

Case Study: Inland Marine Operations

GDS helps an inland marine transportation and logistics company achieve greater than 98 percent network uptime while saving \$70,000 a year in connectivity costs and relieving management and support headaches.



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However, many operators struggle with spotty cellular service as they move through the roughly 12,000 miles of U.S. inland waterways.

The company's existing connectivity solution provided as little as 10 percent uptime in a given month, significantly hindering its ability to leverage modern cloud-based applications. When the data network was unavailable, the crew could not access their marine management software. However, the company's existing hardware was managed by corporate IT staff, who were not always available to assist with connectivity issues in a timely manner.

The company also wanted to provide crew members with Internet access for communication and entertainment, but limit the personal use of bandwidth to ensure adequate performance for business applications and compliance with corporate security policies. Because the ability to monitor and manage onboard communications was limited, the company lacked the necessary control.



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Solution The GDS NOMAD solution was ideally suited to the customer requirements. NOMAD is a compact, wall-mounted unit that includes everything needed to establish voice and data services on inland waterways. A Gigabit Ethernet switch housed in the hardened case securely connects to the GDS NOMAD LTE service to deliver industry-leading uptime and performance.

As an initial step, GDS installed its systems on one vessel and let it run for 60 days. During that time, the customer was charged only for LTE data usage. This allowed the customer to try out the GDS solution while GDS proved its value and collected data that determined the design of the ultimate solution.

Based upon network usage during that time, the GDS team determined that each vessel would need about 15GB of LTE data per month. GDS also used this time to define and adjust security policies to control what areas of the Internet that

onboard personnel can access and ensure that access falls in line with corporate Internet use policies.

GDS then designed and implemented a dual-carrier LTE solution with dual external antennas, and created a shared pool of LTE bandwidth to support the company's seven vessels. The solution provides granular visibility into how the network connection is being used, and enables the allocation of bandwidth by user or group. Bandwidth can be scaled easily as business needs change.

Traffic shaping and application prioritization help ensure Quality of Service for business communications and applications. In addition, NOMAD includes next-generation firewall, intrusion prevention and antimalware protection to detect, block and respond to cyberattacks.

Highly trained personnel provide expert, responsive support from the GDS Network Operations Center. GDS provides one number to call for any issue related to the solution, and one simple bill for all services.

Results

GDS performed a financial comparison, capturing the average cost per vessel of the company's existing solution and comparing it to the cost of the GDS solution. **With GDS, the company saves \$70,000 per year across seven vessels.** Now the company has 10 vessels, and continues to save money on its ongoing connectivity costs.

The solution saw an average of more than 98 percent uptime for the first six months of 2021. Achieving this level of availability using only LTE connectivity services is unheard-of on inland waterways. Most fleets desire to have this amount of uptime but are unable to attain it with either homegrown or market-source solutions.

The system works so well that the company didn't open a single support ticket in the last quarter of 2020 or the first quarter of 2021. There were no issues that warranted

a call to GDS for support of the onboard solution.

GDS conducts quarterly business reviews, allowing both companies to evaluate the efficacy of the solution and identify any changes in business operations or the IT environment that should be addressed. The reviews also allow GDS to be mindful of the company's roadmap. **Over the course of three years, the NOMAD solution continues to be effective, meeting the objectives that were identified at the beginning of the business relationship.**

For More Information

Contact Us:

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Call Us:

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Learn More About This Solution:

- [Inland Marine Connectivity](#)

