



City Improves Connectivity & Security With Cloud-Managed, Software-Defined Virtual Cloud Network

City of Page Maximizes Money & Man-Hours With Cradlepoint's SD-Perimeter & Wired & Wireless Routers

SUMMARY

To effectively serve residents, the City of Page in Arizona relies on constant connectivity with the utmost security of important information. However, the ever-present influx of technologies, applications, and Internet of Things devices that make city employees' lives easier also had been making the IT team's work decidedly more complex.

The City of Page leveraged Cradlepoint's 4G LTE routers, NetCloud Manager, and NetCloud Engine to bring multiple networks together with simplified connectivity and visibility. Now the IT team uses a single pane of glass to monitor and manage its simple yet integral Network-as-a-Service.

SOLUTION:

AER3100 SERIES ROUTERS,
COR IBR1100 SERIES ROUTERS,
NETCLOUD MANAGER,
NETCLOUD ENGINE

APPLICATION:

SD-PERIMETER, SD-WAN,
CLOUD MANAGEMENT,
IN-VEHICLE, FAILOVER

MARKET:

PUBLIC SECTOR

CUSTOMER PROFILE

Page, a planned community near the Arizona/Utah border, was officially formed in 1975. At an elevation of 4,300 feet atop Manson Mesa and overlooking Wahweap Bay of Lake Powell, Page has become a major resort area.

Though it began as a temporary camp for construction workers, today Page is a self-sufficient city. Lake Powell, the Navajo Generating Station, and tourism are the major economic drivers.

BUSINESS NEEDS

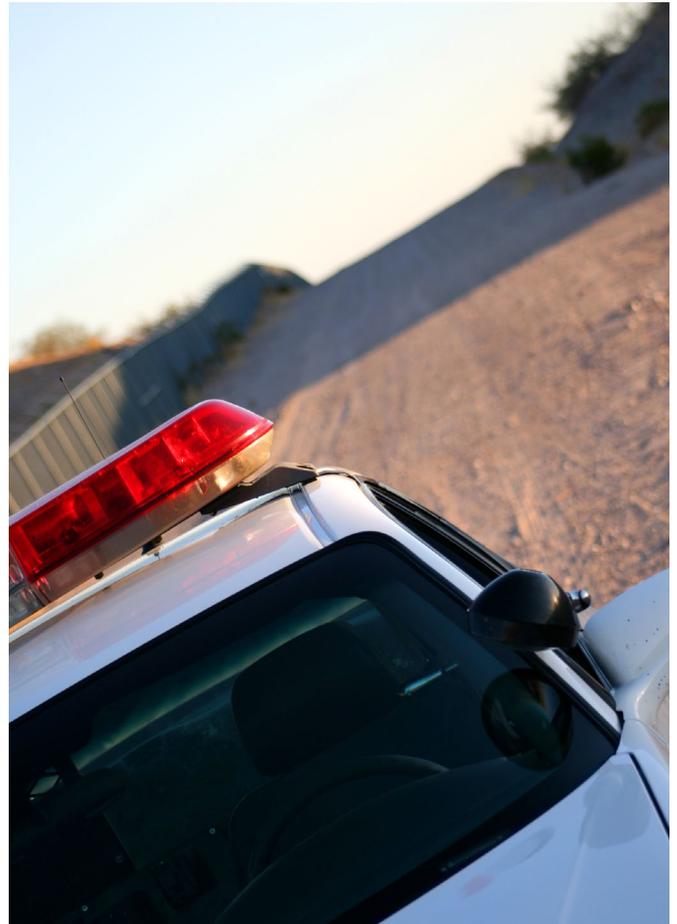
For a relatively small town such as Page, cost-effective network solutions are critical for protecting precious public resources. At the same time, reliable solutions are vital for the safety and well-being of local citizens.

The city needed constant network uptime – enabled by cellular-based broadband for both primary and backup WAN connections – as well as interconnectivity between departments, locations, vehicles, applications, and devices.

“When the Internet goes down and we lose connectivity, vital civic services are disrupted,” said Kane Scott, IT director, City of Page.

