



Improving MDU Tenant Quality of Life and the Bottom Line



“This is something we have never had before – a true plug and play solution. It’s very sophisticated, it’s very smart, it gives us everything we needed without having an engineer in the house 24/7. Our down time is reduced, and we can scale the solution across other properties.”

PROPERTY OWNER

“The requirements were clear: the client needed a switch that can sustain extreme temperatures, provide the capacity needed, perform reliably and be easy to manage remotely. And it needs to perform over the long term.”

Alex Adler
Director of UCaaS/CCaaS
LDI Connect



Overview

MULTI-DWELLING UNIT (MDU) TENANTS WANT to live in safe and secure environments. Property owners aim to accelerate improvements for security and efficiency with digital transformation initiatives. One housing project in New York needed to replace their aging switching infrastructure to connect more than 1,130 Verkada cloud-managed cameras and 148 Cambium Networks cnMatrix™ industrial-grade, cloud-managed switches with the help of system integrator LDI Connect.



The Challenge

Go From Unacceptable to Unbelievable

FIVE YEARS AGO, PROPERTY OWNERSHIP made a significant investment in installing a sitewide camera and security system. Over time, the switching infrastructure experienced an unacceptable number of failures, rendering downstream systems unavailable. Switches in some locations were overheating. The cost of replacing switches with hardened industrial switches was too high, and the process of frequently replacing the existing switches as they failed was unacceptable. The property needed a reliable switch solution that could:

- Provide a stable and reliable network infrastructure
- Deliver the reliability to provide 24/7 security for the tenants
- Support a higher temperature rating
- Scale to include remote management of video cameras and IoT sensors and controls

The property owner needed a solution that would:

1. Be easy to use by someone without a technology background
2. Give precise details on the root cause of trouble

The Solution

Upgrade Everything Without Touching a Wire

WHILE UPGRADING TO CLOUD-MANAGED CAMERAS, they decided to also replace the existing switches with cnMatrix switches from Cambium Networks. All other equipment and cabling were retained. The entire system would be remotely managed via the cnMaestro™ cloud management system from Cambium Networks.

“The customer needed to see all of the ports and be able to toggle any ports for the cameras from a remote location,” said Alex Adler, Director of UCaaS/CCaaS LDI Connect. Key factors for success were:

- Overcoming design issues by using existing cabling
- Planning for scalability for a large project
- Keeping the design simple

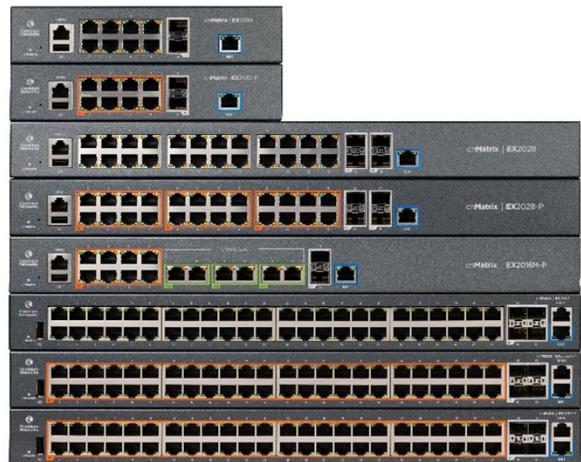
Remarkably Simple to Operate

SIMPLICITY WAS THE KEY. The flat system architecture developed by the joint efforts of LDI Connect, Verkada and Cambium Networks enabled LDI Connect technicians to quickly deploy, configure and test each component in the system. Installation was fast and efficient. Using the cnMatrix switches' unique Policy-Based Automation feature, a sitewide system policy was created and automatically pushed out to all cameras. Technicians only had to configure one camera on one switch, and the cnMatrix switches replicated that configuration and pushed it out to all the switches, saving the time and energy of manually onboarding each of the cameras in the cnMatrix switches.

In addition to connecting the cameras, infrastructure also supports:

- Door lock access
- Elevator voice audio
- Intercom systems throughout the building
- Voice over IP for staff

“The technology that’s inherent in the cnMatrix switches and cnMaestro management made them a great fit for the overall solution,” said the property owner project manager.



