

CASE STUDY

Medford Radiology Group

The Medford Radiology Group helps patients in rural communities get life-saving radiology services. Thanks to the group's 24 board-certified physicians, patients get the help they need when they need it, without having to drive two or three hours to see a specialist.

"If you bump your head and have to get a CT scan, that exam comes to our central reading cube, and the most specialized radiologist will read the information, no matter where you went to the doctor," said BJ Hendricks, Director of IT at Medford Radiology Group.

In 2015, LS Networks created a custom-built network, increasing the organization's network bandwidth, performance and security.

"We had two main concerns," said Hendricks. "One was the lack of security. We have HIPAA laws about privacy and security, and our previous network didn't provide the mechanics to ensure our data was actually private."

"The second concern was we needed more bandwidth. Our old network wasn't architected for our increased data transmission needs."

The group's radiologists oversee about 360,000 procedures per year, offering state-of-the-art radiological diagnostics, reports and consultation to patients and referring physicians in clinics and hospitals across Southern Oregon. This geographic footprint covers Medford, Ashland, the Rogue Valley, Grants Pass, Bend and the Oregon Coast.

"They're transforming access to hi-res imaging," said Bryan Adams, Director of Sales and Marketing at LS Networks. "We're excited to enable their services through our network. Rather than have an expert on staff, clinicians in rural communities can send the images to Medford Radiology Group for expert viewing and diagnosis."

Custom Network

Guided by its mission, LS Networks worked to design and build a network for the Medford Radiology Group that would perform better and offer higher capacity, with more flexibility, faster transmission speeds and a larger network presence.

The LS Networks engineering team and Hendricks' team collaborated on the design, agreeing on a flexible, high-capacity network with expandable data-on-demand capabilities.

"This network allows us to move that data around seamlessly, and LS Networks put in equipment that can expand with us," Hendricks said. "We're only using 2 gigabytes per day right now, but we can call them up and say we need five or 10 if we take on a new client that uses a lot of data."

"If we have special back-up needs, LS Networks will provide bandwidth on demand and temporarily increased bandwidth at 10 gigabytes, and we can run huge backups because we have the 50 to 100 terabytes of data we need."

"We are excited to expand our mission of providing a better quality of life for rural communities," said Adams. "Partnering with the Medford Radiological Group expands our mission footprint by helping them serve more communities and healthcare providers throughout the state of Oregon."

— Bryan Adams, Director of Sales and Marketing at LS Networks

As the Medford Radiology Group's patient load has increased and new life-saving technology like Digital Breast Tomosynthesis (DBT) has come along, the group's data needs have grown exponentially. DBT uses 10 to 15 low-dose X-rays to create a 3D image that helps doctors find abnormalities that might otherwise go unnoticed.

But DBT technology uses anywhere from 250 megabytes to 3 gigabytes per exam, and with 80–90 exams per day, that's a lot of data. With the Medford Radiology Group's old network, sending this much data would have been like "pushing watermelons through garden hoses," said Hendricks. "It would have taken forever to work. This was one of the reasons we looked for a new provider."



LS Networks provides the bandwidth necessary to transmit data from new technology like DBT.

This data transmission can be life saving when radiology reports go to emergency rooms across the state.

"It's very important that the network is as reliable as possible," said Adams. "We built a solid network and reinforced it with added redundancy to the fiber path in the primary locations where these sensitive images are stored."

The new network offers a couple of ways for hospitals and imaging centers to connect. They can use a direct connection from the private LS Networks network or a public internet connection through their current provider, using secure VPN encryption technology.

Better Care for Rural Patients

The work LS Networks is doing with Medford Radiology Group is part of its effort to deliver high-speed fiber broadband connections across the Northwest, bringing healthcare services to rural communities where access is limited.

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— BJ Hendricks, Director of IT at Medford Radiology Group

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The partnership has also meant better service, security and reliability for the diagnostics provider.

“They’ve been great,” said Hendricks. “LS Networks brought their high-end talent in, and it made conversations go easy once they understood what we were trying to do. It was good to have a partner to talk with about what connectors we need, what equipment to buy and how we should do our routing.”

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Headquartered in Portland, OR, LS Networks is committed to the community and is owned by a collective of rural electric cooperatives and a Native American business enterprise, including over 60,000 citizens and communities. We’re not about the money. We’re about the service to and for our customers.

LET’S DISCUSS YOUR NEEDS

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