

Customer Profile:



Wiggins Telephone Association is a small independent telco provider in Wiggins, Colorado. The rural area is approximately 80 miles northeast of Denver. The company provides quality, affordable communications and information services, including products and support, to local businesses and residents. By offering high-speed Internet connectivity, cell phone plans, and traditional wired telephone service, Wiggins helps develop economic and technological progress in the region. The Wiggins Telephone Association was formed and incorporated in 1951 when Mountain Bell would only agree to serve the town of Wiggins and not the rural surrounding areas.

“With D-Link, we can deliver end-to-end optic fiber connectivity – from 3MB to 100MB – to any home or business. We offer tiered pricing, so we can be flexible as bandwidth needs increase.”

Casey Quint
Plant Manager,
Wiggins Telephone Association



Colorado’s Wiggins Telephone Association Offers Rural America True, End-to-End Fiber Optic Internet Access up to 100Mbps with D-Link® Equipment

The Challenge

Wiggins Telephone Association’s copper telephone network was at the end of its 30-year lifecycle. Demand for new data services was placing new burdens on the existing telco network. Many of their customers were still using dial-up connections, and Wiggins was not able to deploy broadband services like DSL in many areas because of copper limitations. “We needed to rebuild our plant,” said Terry Hendrickson, Wiggins’ CEO and General Manager.



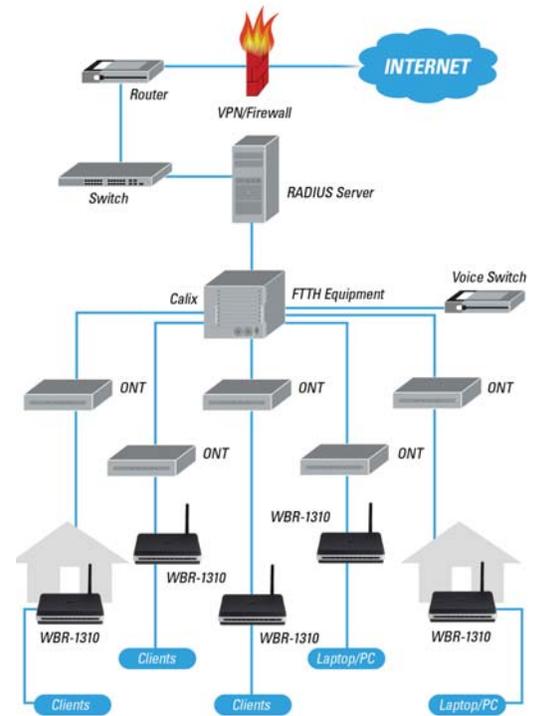
Terry Hendrickson, CEO and General Manager of Wiggins Telephone Association

The service area covered by Wiggins includes 1,600 phone lines that spread over 2,000 square miles. That’s less than one customer per square mile. “It’s a rural area,” said Hendrickson, “but we need high speed Internet services just like people do in the cities. Perhaps more so. We can’t just go around the corner to a coffee shop and get Wi-Fi. People in the city take that for granted.”



Located in Wiggins, Colorado, Wiggins Telephone Association provides quality, affordable communications and information services, including products and support to its customers.

After studying the situation closely, the company decided to implement a long-range solution that would meet user requirements for the next 30+ years. “Fiber to the home was the only logical choice,” said Casey Quint, Wiggins’ Plant Supervisor.



Wiggins installed D-Link WBR-1310 Wireless G Routers, which connect to Optical Network Terminal (ONT) cards, to provide broadband services like DSL to its rural customers.

The plans moved forward and Wiggins is now replacing more than 2,000 miles of copper with fiber optic lines. They expect to complete the install over the next 2-3 years. Funding for the \$29.5 million project is provided by a USDA/RUS loan to be paid by Universal Service Fund.

