



CASE STUDY

Critical IT Transformation Paves Way for Sustained Efficiency



Madison County, Illinois, is part of the Saint Louis metropolitan area, serving a population of over 250,000. The county's IT department, led by Christopher Bethel, ensures seamless connectivity and IT infrastructure for critical entities, such as local police departments, courts, emergency management, and the treasurer's office. Operating with a lean but capable team of 14 people, Madison County relies on trusted partners like C1 to execute complex projects while meeting stringent requirements for reliability and compliance.



The challenge: Critical IT transformation paves way for sustained efficiency

Madison County was relying on an outdated on-premises Microsoft Exchange infrastructure, which presented escalating maintenance costs and staffing challenges. "The codebase of Microsoft Exchange became overly complex, and retaining staff with the expertise to manage it was nearly impossible," says Christopher Bethel, IT Director.

The county also faced unexpected hurdles, like database corruption within its legacy email environment. Additionally, with many local governments already making the shift to cloud solutions, staying competitive meant modernizing critical IT systems like Office 365 while keeping public safety networks running reliably.

On top of email migration, the county's aging wireless infrastructure posed significant challenges. Madison County's reliance on Cisco wireless controllers created unpredictable downtimes that impacted connectivity for critical entities, such as police departments. Bethel underscores, "When controllers failed, the entire Wi-Fi network followed, leaving us exposed."

Lastly, with firewalls nearing the end of their lifecycle, Madison County required a Palo Alto refresh. Balancing modernization with budget constraints was crucial, requiring both strategic planning and reliable execution.

Key results

- **Improved efficiency** and eliminated on-premises email challenges
- **Enhanced wireless connectivity** across county buildings
- **Reduced downtime** and maintenance efforts

"The scale and resources C1 offers have enabled us to punch above our weight."

Christopher Bethel
IT Director, County of
Madison, Illinois



The solution: Scalable solutions, seamless execution

Madison County partnered with C1 to migrate from on-premises Exchange servers to Office 365, leveraging C1's expertise in scoping, planning, and execution. Even when faced with unexpected database corruption challenges during the migration, C1 provided timely guidance and tools to restore and inject emails directly back into new systems. "What could've been a catastrophic setback was managed seamlessly, thanks to C1's support and responsiveness," Bethel emphasizes.

For the wireless network overhaul, C1 worked alongside Madison County to deploy Aruba's cloud-hosted wireless solutions. With a more intuitive interface and lower costs compared to older Cisco systems, the transition to Aruba significantly improved network reliability while retiring underperforming controllers.

Finally, Madison County launched a Palo Alto firewall refresh project with the help of C1. Leveraging C1's resources, Bethel's team ensured their new firewalls were appropriately scoped for peak performance, avoiding overpayment for unneeded high-end equipment.

Across all projects, C1's ability to provide scalable solutions while working collaboratively with Bethel's small but mighty IT team ensured success. "The scale and resources C1 offers have enabled us to punch above our weight," Bethel adds.

The result: Modern infrastructure, maximum uptime

By eliminating the need for routine maintenance on legacy Exchange servers, IT teams can now dedicate valuable time to strategic initiatives rather than focusing on reactive troubleshooting. This shift has significantly enhanced their ability to address pressing organizational priorities with agility and focus.

Furthermore, the county's network infrastructure has achieved newfound reliability, with reduced downtime and streamlined system upkeep. The robust connectivity brought by the Aruba deployment ensures seamless communication and uninterrupted access to critical resources across departments. IT administrators also report greater peace of mind, as the modernized system provides enhanced protection against cyber threats, reducing the risk of email-related outages or disruptions.

"Knowing that our email infrastructure is secure and doesn't require constant oversight is a burden lifted from our team," says Bethel. This innovative approach to IT management has not only fortified cybersecurity but also empowered the staff with tools to work more efficiently and collaboratively. The county's investment in Aruba technology demonstrates the potential of advanced solutions to simplify complex systems while fostering growth, resilience, and sustainability.

Build the network that puts you two steps ahead

C1 specializes in crafting tailored, secure, and intelligent networks aligned to our clients' needs. With a focus on flexibility and reliability, we empower enterprises to foster remarkable connected experiences, facilitating seamless connectivity, collaboration and innovation across their entire ecosystem. Contact us to learn how our solutions can transform your networking landscape and build tomorrow's infrastructure today!

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