



Size:

300 employees

Industry: Telecommunications and technology services

Location:

Jonesboro, Arkansas

Challenges

- Leverage existing fiber infrastructure to deliver new revenue-generating services
- Create a full set of cloud offerings with a lean IT staff and budget
- Allay customer fears of the public cloud

Solutions

- Application-centric, software-defined networking for network operators
- Centralized, automated infrastructure management for the cloud administrator
- Public cloud technologies for the cloud service provider

Ritter Communications transforms its business with Cisco ACI and Microsoft Cloud Platform

Results

- Rapid market adoption of new hybrid cloud services
- Adopted lean, agile network operations
- Increased customer retention and revenue
- Reduced OpEx and improved ROI

Products

- Cisco® Cloud Architecture for Microsoft Cloud Platform
 - Cisco Application Centric Infrastructure (Cisco ACI™)
 - Windows Azure Pack
 - Cisco Unified Computing System™ (Cisco UCS®)
- Cisco Firepower® Next-Generation Intrusion Prevention System (NGIPS)

More information

- [Cisco ACI. An Optimal Solution for the Microsoft Cloud Platform. \(Infographic\)](#)
- [Winning Together with Cisco ACI and Microsoft Azure Pack \(Video\)](#)
- [Cisco Application Centric Infrastructure and Microsoft Integration \(White Paper\)](#)
- [Cisco Cloud Architecture for the Microsoft Cloud Platform](#)
- [Cisco ACI](#)
- [Windows Azure Pack](#)

Ritter Communications transforms its business with Cisco ACI and Microsoft Cloud Platform

Headquartered in Jonesboro, Arkansas, Ritter Communications began providing local phone service in 1906. Today, Ritter serves 62 communities and more than 45,000 customers in northeast and north central Arkansas and west Tennessee with advanced voice and data services typically found only in major metropolitan areas. Ritter invests heavily in the communities it serves by deploying proven, best-in-class infrastructure and technology while coupling it with a world-class, customer-focused experience.

Challenge: Leverage existing fiber infrastructure to deliver new revenue-generating services

Sheer connectivity doesn't deliver the revenues it once did. With a wealth of options at their disposal, consumers are increasingly choosing non-traditional providers for phone, television, and Internet services—and many are cutting the cord altogether. This has forced venerable telecom companies like Ritter Communications to rethink and rework their business models.

“Large-scale fiber deployments are capital intensive, and there is consistent downward pressure on the price points for connectivity services,” says Greg Sunderwood, vice president of engineering at Ritter, which has served customers in Arkansas and beyond for more than a century. “We needed to create new innovative services that would enable us to layer additional revenue onto the assets we have already built.”

Ritter had two things on its side: A trusted and entrenched standing within the local, largely rural community. And more importantly, a carrier-grade fiber network already in place.

Both would be essential for a new set of business-focused cloud services, intended to drive additional revenue and growth. But Ritter had limited operational experience with cloud services, and so did its customers.

