

Midco Boosts Operational Efficiency and Drives Network Excellence with Kentik



CATEGORY

- ▶ Communications service provider: Internet, TV, phone, data center, and managed IT services

CHALLENGE

- ▶ Limited visibility into rapidly changing traffic flows, peering dynamics, and the economics of traffic delivery
- ▶ Reliance on manual spreadsheets for capacity planning and disparate tools for troubleshooting

SOLUTION

- ▶ The Kentik Network Intelligence Platform: Leveraging traffic analytics, synthetic testing, and device monitoring, tied together with Kentik AI

RESULTS

- ▶ Successfully shifted traffic mix from 90% transit to 10% transit, dramatically reducing delivery costs
- ▶ 60x faster mean time to insight (MTTI)
- ▶ Troubleshooting and data gathering time reduced from hours to seconds
- ▶ Data-driven network planning decisions enabled by deep network intelligence
- ▶ Efficient network infrastructure

Background

Founded in 1931, Midco is a telecommunications leader redefining connectivity. The company maintains market leadership by providing exceptional customer experiences using the region's most reliable owned and operated fiber network spanning 21,000 miles. Midco's service area covers more than 1.2 million homes and businesses in over 600 communities with 1,900 team members across Kansas, Minnesota, North Dakota, South Dakota, and Wisconsin. Their mission is to be the best communications company in the country for their neighbors, team members, partners, and communities. Midco has been a Kentik customer since 2016.

Introduction

In today's competitive broadband and ISP market, network quality is the core of customer experience. Subscribers expect fast, consistent service, and even small performance issues can drive dissatisfaction. At the same time, infrastructure teams are juggling rising costs, growing capacity demands, and the pressure to operate larger, more complex networks without increasing headcount.

With so many critical community-anchor institutions and subscribers relying on their fiber network and managed IT services, maintaining reliable and trustworthy connectivity is central to Midco's business. Midco, in turn, has relied on Kentik's network intelligence since 2016 to deliver exceptional service performance and digital experiences, using best-in-class traffic analytics and, more recently, network monitoring and synthetic performance testing.

To learn more about Midco's journey and how the company uses Kentik to deliver consistent service quality, cut costs, and boost operational efficiencies, we sat down with John Lubeck, Director of Core IP and Transport, whose eight-person network engineering team oversees strategy and operations for routing, switching, transport, and interconnection at Midco.

The challenge

As streaming adoption surged in the mid-2010s, Midco accelerated its shift toward IP- and fiber-centric infrastructure, and its engineering team quickly found itself operating with limited visibility into rapidly changing traffic flows. The team was adding caches, turning up new peering links, and joining internet exchanges, yet lacked the data needed to determine which ASes, CDNs, and content sources should drive those decisions.

Capacity and cost planning were equally constrained. Engineers relied on spreadsheets to track commit rates, burst billing, and runout thresholds – an approach that couldn't keep pace with Midco's rapid growth. And when incidents occurred, troubleshooting meant switching between device CLIs, routers, and disparate monitoring tools to correlate network traffic, metrics, and performance.

With their network evolving so quickly, the Midco team recognized they needed a flexible and powerful next-gen network observability solution. "We really needed a single pane of glass platform to help us understand where our traffic was coming from, which content providers we should connect with, and how to lower our transport costs," says Lubeck.

The solution

When evaluating options, the team quickly realized most observability tools were built for enterprise networks – not for ISPs managing multiple interconnections, constantly shifting AS paths, complex traffic dynamics, and key commercial relationships. Kentik was the only platform they evaluated that provided the depth of operational and commercial network intelligence needed to drive faster troubleshooting and guide cost, interconnection, and network planning decisions at scale.

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Kentik's strengths aligned directly with Midco's ISP observability and monitoring needs, including:

- **Service-provider-grade network visibility** across edge, backbone, and the internet, with rich ASN and BGP context and seamless integration with PeeringDB.
- **Deep traffic flow analytics** to identify sources, destinations, top talkers, OTT categories, CDN providers, and shifting subscriber behavior.

- **Automated capacity and cost planning**, including circuit cost modeling, commit-rate tracking, and burst billing analysis.
- **Insight into Midco's traffic delivery supply chain** – how traffic is handed off (peering versus transit), how much is served on-net versus off-net, and where optimization opportunities exist.
- **A unified operational view** combining device health, traffic analytics, and synthetic performance testing for faster troubleshooting and issue resolution.

Use cases

Understanding traffic mix and optimizing peering

Once Midco deployed Kentik, the team finally had a clear view into why their traffic behaved the way it did – where it originated, which CDNs carried it, and how it could be delivered more efficiently. That level of insight immediately reshaped Midco's caching and interconnection strategy, helping them determine peering targets and cache deployments to reduce transit costs and boost performance. Over time, the results were dramatic.

