

South Central Connect Brings Wi-Fi to the Largest Covered Marina in Arkansas with Mist and Juniper Networks

The sparkling blue lakes of Arkansas have it all: sunny skies, hungry fish, and now, Wi-Fi. Whether it's a thrilling day waterskiing or a relaxing day cruising on a houseboat, with South Central Connect's new Wi-Fi service, no one has to give up modern amenities to enjoy life on the lake. South Central Connect, a regional service provider, is now offering Wi-Fi service to the people of rural Arkansas, including when they are on their boats, with the Mist Platform.

South Central Connect, the for-profit arm of South Central Arkansas Electric Cooperative, is in the midst of a multi-year effort to bring blazing-fast fiber to the homes and businesses of rural Arkansas. Along the way, it launched an innovative public Wi-Fi service for areas where it is difficult to get Internet connectivity, including marinas, RV parks, and other seasonal areas.

Lighting up marinas with Wi-Fi was an "aha" moment.

"We were deploying fiber to cabins around DeGray Lake (when) some boat owners approached us about connecting the Iron Mountain Lodge and Marina on DeGray Lake," says Marty Allen, broadband manager at South Central Connect.

While weekends and summers are the busy times at the lake, some people live on their houseboats year-round or prefer the convenience of working from their boats. These boat owners had limited connectivity options, and typically used mobile hotspots or satellite phones.

"We toyed with the idea of wiring up boats like houses," says Robert Green, network supervisor at South Central Connect. "But then we got creative."

Taking inspiration from guest Wi-Fi at hotels and airports, South Central launched its first self-service Wi-Fi at Iron Mountain Marina on DeGray Lake.

SUMMARY

COMPANY

South Central Connect, LLC (a subsidiary of South Central Arkansas Electric Cooperative, Inc.)

INDUSTRY

Utilities

CHALLENGES

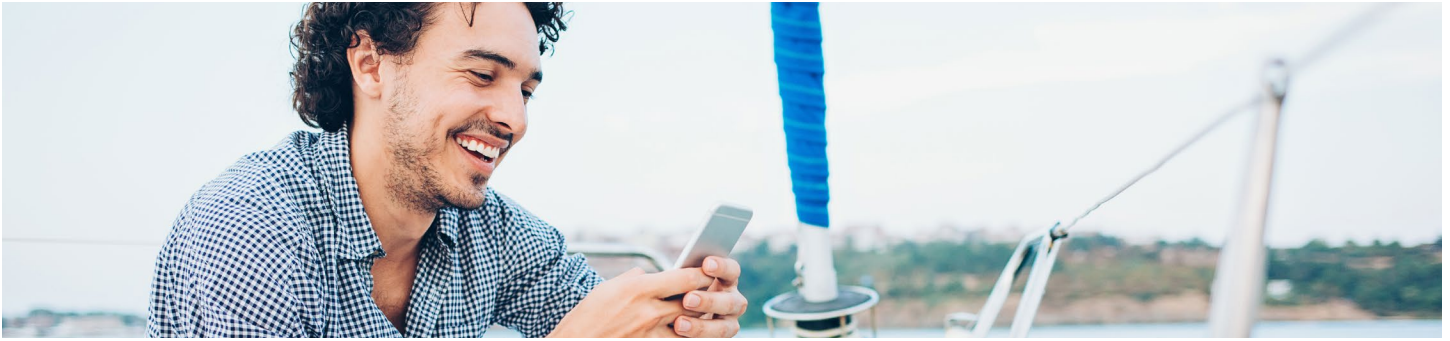
Offer Wi-Fi in hard-to-reach areas like marinas and RV parks with self-service as part of a regional fiber broadband rollout.

SOLUTIONS DEPLOYED

- Mist Platform
- EX2300 Ethernet Switch
- MX480 and MX204 Universal Routing Platforms

RESULTS

- Delivered an exceptional network experience to boat owners and guests at one of the largest marinas in South Central Arkansas
- Simplified deployment and troubleshooting with AI-powered networking
- Reached midway point of fiber-to-the-home deployment project, serving residents and businesses in a traditionally underserved area



“We see a big opportunity to bring the Mist Wi-Fi solution to RV parks, special events, and apartment complexes where university students live.”

— Marty Allen, broadband manager, South Central Connect

THEN THEY SAW MIST

“We looked at different wireless LAN vendors, but we couldn’t find anyone doing what we wanted to do,” Green says.

South Central Connect uses Juniper routing for its regional fiber network, so the team discussed their plans with the Juniper account team. “The timing was phenomenal,” Green says. “Juniper had just purchased Mist.”

With a modern microservices architecture, the AI-driven Mist WLAN is designed for today’s modern cloud and smart-device era. Mist, a Juniper company, delivers unparalleled user experiences and provides a cohesive approach to manage wired and wireless networks.

