



# Pioneer Turns to Monolith Software for Leading Edge Technology Management



**Customer:** Pioneer Telephone

**Headquarters:** Kingfisher, Oklahoma

**Industry:** Telecommunications

## Challenge:

- Introduce leading edge technology management for landline business to position the company for growth
- Retain high level of customer service while keeping costs low

## Solution:

Monolith Software for consolidated fault, performance and availability monitoring and real time dashboards

## Results:

- Rapid deployment and quick ramp to productivity
- Proactive response to customer issues – alerting them to problems before they know they exist
- Significant savings in staffing resources through remote network management and reduced number of truck rolls
- Greater visibility into operational performance and the ability to draw out metrics and trends from performance data
- Greater opportunity to centralize administration and cross-train staff

## About Pioneer Telephone Cooperative

Pioneer Telephone, headquartered in Kingfisher, Oklahoma, is a multi-service communications company serving more than 140,000 customers and members across 30 Oklahoma counties. Serving its customers since 1953, Pioneer is the fourth largest telephone cooperative in the United States.

Pioneer provides an array of communications products and services to its rural Oklahoma customer base, growing from just two landline exchanges in the 1950s into a vibrant landline business in 2009, with 76 exchanges across the state of Oklahoma. The company is now aggressively expanding its coverage area and its service portfolio to customers, and sees its future in the delivery of wireless technologies. It recently completed a major expansion of its network and implemented a new IP core to provide Internet services, broadband, cellular coverage and digital television. In addition to its consumer business, Pioneer telephone also serves the commercial business market, providing managed services and security alarms for businesses around the state.

## The Challenge

Pioneer faces a number of business challenges familiar to any telecommunications provider. First, the company operates in a highly regulated environment, and the operation of its network must withstand and satisfy the scrutiny of regulators at the State and Federal levels. The company is also rapidly expanding its portfolio of services to retain and win new customers, regularly adding new and cutting edge devices to its network device portfolio.

The need to deliver quality service to customers at a low cost is another business imperative for Pioneer. Phone coverage and dial tone, whether delivered through landline or wireless is ubiquitous in today's marketplace. Customers expect and demand high quality service from Telco service providers and are rightly intolerant of any downtime. Pioneer's network team has set itself a mission of customer satisfaction through proactive and constant surveillance. "We want to know that the equipment has failed before the customer knows, and get it up and running before the customer knows," says Ken Muscik, director of Subsidiary Services.



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**- Ken Musick, Director of  
Subsidiary Services, Pioneer  
Telephone**



The rural nature and low population density Pioneer’s Oklahoma customer base also puts additional pressure on the NOC team to optimise its resources and automate surveillance wherever possible to keep costs low. “Remote and consolidated monitoring of the network helps us achieve greater levels of efficiency, helps us manage our resources better, and keeps our truck rolls low,” says Musick.

Two months ago, the company merged its landline and wireless operations systems monitoring, establishing a new centralized network operations center (NOC) under the helm of Ken Musick. The NOC unified team of 12 network operation center technicians provides consolidated 24X7 management of the company’s diverse, and expanding cellular and network surveillance environment.

Given its tenure in the business, and the consolidation underway in the Telco marketplace, Pioneer Telecom’s network environment is extremely complex, consisting of 50+ different devices ranging from traditional legacy switches, environmental control systems, and big-band DACS, through to cutting edge Calix video equipment, SONET/DWDM backbones from Cisco and Meriton, and high speed bandwidth Ethernet routing backbones for data. The wide range of legacy and modern devices and the existence of two separate performance management systems for its landline and wireless operations presents a significant management and performance monitoring challenge for the newly formed NOC team.

In 2007 Pioneer learned that its monitoring solution for the landline business was in the process of being end of lifed by its vendor. Faced with the need to make a change, the company began casting an eye out to the marketplace for a replacement. The new solution needed to provide alarm and surveillance management capabilities equal to the incumbent solution, as well as excellent platform coverage, a low total cost of ownership, and ease of use and administration. The team also hoped to enhance its monitoring capabilities and placed a premium on vendors who could offer a consolidated solution providing alarm and surveillance management, event management, availability and performance tracking as well as enhanced trending and monitoring of operational metrics and service level agreements.

