

Redundant Networks

Powering redundant, reliable internet across peaks and valleys

Redundant Networks

kitsapwifi.com

- Privately-owned WISP based in Kingston, WA
- Local ISP partner serving Kitsap County
- Operates a geographically diverse fiber ring network
- Founded to address geographic challenges leading to outages



Challenges

- Delivering redundant connectivity in the face of frequent system outages
- Addressing downtime and lost productivity caused by fiber cuts
- Ensuring seamless failover for remote Olympic Peninsula networks
- Overcoming the lack of geographically diverse fiber infrastructure

Solutions

- [Lumen® Dedicated Internet Access \(DIA\)](#)
- [Lumen® Wavelength Services](#)

Results

- Network coverage extended to serve previously underserved areas
- Scalability achieved without costly infrastructure rebuilds
- Downtime significantly reduced for uninterrupted internet use



“ Lumen helped us build our geographically diverse redundant fiber ring, which allows us to serve our customers across the region.”

— **Andrew Horton**, CEO, Redundant Networks

Challenge

Ensuring reliable connectivity in remote communities

Washington's Olympic Peninsula is known for its stunning views of water and mountains — and the challenge of keeping residents supplied with reliable internet. Redundant Networks, located in the small town of Kingston, WA, decided to tackle the problem head-on and answer the key question: How do we keep people online?

“Our mission is to deploy comprehensive redundancy at every level,” said Andrew Horton, CEO of Redundant Networks. “We were founded to address the critical need for a backup connection to prevent disruptions in the business world.”

Frequent fiber cuts are the norm on the Olympic Peninsula, primarily due to how the initial fiber was first laid out. The area sees many remote and isolated customers, and the complex waterways make network connections vastly more complex. With more people than ever working from home, connectivity interruptions are a major concern, costing residents time, money and patience.

Solution

Routing success with resilient, reliable solutions

As a business owner himself, Horton understood the need for a reliable solution that addressed the geographical challenges of the Olympic Peninsula. That's why he turned to Lumen, who could establish an underwater route when previous providers had said it would be impossible. “A key milestone for Redundant Networks was introducing a geographically diverse fiber ring into our county that delivers reliable backup connections to keep businesses and residents online,” he said.

The network is built upon two 10GB point-to-point Lumen® Wavelength (DWDM) technology and Lumen® Dedicated Internet Access (DIA), incorporating redundancy and enabling scalability. “DWDM allows us the flexibility to upgrade our circuits without taking the whole network down or making expensive changes to rebuild the network,” said Horton.

Lumen Solution Set

- [Lumen® Dedicated Internet Access \(DIA\)](#)
- [Lumen® Wavelength Services](#)

Results and Future Plans

Reliable internet for today and tomorrow

Since working with Lumen, Redundant Networks has been able to add both international transit and local transit to its network, making it possible to expand the network outside the county and add high-speed bandwidth.

Downtime is all but eliminated, and upgrading the network is seamless, with no downtime required. Thanks to high-speed connections, traffic can move from point A to point B in the quickest way possible.

“At the end of the day, our responsibility as an internet service provider is to provide an internet connection that doesn't go offline,” said Horton. “By working with Lumen, we were able to accomplish that goal and have amazing uptime and high-speed internet in an area where it originally wasn't an option.”

For Redundant Networks and Kitsap County, the future is bright, fast, and high-speed.