Ultra-Fast Provisioning

Technicians only had to configure one camera on one switch, and the cnMatrix switches would take that configuration and push it to all the switches. Technicians did not have to manually onboard each of the 1,130 cameras in the 148 cnMatrix switches.

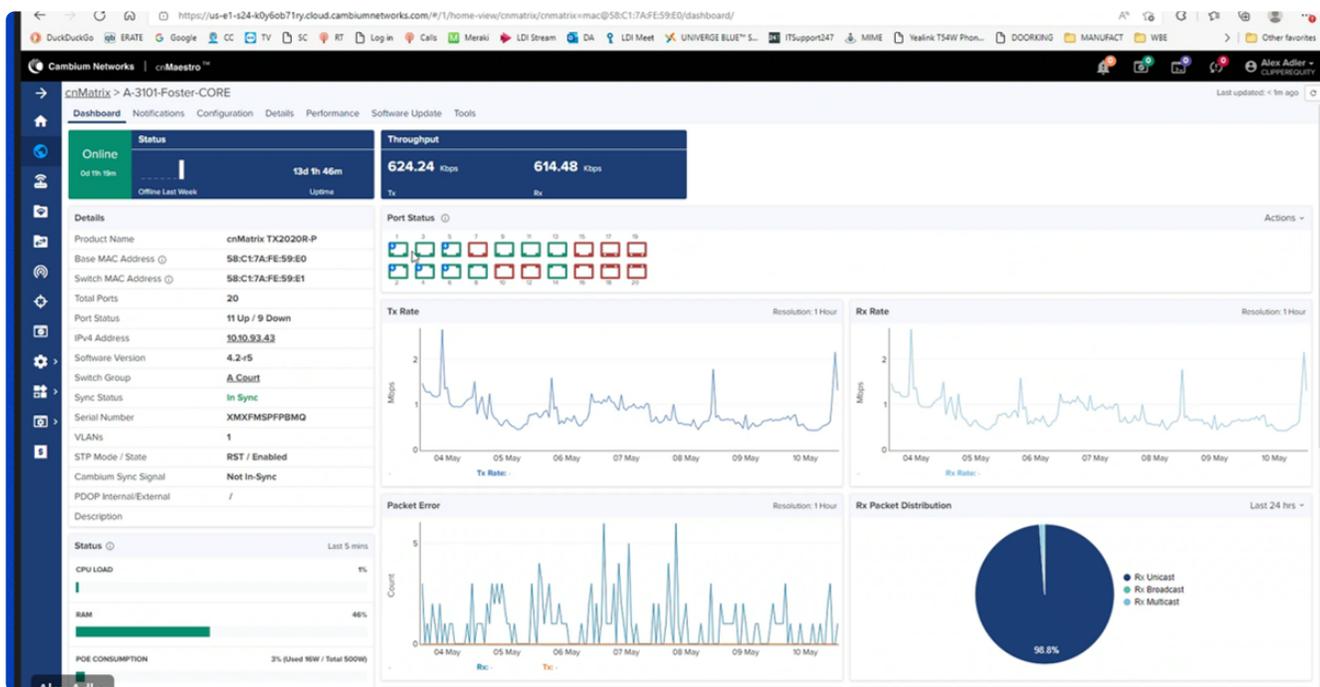
The Results

Home Sweet Home

TENANTS NOW HAVE EXCELLENT EXPERIENCES with key fobs for access, intercom systems and elevator help when needed. The property manager can use the video surveillance cameras to monitor for fire hazards and safety issues.

“All of this gives tenants a better experience living here,” said Alex Adler, Director of UCaaS/ CCaaS LDI Connect. “They know that their key card is going work. They know that they can get help in the elevator. They know that they can press a button and get somebody at any time. They feel confident where they live.”

The ease of installation and affordability allowed the teams to get the network up and running quickly. On top of being self-healing, flexible and simple, the cnMatrix switches created a true plug-and-play solution. Now, the building has a system that can grow with future changes to the network.

