics to collect, visualize and analyze data about its IT environment and workloads to make the right configuration decisions.

Partnering with Dell EMC and Trace3

Throughout the review and implementation process, the city relied on the guidance and assistance of Trace3, a long-time Dell EMC partner that helps organizations efficiently build, migrate and operate on-premises or cloud IT.

“Trace3 and Dell EMC were true partners, with Trace3 taking the time to understand our requirements—allowing us to roll out applications faster than we could on our own and looking out for our best interests,” Hyatt notes.

In addition, the city counts on receiving assistance as needed from Dell EMC Support Services. “It’s great to be able to manage and support the PowerEdge MX system as one,” comments Hyatt. “Dell EMC support has always been outstanding.”



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