"When we started this journey, only around 10% of our traffic was coming from CDNs," says Lubeck. "Now about 90% goes through CDNs or local caches, and only 10% goes through transit. Kentik helped us flip the whole script on how we manage our traffic."

Capacity planning and cost management

Prior to Kentik, Midco engineers tracked circuit costs and commit rates through manual spreadsheets. Kentik automated those workflows via the [Capacity Planning](#) and [Connectivity Cost](#) modules, helping Midco move to an efficient, data-driven model for growth planning, capacity upgrades, and contract negotiations.

"It was the capacity planning and connectivity costs tracking that stood out," Lubeck explains. "We could put in the costs of those circuits and what we were paying for burstable traffic. A lot of that was manually done through spreadsheets before. Now those reports are auto-generated and sent directly to our finance team."

Live streaming events and OTT visibility

As subscriber behavior shifted toward streaming, major live events became the new stress test for Midco's network. Using [Kentik True Origin](#) to classify traffic by over-the-top (OTT) services and applications, the team can precisely track OTT consumption patterns, platform-specific demand, and regional spikes. "Our new peak night is Thursday because of Thursday Night Football," Lubeck says. "Kentik helps us validate what content providers predicted for traffic, create baselines, and catch anything abnormal immediately."

With these OTT insights, Midco can proactively prepare for traffic-surge events, including sports playoffs, the Super Bowl, and large software releases like video game updates. Additionally, they can track how their IPTV service – MidcoTV – is performing compared to other OTT application traffic on their network.

✓ Rapid troubleshooting and incident resolution

With Kentik bringing together flow, NMS metrics, and synthetic tests, Midco has a unified operational picture during incidents. When a network impairment or fiber cut occurs, the team can immediately see which interfaces are under strain, how traffic is rerouting or needs to be rerouted, and whether congestion risks are forming. Kentik Synthetics also gives non-engineering teams self-service visibility into latency, jitter, and packet loss.

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✓ AI-assisted operations

Midco has also begun leveraging Kentik AI to accelerate troubleshooting and make network insight more accessible to junior engineers. By using natural language queries and AI-assisted insights, the team can get answers without needing deep network expertise.

Lubeck recalls asking one of his engineers to use Kentik AI Advisor to analyze and assess next steps for a particular anomaly. "He clicked Kentik's "Analyze" button, and we were blown away," he says. "Everything he needed was right there – the explanation, the show commands, and the suggested next steps."

Kentik AI helps Midco reduce time-to-insight while also supporting learning and consistency across skill levels. "Kentik AI really accelerates mean time to repair by getting the right information straight to the engineers who need it," Lubeck says. "And it helps newer engineers understand what they're looking at."

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Results and ROI

Operational efficiency: Hours turned into seconds

Before adopting Kentik, answering traffic questions, validating event patterns, or correlating data across routers and tooling could take the Midco team hours. "Our ROI with Kentik is the efficiency

gained and faster time to insight,” Lubeck says. “Kentik allows us to answer questions in a matter of seconds instead of hours. We’re not jumping between tools, logging into router after router, or hunting through spreadsheets. It’s all in one place.”

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This shift transformed how Midco operates:

- **Troubleshooting acceleration:** Investigations that once required manual correlation across multiple systems now resolve far more quickly.
- **Strategic traffic management:** Successfully shifted traffic from 90% transit to 10% transit, significantly lowering transport costs.
- **Reporting efficiency:** Engineers can instantly validate traffic trends, live-event impacts, or unexpected spikes.
- **Greater confidence:** Teams move faster because they can rely on complete, consistent data rather than best-effort guesswork.

Conclusion

Midco’s network continues to evolve – expanding FTTH, [customizing 400G business solutions](#), launching Midco Mobile, and supporting a subscriber base that expects more every year. With so much change, one thing remains constant: the need for clear, real-time insight into how the network behaves.

With Kentik, Midco’s engineering team is equipped to meet rising subscriber expectations, manage costs, and support the company’s future growth.

“If we didn’t have Kentik,” Lubeck says, “we’d have to hire developers and build all these correlations manually. Or we’d need a bigger team. For a service provider, Kentik is a great tool to let you know what’s happening on your network. It’s essential.”

Kentik is the network intelligence platform for modern infrastructure teams. Unlike traditional monitoring and observability tools, we demystify complex network operations, enabling organizations to deliver applications and innovation at scale. Built by network experts to make critical insight accessible to every engineer, Kentik is the real-time source of truth that understands every network in context, from data center to cloud to the internet. This single platform unifies and correlates cloud, device, flow, and synthetic data to turn telemetry into action. Market leaders like Akamai, Booking.com, Dropbox, and Zoom rely on Kentik to run, manage, and optimize their networks.

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