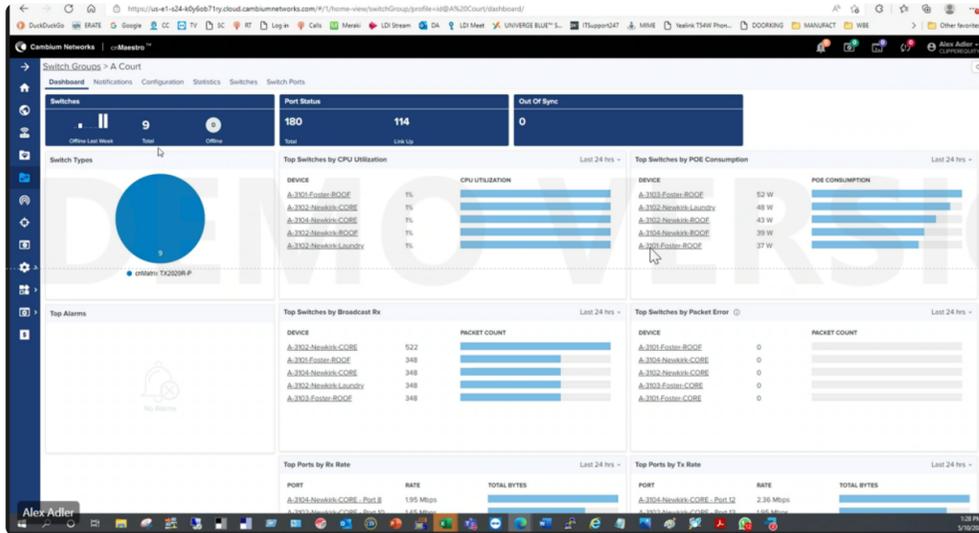


“With this solution, we were able to remove the need for a video monitoring computer on site,” said the property owner project manager. “By removing the NVR DVR, we removed the most vulnerable part of the security technology. Instead of a mesh of dumb switches that are failure points requiring multiple skilled technicians, we now have one centralized intelligent system that can be monitored from any location, gives us notification of issues before our tenants even notice, and requires fewer technicians on site.”

This exact type of security deployment can be easily replicated in other properties. Their plan is to roll out this solution at more properties in the near future.

Welcome to the New Trouble-Free World

“Property owners and property management companies need to provide a safe and secure environment for their tenants, and we applaud the property owners for doing exactly that,” said Brian Gertler, LDI Connect SVP. “They recognized an opportunity to use technology to upgrade an existing property and now have confidence in the technology, in the solution and in LDI Connect as a security solutions provider to upgrade their other properties. That is invaluable.”



Name	Offline Switches	Ports Up	VLANs	Active PoE Ports	Auto Sync	Last Edited
B.Court	0 of 22	251 of 392	1	152	On	Apr 28 2022 10:48:27
S.Court	0 of 7	90 of 132	1	59	On	Apr 28 2022 10:37:50
L.Court	0 of 32	376 of 600	1	253	On	Apr 28 2022 10:36:58
A.Court	0 of 9	115 of 180	1	78	On	Apr 28 2022 10:36:30
E.Court	0 of 26	315 of 480	1	211	On	Apr 28 2022 10:36:05
D.Court	0 of 30	217 of 352	1	127	On	Apr 28 2022 10:35:47
F.Court	0 of 32	376 of 584	1	251	Off	Apr 28 2022 10:35:15
Default Switch	0 of 0	0 of 0	1	0	On	Nov 18 2021 15:21:54

ABOUT CAMBIUM NETWORKS

Cambium Networks delivers wireless communications that work for businesses, communities and cities worldwide. Millions of our radios are deployed to connect people, places and things with a unified wireless fabric that spans multiple standards and frequencies of fixed wireless and Wi-Fi, all managed centrally via the cloud. Our multi-gigabit wireless fabric offers a compelling value proposition over traditional fiber and alternative wireless solutions. We work with our Cambium certified ConnectedPartners to deliver purpose-built networks for service provider, enterprise, industrial, and government connectivity solutions in urban, suburban, and rural environments, with wireless that just works.