



# GREAT CONNECTIVITY POWERS IMMERSIVE EXPERIENCES AT THE NATIONAL LAW ENFORCEMENT MUSEUM

## Summary

**Company:**

National Law Enforcement Museum

**Industry:**

Media and Entertainment

**Business Challenges:**

Enable visitors to walk in the shoes of law enforcement

**Technology Solution:**

- EX4300 Ethernet Switch
- SRX4100 and SRX300 Services Gateways

**Business Results:**

- Powered immersive, interactive experiences, ticket sales, and museum operations
- Built a set-and-forget network
- Overcame last-second network challenges to open museum on time

More than a decade in the making, the National Law Enforcement Museum opened its doors in October 2018, inviting visitors to experience the real-life world of law enforcement through immersive, interactive experiences and thought-provoking community discussions. The museum relies on Juniper Networks to power its visitor experiences and operations.

“The museum provides a walk-in-the-shoes experience of American law enforcement,” says Chad Fulgham, CIO and interim executive director of the National Law Enforcement Museum in Washington D.C.

Within the walls of its strikingly modern exterior, the museum showcases artifacts from its 21,000-object collection, telling the story—past, present, and future—of American law enforcement. The 57,000-square-foot museum engages visitors of all ages in memorable, experiential exhibits. The names of almost 22,000 local, state, tribal, and federal sworn law enforcement officers who have lost their lives in the line of duty are memorialized across the street at the National Law Enforcement Officers Memorial. The museum also serves as a platform for constructive dialogue between the community and law enforcement.

### Immersive Experiences Depend on Connectivity

Visitors hear about real-life events from law enforcement officers, victims, and bystanders, and use law enforcement techniques to solve simulated criminal cases. Adrenaline gets pumping in crisis simulations as people try to make the right decisions to de-escalate a situation with a Taser in one hand and a firearm in the other. Visitors can put on a 911 dispatcher’s headset and decide how to respond. They can work through the evidence of serial bank robbers in Washington to determine what to present at trial.

Fulgham, previously the Executive Assistant Director and CIO of the FBI, joined the museum months before its opening. One of his first actions was to move the museum’s IT systems to the cloud.

“We are almost 100-percent cloud,” says Fulgham. “But cloud applications don’t work without the network.” Office productivity, collaboration, storage, printing, cybersecurity, and VoIP are hosted in the cloud. The museum is also transitioning its fallen officer and customer databases to the cloud to complete the migration.

*“We wouldn’t have a museum today if not for Juniper Networks and Copper River.”*

- Chad Fulgham, CIO, National Law Enforcement Museum

Visitor experiences and museum operations absolutely depend on connectivity. The network supports the immersive exhibits, classroom experiences, and events in the theater. Tablets are used for ticket and gift shop purchases. Security cameras, ticket scanners, building access systems, and lighting and temperature controls are all networked. Exhibits are updated remotely by the museum's interactive agency partner.

Social media is a big part of the museum's plan to attract new visitors. "We're a privately funded museum, and we rely on social media and word-of-mouth for future visitors," says Fulgham. "We want visitors to share their experiences in real time on social media." And that, too, requires great, reliable connectivity.

## A Foundational Partnership

Juniper Networks and Copper River IT, an IT solutions provider with a longtime focus on the public sector, partnered to build the museum's network. "We wouldn't have a museum today if not for Juniper Networks and Copper River," says Fulgham.

"Deploying the network at the National Law Enforcement Museum was really exciting because of the team's passion for the importance of the mission," says Chan Park, solutions architect at Copper River. Copper River IT configured and deployed the network, and they continue to provide support.

The museum uses the Juniper Networks® EX4300 Ethernet Switch, a compact, fixed-configuration platform, for connectivity at the museum, including Wi-Fi traffic and to connect surveillance cameras and other smart, wired devices. The Juniper Networks SRX4100 Services Gateway provides integrated networking and security on the museum campus, while the Juniper Networks SRX300 Services Gateway provides integrated networking and connectivity at both the administrative offices in Washington D.C. and its collections archive in Maryland.

"Juniper is like a rotisserie chicken," quips Fulgham. "It's set-and-forget. As a CIO, I don't want to think about the core infrastructure. I expect it to work, and Juniper does."

## Last-Minute Squeeze

Museum openings are high-profile affairs, and the National Law Enforcement Museum was no exception. The opening ceremony featured former attorney general John Ashcroft and current deputy attorney general Rod Rosenstein, and included a taped message from former president George W. Bush. Clint Eastwood, the museum's honorary chairman, was in the audience.

The night before the friends-and-family opening, the IT team discovered that the wiring was done improperly—and the mobile ticketing system didn't work. Without the wired network, the wireless network wouldn't function. Park, along with Long Nguyen, a network engineer at Copper River IT, worked diligently into the night to uncover and resolve the problem. "Chan and Long would make great investigators," says Fulgham.

Copper River continues to work closely as an extension of the museum's IT team. "Copper River is always here when we need them. I trust them completely, and I've been impressed with their people and services," says Fulgham.

## For More Information

To find out more about Juniper Networks products and solutions, please visit [www.juniper.net](http://www.juniper.net).

## About Juniper Networks

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

### Corporate and Sales Headquarters

Juniper Networks, Inc.  
1133 Innovation Way  
Sunnyvale, CA 94089 USA

Phone: 888.JUNIPER (888.586.4737)

or +1.408.745.2000

Fax: +1.408.745.2100

[www.juniper.net](http://www.juniper.net)

### APAC and EMEA Headquarters

Juniper Networks International B.V.

Boeing Avenue 240

1119 PZ Schiphol-Rijk

Amsterdam, The Netherlands

Phone: +31.0.207.125.700

Fax: +31.0.207.125.701

**JUNIPER**  
NETWORKS | Engineering  
Simplicity