In order to deliver connectivity into local homes and businesses, Wiggins needed a “set-top box,” a router essentially, for each of the premises. “We didn’t want the customer to provide their own router,” explained Hendrickson. “We decided to take ownership of that piece. This way we can help them manage and support the equipment, and we don’t end up having to support a huge variety of self-installed routers from different manufacturers. It’s easier for the customer, and it’s easier on us. The customer is also a little stickier, they value our service and support, and we’re both on the same page if a tech support issue comes up.”

Wireless Networking Solutions



WBR-1310 - Wireless G Router

- Easily Create a Basic Network to Share Your Internet Connection
- Works with Other 802.11g and 802.11b Wireless Networking Devices
- Check E-mail, Surf the Web, and Chat with Friends and Family Online

Wiggins' plan for direct fiber to the home required routers that authenticate via PPPoE. "Cost was a very big factor since we'd need to put one in each home or business," said Quint.

The Solution

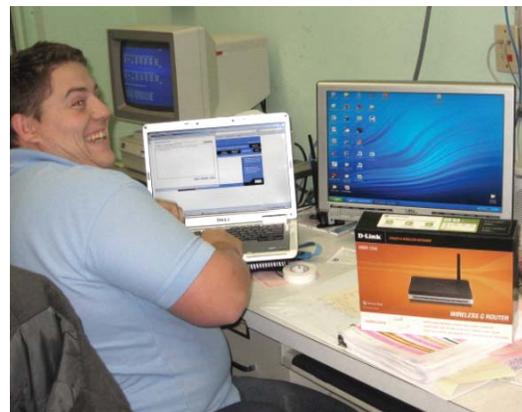
Another regional telecom provider, Golden West Internet Solutions, suggested that Wiggins install D-Link routers in their local service area.

After testing several routers from various manufacturers, Wiggins settled on D-Link's WBR-1310 Wireless G Router. The WBR-1310 connects to an Optical Network Terminal (ONT) card provided by Calix (which is Wiggins' transport provider). That card links to a gigabit fiber port outside the structure. It's a genuine fiber connection from end to end. "It's as good as it gets," said Quint. "We can deliver end-to-end optic fiber connectivity – from 3MB to 100MB – to any home or business. We offer tiered pricing, so we can be flexible as bandwidth needs increase."

Installation of the routers is handled by Wiggins, and everything has gone smoothly so far. "The nice part for me and our IT guy is that D-Link's support is so responsive," said Quint. "We called other vendors, and they wouldn't talk to us. With D-Link we get engineers on the line immediately. That really helped us pick the product and increase our comfort level with the decision."

The D-Link routers provide PPPoE authentication, wireless coverage for the users, and a simple, easy to administer platform for support and service. Wiggins tech support can log in to any of the routers remotely and diagnose problems from their main office.

"We tried a few different routers and tested them with Calix," said Quint. "We heard of some other problems with the routers with other vendors, but we didn't see problems with the D-Link equipment. Some of the competitive routers wouldn't do PPPoE correctly. We know of other companies that had major problems with them. We went with D-Link because of their support, and authentication and handing out the IP addresses was easy and reliable with their equipment."



Wiggins Telephone Association selected the D-Link WBR-1310 Wireless G Router to deliver connectivity into local homes and businesses because of the router's ability to authenticate via PPPoE and its security features and affordability.

"The D-Link router offered us a quality low-cost solution that we could feel comfortable putting into the customer's house," said Hendrickson. "We secure the routers from our end with WPA and assign each customer a unique password so nobody else can access their router. It helps protect the customer, and we can manage bandwidth usage closely."

Opportunity for Expansion

Wiggins is hoping that the project will serve as a stimulus to the local economy. "Internet connectivity is essential these days," said Hendrickson. "We have a lot of work from home moms and home businesses in the area, and they need the bandwidth."

Part of the Federal government's stimulus package includes \$6 billion in broadband upgrades for rural America. This should help Wiggins continue the project and get local residents and businesses set up with fiber connections.