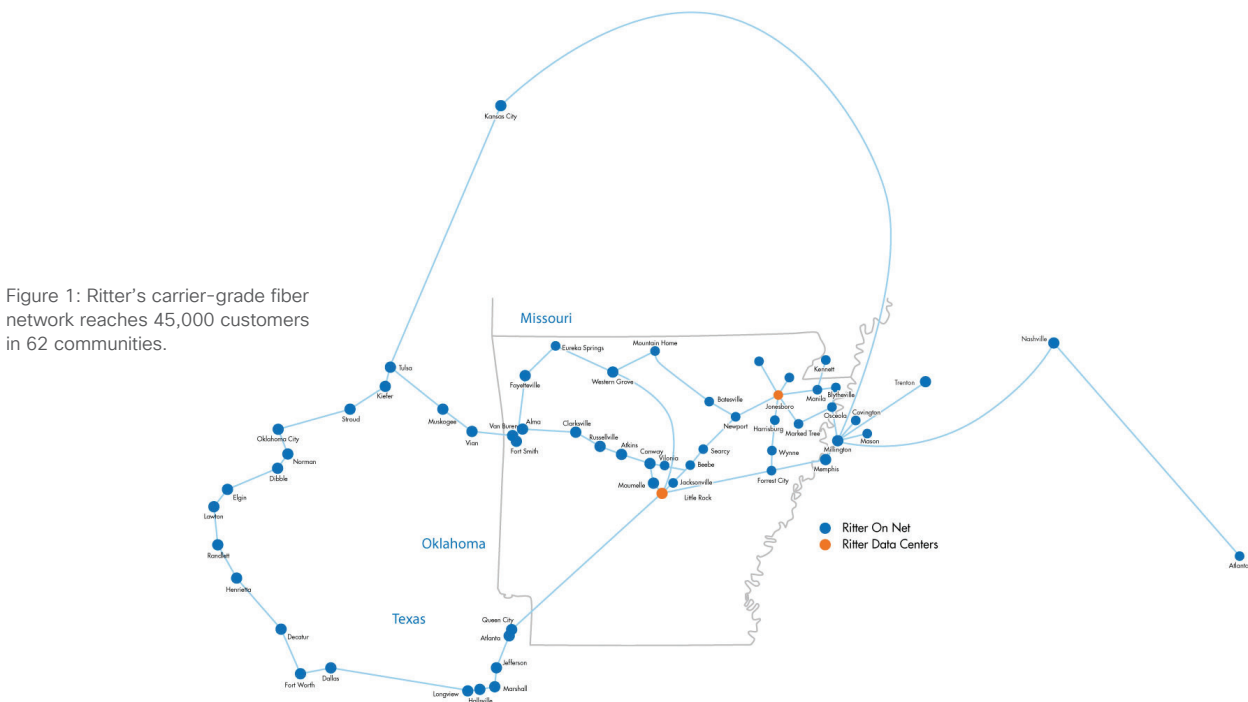


Figure 1: Ritter's carrier-grade fiber network reaches 45,000 customers in 62 communities.

Overcoming public cloud concerns

According to Sunderwood, one of the biggest challenges of delivering new cloud services would be convincing its business customers to alter longstanding IT processes.

“We serve a very rural market, and many network managers are tied to their servers. They wouldn’t feel comfortable putting everything in a public cloud,” Sunderwood explains. “We knew we could utilize our fiber network to deliver cloud services, but we didn’t want to be a pure reseller. We wanted more differentiation on the front end and more control on the back end.”

Because Ritter’s lean IT staff didn’t have the expertise, resources, or budget to build a cloud stack from scratch, they needed to find a way to leverage the public cloud while allaying customer concerns. They found the answer in Cisco Cloud Architecture for the Microsoft Cloud Platform. The integrated solution features a combination of Cisco ACI, Windows Azure Pack, and the Intel® Xeon® processor-based Cisco UCS.

“We essentially pull the public cloud into a customer’s environment,” says Brandon Ferguson, senior cloud engineer at Ritter. “Microsoft Azure is the customer-facing management console, and Cisco ACI handles back end infrastructure and network management.”

“It’s a nice, clean package and a natural extension of our existing fiber network,” Sunderwood adds. “And we were able to pull it together with limited resources.”

Orchestration and automation

Cisco ACI, the industry’s leading software-defined networking (SDN) solution, provides seamless connectivity, automated configuration, and policy control that can be extended across multiple data centers and cloud environments. Designed for secure multitenancy, it enables Ritter to give its business customers a true private cloud experience on a shared infrastructure.

That customer experience is driven by Windows Azure Pack, a collection of Microsoft Azure technologies that integrates with Windows Server, System Center, and SQL Server. Through a self-service interface, Ritter’s business customers can establish their own subnets, virtual routing and forwarding, bridge domains, and other resources with ease.

“Everything is orchestrated by the customer within Azure Pack. Cisco ACI then automatically provisions the fabric in a secure tenant environment,” Ferguson explains. “It’s all integrated. We just coordinate the WAN and Metro IP addresses with the customer, and Cisco ACI does the rest.”

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Brandon Ferguson

Senior cloud engineer, Ritter Communications

More revenue, less expense

Ritter's business used to be reliant on "box sales," with revenue coming from the latest cable converters, phone systems, and networking gear. But the margins on those sales were always slim due to the high cost of equipment and the army of technicians required to install and configure those boxes. Ritter's new cloud services are a different story.

"We've gone from manual provisioning to 100 percent virtual deployments," Ferguson says. "We manage everything centrally, and we can continue to scale our services and revenue while driving down our capital and operating expenses."

If initial customer demand is any indication, simplified management, automation, and the scalability that come with them are absolutely essential. Local businesses are flocking to Ritter's new infrastructure, backup, and disaster recovery cloud services. Their spending has been 50 to 60 percent higher than Ritter anticipated. And many are now considering virtualizing their entire IT environment.

"We've turned server hugging skepticism into cloud-first approaches," Ferguson claims. "I see it all the time. The subscriptions start with just one low-risk server, then it seems like every time I check back on that tenant, they are adding more and more resources in the cloud as the trust grows. The Ritter cloud is a simple, consumer-friendly, highly automated offering, and it's been the catalyst for a mind shift—for us and our customers."

"Three years ago, we were as green as anyone with the cloud. Now we're the local expert. We've been able to demystify a very daunting technology stack, and it has resonated in our market. We're seeing a ton of success."

Greg Sunderwood

Vice president of engineering, Ritter Communications

Looking ahead

With demand for its new cloud services booming, Ritter is preparing to launch a new security offering that leverages the integration of Cisco ACI with Cisco Firepower, a threat-focused, next-generation firewall. The company intends to increase automation and provide additional self-service capabilities for its customers. And it will explore additional integrations—including software-defined WAN—to extend the market reach of its cloud services.

"Three years ago, we were as green as anyone with the cloud. Now we're the local expert," says Sunderwood. "We've been able to demystify a very daunting technology stack, and it has resonated in our market. We're seeing a ton of success."