CASE STUDY

Digital Electricity™ Enables First-Time NGA Broadband Access with New Remote DSLAM Cabinet Installation

Industry
Fault Managed Power
Wireless Densification

Solution
DSLAM cabinet Telent's VoltServer service
VoltServer Transmitter and Receiver units

Introduction

Telent's VoltServer solution allowed a new remote DSLAM cabinet to be installed, providing customers with access to NGA broadband for the first time.

Project Overview

The Facility

A remote rural location that lacked access to Next Generation Access (NGA) broadband due to its distance from existing infrastructure.

The Challenge

A group of customers in a remote rural area were experiencing poor internet speeds. The service provider has a commitment to roll out NGA broadband to rural areas, but these customers were too far away from the nearest street cabinet to benefit from the latest FFTC technology. This required a new DSLAM cabinet to be installed, but there had been delays in getting a power connection caused by wayleave issues. This had delayed bringing the new infrastructure online and affected local customer satisfaction levels.

The situation required an innovative solution that would deliver electrical power to the cabinet and provide its customers the desired level of service.

The Solution

Telent's VoltServer service was selected to power a new DSLAM cabinet because it reduced the need for extensive civil engineering work and eliminated the wayleaves that had previously been a major project bottleneck. The service wrap also simplified the power installation element activity for the service provider's network planning team by creating a single point of contact to manage the entire power supply installation process end-to-end.

> "Telent's innovative VoltServer Digital Electricity solution allows us to power assets by running electricity cables through existing ducting."
>
> Chief Engineer,
> Broadband Service Provider

To provide the new power supply, Telent sent senior technicians to the site to specify an appropriate solution. This team worked closely with the client's network planning staff to ensure the solution was fit for purpose and complied with the necessary standards and procedures.

IMPLEMENTATION DETAILS

Distance Considerations

Due to the distance from the street cabinet, traditional methods for implementing Telent's VoltServer Digitial Electricity to power a new DSLAM cabinet in a remote area weren't feasible. VoltServer's Digital Electricity used existing ducting, skipping the need for more permissions, which sped up deployment.

Installation and Training

Telent's engineers installed VoltServer transmitter and receiver units, utilizing existing infrastructure such as telecom ducts to minimize disruptions and costs. The touch-safe nature of VoltServer facilitated installation without the need for heavy armored cables.

Results and Future Expansion

Waiting for wayleaves to be granted significantly slowed down the ability to bring the new DSLAM cabinet into operation. VoltServer Digital Electricity was run in the existing duct, which meant that the new electrical connection was established quickly without additional wayleaves.

Telent's end-to-end electricity supply connection service provided a single point of contact for the client's network planning team, which significantly cut down on the workload involved in powering new infrastructure.

The touch-safe nature of the product meant that the Telent could run the electrical power alongside other cables in existing ducts. Plus, standard electrical cables were used without the need to use heavy armored cables. This reduced costs and improved efficiency.

The fact that an existing duct was used meant that civil engineering disruptions were minimized. This reduced disruptions to internal and external stakeholders and reduced civil engineering activities in laying the new power supply.

Conclusion

Through the innovative application of VoltServer's Digital Electricity technology, Telent successfully addressed the challenges of powering a new DSLAM cabinet in a remote rural area. This facilitated NGA broadband's expansion and demonstrated the potential for future deployments and infrastructure enhancements in similar settings.