Of course, with access to citizens’ information being mission critical, the city also needed trustworthy, encrypted security that is easy to implement, monitor, and manage.

In essence, the City of Page needed a comprehensive, simple, and secure solution that would bring multiple networks together, facilitating seamless communication and access between city hall, the police department, and the fire department.



Another key need was constant mobile connectivity and network access in police vehicles so officers could do their work from the field instead of at headquarters.

“We were looking to increase the efficiency of all our officers,” said Scott.

SOLUTION

To help maintain and expand its public safety and civic services, the City of Page deployed a comprehensive Network-as-a-Service solution from Cradlepoint, including:

- + Cradlepoint AER Series routers in city offices provide highly available WAN routing via wired and 4G LTE cellular connectivity, and wired and WiFi connectivity for the LAN.
- + Cradlepoint COR Series routers in police vehicles provide reliable 4G LTE access anywhere.
- + The Cradlepoint NetCloud platform enables valuable services, including:
 - + Cloud management allows the city to remotely monitor and manage its routers from a single pane of glass.
 - + Through SD-Perimeter services, a secure, encrypted overlay network connects people, places, and things via either a desktop or mobile client or a gateway on the router platforms.
 - + SD-WAN features improve WAN performance at city locations.

“Software-defined networking really is what brought it all together for us.”

—Kane Scott, IT director, City of Page

BENEFITS

RELIABLE PRIMARY & BACKUP WAN CONNECTIVITY

In its vehicles, the police department is relying on 4G LTE as its primary WAN source through Cradlepoint's COR Series routers, which has enabled the city to confidently deploy on-board tablets.

“Before Cradlepoint, we couldn't easily get remote connectivity in a mobile environment. It wasn't reliable. Now we have a connection we can trust,” said Scott, who also plans to extend COR Series routers and tablets to each fire department vehicle.

In fixed locations at city hall and police headquarters, Cradlepoint's AER Series routers provide wired and wireless connectivity through the same device. The city utilizes 4G LTE for failover connectivity, which is essential because Internet disruptions hinder critical interdepartmental communications during emergencies.

SEAMLESS INTERCONNECTIVITY OF MULTIPLE NETWORKS

Without Cradlepoint NetCloud, the city would have been building and managing traditional VPN-type connections, which are more complex and time-consuming to plan, design, implement, and operate. Instead, the IT team implements a Virtual Cloud Network in a fraction of the time. It's a much simpler, easier, and time-efficient architecture.

With SD-Perimeter, the IT team can more efficiently move data from point A to point B.

“Instead of having to VPN to city hall, then to the fire department, then elsewhere and so on, those locations are both connected to a Virtual Cloud Network through NetCloud, which makes it seamless,” said Scott.

In the future, adding new locations and devices will be faster and easier through this solution.

FULLY ENCRYPTED INFORMATION

The city’s Cradlepoint solution offers advanced security, including stateful firewall, and fully encrypts sensitive data. Page also utilizes cloud-managed intrusion detection and prevention.

“Cradlepoint is able to handle all that traffic without any issues. Also, utilizing cloud-managed third-party security services is just a matter of buying a license and ‘boom,’ those services are activated,” said Scott.

Page’s IT specialists also use Network-as-a-Service for microsegmentation, allowing them to easily restrict traffic down to the host and

application level. They use the platform to remotely manage and instantly adjust which users can access what information and applications.

VISIBILITY, MONITORING, MANAGEMENT & CONTROL THROUGH SINGLE PANE OF GLASS

Centralized cloud management enables the city’s IT specialists to remotely monitor and manage routers – and to deploy software updates to the entire network in just seconds.

Through SD-Perimeter, the team also has visibility into and control of devices that live beyond the routers.

LOAD BALANCING

The city uses dual-modem AER Series routers, each with dual-SIM slots, for load balancing, which saves money on data usage.

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“If we need to remote desktop into a ruggedized tablet in a police vehicle, we can do that with Cradlepoint’s SD-Perimeter. Without Cradlepoint, this would have taken a lot more hardware, software, and man-hours.”

– Kane Scott, IT director, City of Page

