

Alabama Fiber Network gets top-quality IP transit to bridge the digital divide

Client profile

Alabama Fiber Network (AFN) is a consortium of eight local electric cooperatives, plus technology leaders including Ciena and Arista Networks, founded in 2022 to bridge Alabama's digital divide through advanced fiber technology. Officially launched in 2024, the consortium has government backing through more than \$200 million in grant funding from the US Department of the Treasury.

AFN's aim is to bring at least 400 gigabits of capacity to each of Alabama's 67 counties via a middle-mile network stretching more than 8,000 km. By the end of September 2024, the organization had completed 67% of its backbone network rollout, reaching 38 counties. Unveiling Sprout Fiber Internet as its first customer this summer, AFN has since added four more 100-gigabit customers.

The rollout forms a key part of Alabama's Be Linked program to expand high-speed internet access statewide. AFN's high-quality connections will support other broadband providers and organizations including government offices and municipalities, educational institutions, healthcare centers, and local businesses.

Which services?

- IP Transit



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Abdul Taylor, Global Client Manager for the Global IP Network at NTT DATA

Summary

Bridging the digital divide by plugging gaps in broadband coverage is a central tenet of modern global telecoms. This goal has become even more of a focus following the COVID-19 pandemic, which highlighted the critical need for connectivity as people worked from home, and needed remote access to education and health services.

In the US, the COVID recovery program set aside hundreds of billions of dollars in funding to support multiple measures including the development of broadband infrastructure. Investment is particularly important in locations like Alabama, where 55 of the state's 67 counties are considered rural and estimates suggest almost 20% of rural households still lack broadband access.

Alabama Fiber Network (AFN) formed as a collaborative initiative between eight local electrical cooperatives in 2022 to meet this need, backed by support from grant funding. The consortium needed reliable and high-quality IP transit to support the network, ultimately selecting NTT DATA's Tier 1 Global IP Network as a partner for the purpose.

Business need

A need for best-of-breed services

Before they teamed up to form AFN, the eight local electric cooperatives that make up the consortium were already providing ISP services to customers. As the nation and state pushed for greater connectivity, these companies recognized that taking a joint approach would enhance their ability to drive efficiency and create effective partnerships.

“One of the consortium’s goals was to find IP transit providers from which to source reliable, low-latency services,” says AFN CEO Terry Metze, who emphasizes that quality was the top priority above cost.

“Cheap services are not the main thing we were trying to do here,” he says. “We were trying to get best-of-breed services.”

In seeking providers that could offer high-quality and low-latency connectivity across Alabama, AFN identified NTT DATA’s Global IP Network as the ideal option. With both that deal and the consortium in place, things are all set for real results in bridging the digital divide.

“In my 30 years of experience in telecoms, this is about as good an opportunity to meet needs for rural Alabamians as for people in any rural region I’ve ever seen,” says Metze. “When you look at the uniqueness of the ownership and the partnership with the state, we have the technical know-how and broadband expertise to make this a real success.”

Solution

Boosting transit with NTT DATA

With NTT DATA and AFN signing a contract in early 2024, our network is now providing 200G of transit to the consortium.

The link-up has some key advantages for AFN, says Abdul Taylor, Global Client Manager for the Global IP Network at NTT DATA. “NTT DATA has top social media websites, gaming platforms and CDN traffic on our backbone,” he explains. “With us, AFN’s subscribers get optimized routes and service, and they’re also directly hopped on to top content. The collaboration is the best win-win scenario for both organizations.”



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Terry Metze, CEO, Alabama Fiber Network

While AFN’s main current focus is getting its network up and running throughout its coverage areas, the consortium is open to taking further capacity and services from NTT DATA’s Global IP Network in future.

One such set of services with big potential for a provider like AFN is NTT DATA’s portfolio of DDoS Protection Services (DPS). Taylor cites the company’s DPS Max and Service Provider offerings, which include attack detection and auto-mitigation, as well as additional revenue-generating options on the latter service.

“We’ll definitely be looking at NTT DATA as an option for such capabilities because of the depth and breadth of services they can provide,” says Metze.

Individual cooperatives will also have their own needs, with NTT DATA open to servicing the requirements of the separate providers as well as the consortium. Single cooperatives may, for instance, have a need for additional capacity to a particular location. “It’s a very fluid relationship between cooperatives and the consortium, with opportunities when it comes to both,” says Taylor.

Outcomes

A dramatic drop in latency

While it's early days in the relationship, Metze says latency has already been cut by 70% among initial customers through AFN linking up with NTT DATA. "The service we're getting is amazing," he says. "Once the connection's up, it's solid."

At the same time, he notes the readiness of NTT DATA to address any concerns that may arise. "If we contact them, they come right back to us to assist, and can troubleshoot issues very quickly," says Metze. "That's great news when you're in the process of trying to build an airplane while flying it. I'm really satisfied with the way things are going right now, and I've heard zero complaints about the service from my staff."

Delivering top-class services to the underserved

IP capacity demand will continue to increase as connectivity grows across Alabama, expects Taylor. "As we see more and more traffic, I expect we'll see even more of a desire for that quality connectivity in Alabama, whether it's residential or commercial connectivity to small- and medium-sized businesses, or to large enterprises or institutions like colleges," he says.

And Taylor is optimistic about the outlook for the state's rural communities. "We're really helping AFN to deliver internet access to unserved and underserved communities," says Taylor. "Once you see the anchors in place, it's going to promote growth and innovation all across the state."

Blueprint for innovation and success

This type of set-up has the potential to provide a blueprint for fruitful rural rollouts elsewhere too, as other states and the nation as a whole look to boost broadband connectivity.

As for the partnership between NTT DATA and AFN, the new union presents a promising outlook for the future. "We're at the beginning of a healthy relationship between our two organizations, and there will be opportunities for more services to be added," says Taylor.

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