## The Solution

The search for a new vendor was headed by Lloyd Green, Director of Central Office and Network with assistance from Monte R. Lee and Company, a consulting engineering firm based in Oklahoma City who helped guide the requirements gathering and vendor selection process.

The incumbent vendor was immediately ruled out as an option. Licensing and maintenance costs for the technology proposed by the vendor as a replacement for the end of life solution were prohibitively high, and simply out of the team's reach. The team began its search for a new vendor by attending Management World, a tradeshow hosted in Dallas by the Tele Management Forum where they toured various vendor booths and reviewed available options. The selection team also conducted online searches, and polled internal team members to solicit suggested vendors and technologies. As evidence of the power of word of mouth marketing, Monolith Software was suggested by one of the team's technicians who had previous experience with the Monolith system. Monolith was added to the list of candidates. In total, eight technologies were selected for consideration, and the vendors brought in for on-site sales presentations and interviews. This list was then pared back to a short list of four. Each vendor was asked to complete a comprehensive RFP, provide a demonstration of the technology to the Pioneer NOC team, and submit to a Q&A session. In the end, Monolith Software was identified as the best in class solution, meeting the team's criteria for consolidated platform coverage, low total cost of ownership and ease of use. Monolith's highly responsive, US-based support was also considered a plus by the Pioneer selection team.

Monolith promised a streamlined and short implementation timeframe – a quality that was important to the Pioneer team who had a hard deadline for implementation of their alarm and surveillance solution. While other vendors in the selection process recommended implementation timelines that stretched over months, Monolith committed to full delivery in just five weeks – and then proceeded to meet that objective handily thanks to Monolith's open and single architecture, powerful discovery and highly flexible configuration capabilities. In the first two weeks of the implementation, Monolith staff worked with Pioneer's NOC team remotely and onsite to discover the Telco's wide ranging device environment (Nortel, Adtran, Cisco), record the data into the Monolith platform, and develop business rules surrounding SMTP traps, ASCII, TLI and Syslogs. The team was also able to speed implementation by leveraging pre-existing serial to Ethernet terminal services for TLI, PDS, Siemens and Nortel DMS formats, and build new web-based configurations based on existing components.

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**- Tammy Roman, NOC Tech1,  
Pioneer Telephone**



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**- Tammy Roman, Pioneer Telecom  
NOC Tech1**



## The Benefits and Results

Pioneer’s NOC team has now been up and running with the Monolith platform for approximately a year and rely on Monolith for alarms, surveillance, event management and to collect operational metrics associated with the company’s landline and digital television services. “Overall we are very pleased,” says Tammy Roman, Pioneer Telephone NOC Tech1, responsible for administration of the Monolith system. “The Monolith platform has been very easy to work with. We heavily use the alarms browser in particular, and really like that we can access the system remotely using a Web browser and VPN – this allows us to manage our network from anywhere, at any time. We have been especially happy with Monolith’s support team; they are very responsive and timely. We have also been experimenting with the event reporter and with the platform’s metrics manager, monitoring and drawing out key metrics related to bandwidth tied to our Cisco 7609 routers, and IP core.”

The Pioneer team realizes they are only scratching the surface in terms of uncovering the benefits of the Monolith platform. They are now investing in additional training on the platform and with further in-depth understanding of the solution, plan to expand on their use of dashboards, creating individual views for various groups within the company, service reps, and commercial business clients. Pioneer is in the process of launching new monitoring services for businesses to help them better manage and plan for capacity and can see tremendous value in giving customers dashboard-based visibility and access to data, trends and metrics in Monolith.

“We have our feet wet with the software,” says Tammy Roman. “Now, we can draw on our familiarity with the platform and apply its “single pane of glass” capabilities directly to our business needs. We’re confident in our ability to use the system. And we know we have powerful dashboards, reporting and metrics capabilities at our fingertips that will allow us to start drawing vital operational information out of the tool.”

## About Monolith Software

Monolith Software is the leading provider of operationally focused technology management software for network operations centers (NOCs) delivering the only fully integrated platform for managing fault, availability and performance on the market today. Service providers and IT organizations seeking to increase operational efficiency and drive down costs while maintaining 99.999 percent uptime and availability turn to Monolith Software’s next generation management and monitoring solution for real time insight into the health, performance and availability of mission critical systems and applications.