The Mist demo was up and running in South Central Connect’s offices in no time. “I set up a branded captive portal and the network was accepting traffic and collecting analytics in less than 15 minutes,” Green says. “It was unbelievable how quick and easy it was to set up Mist.”

“With the Mist dashboard, I can be sure that the user experience is what I expect it to be—and what the user expects it to be.”

— Robert Green, network supervisor, South Central Connect

DELIGHTING SUBSCRIBERS, EVEN OVER WATER

“Designing Wi-Fi for a marina of this size wasn’t trivial,” Allen says. “There were a lot of potential sources of RF interference, not just from other SSIDs, but also metal structures, covered roofs, and the water itself,” Green added. “When we turned Mist on, we had a really good Wi-Fi service.”

The Wi-Fi covers five houseboat docks at the marina, which has one of, if not the largest floating structures in the state. The marina spans approximately 140 acres of DeGray Lake, and one of the five docks is approximately four acres under a metal roof and stretches 1200 feet.

Boat owners and guests have been delighted by the Wi-Fi service. Customers can choose from several Wi-Fi packages, ranging from a day to six months. “People can walk from one end of the dock to the other and stream a movie or do a Facetime video call without any pauses in the video,” Green says.

It turns out that life on the lake is device-rich. In the planning stages, the South Central Connect team estimated that each houseboat would have four devices, but it quickly found that people commonly had eight devices onboard. “We see everything from phones, tablets, and laptops to smart TVs, thermostats, doorbells, and even smart beds,” Allen marvels.

Wi-Fi can be essential even if an owner isn’t at the marina. “Many of the houseboat owners live in Texas, and if it gets cold in the winter, they can log onto the boat to turn up the thermostat so their boat doesn’t freeze,” Green explains.

SIMPLIFIED NETWORK DESIGN AND OPERATIONS

“Mist is intuitive and easy to use,” Green says. “It’s a great Wi-Fi solution.”

The Mist Platform includes Marvis, an integrated AI engine that simplifies IT operations through client-level insight, rapid wired and wireless troubleshooting, trending analysis, anomaly detection, and proactive problem remediation.

“I love data and Mist has great analytics,” Green says. “With the Mist dashboard, I can be sure that the user experience is what I expect it to be—and what the user expects it to be.”

The wireless network connects to a Juniper Networks® EX2300 Ethernet Switch, and then onto South Central Connect’s fiber network.

Ongoing operations have been simple. With a Mist wireless and Juniper wired network, South Central Connect ensures a complete network experience by setting service-level expectations for key wired and wireless performance metrics.

BRINGING FIBER TO THE HOME

Meanwhile, South Central Connect continues to build out fiber to the homes of South Central Arkansas Electric members and beyond. Consumers and businesses can choose 100-Mbps or 1-Gbps symmetrical Internet speeds as well as triple-play services.



“We provide fiber to the home primarily to our electric membership, but we can also provide Internet, television, and phone services to both residential and commercial customers in our service territory,” Allen says.

“Mist is intuitive and easy to use. It’s a great Wi-Fi solution.”

– Robert Green, network supervisor, South Central Connect

South Central Connect uses Juniper Networks MX480 Universal Routing Platform for its core network and Juniper Networks MX204 Universal Routing Platform to provide Layer 3 services at fiber huts in its electric substations. Juniper Networks MX Series 5G Universal Routing Platforms deliver high performance, reliability, and scalability, enabling the delivery of advanced business and residential services. Running Junos® operating system, which powers Juniper routing, switching, and security platforms, automates network operations, increases operational efficiency, and frees up resources for growth opportunities.

NEXT STEPS

As South Central Connect lights up rural areas with fast, affordable Internet, it sees many other opportunities to deliver Wi-Fi where fiber isn’t practical.

“We have three other marinas in the area that want this solution,” Allen says. “We see a big opportunity to bring the Mist Wi-Fi solution to RV parks, special events, and apartment complexes where university students live.”

Whatever the future holds, South Central Connect can count on a network that’s designed to deliver an exceptional user experience and the highest levels of performance, scalability, and security.

“Mist gives us the flexibility to meet many different use cases for Wi-Fi,” says Allen.

FOR MORE INFORMATION

To find out more about Juniper Networks and Mist, please visit www.juniper.net and www.mist.com.

ABOUT JUNIPER NETWORKS

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

ABOUT MIST

Mist built the first AI-driven, microservices cloud-based Wireless LAN (WLAN), which makes Wi-Fi predictable, reliable, and measurable and enables scalable indoor location services like wayfinding, proximity messaging and asset visibility. In addition, Mist’s AI technology plays a key role in bringing automation and insight across the full IT stack, delivering seamless end-to-end user experiences and substantial IT cost savings. In 2019, Mist was acquired by Juniper Networks and operates as a business unit focused on the AI-Driven Enterprise which combines Mist’s next-generation wireless platform with Juniper’s best-in-class switching, routing, security and SD-WAN solutions to deliver unsurpassed end-to-end user and IT experiences.