

# Success Story

## Texas Education Telecommunications Network (TETN)

### Customer Overview

Since its inception in 1996, the Texas Education Telecommunications Network (TETN) has provided video, voice, and data services among the 20 Texas Education Service Centers (ESCs) and the Texas Education Agency.

Through the TETN network, school districts who are members of their ESC Regional Network, have access to the statewide education intranet and services including 21st Century applications, tools and digital resources.

Currently the ESCs provide internet access and other technology services such as video conferencing, application hosting, learning management systems, etc. to over 900 school districts and charter schools in Texas.

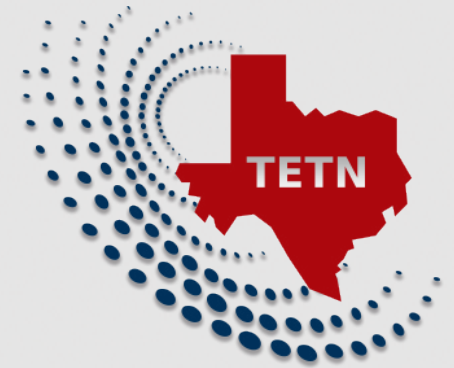
### Challenge

Besides providing high-speed broadband connections and services among the Education Service Centers, TETN also provides commodity internet via 4 upstream providers from their PoP in Dallas. To ensure the best internet connectivity for the large ECS employee base and the connected school districts, TETN needed a real-time solution for internet routing optimization.

### Solution

Before deploying Noction IRP, TETN had a predominantly reactive approach towards solving routing issues. Typically routing anomalies were detected after the end user had already been affected. Complex troubleshooting followed by manual route configuration and policy adjustments had to be performed. With Noction IRP, TETN is able to proactively eradicate network anomalies and automate multiple manual mechanisms that used to consume engineering time and effort.

### Summary

**Customer name:**

Texas Education Telecommunications Network

**Industry:**

Education

**Location:**

Dallas, TX, USA

**Business Challenges:**

- Maintaining competitiveness by providing high performance commodity internet service.
- Automate manual BGP configuration processes
- Eliminate the risk of BGP misconfigurations due to human errors.
- Gain in-depth visibility into middle-mile routing and provider performance

## Results

By running for 4 months in TETN network, IRP optimized over 185 TB of traffic by announcing over 1 million route improvements to the company's edge routers. The platform reduced latency by an average of **26%** and dropped packet loss by an average of **84%** for the analyzed prefixes.

"In the case of commodity internet, the ESCs have the option of choosing any other provider, therefore we need to stay competitive and provide the best possible service", said Lee Williams, Network Engineer at TETN. "With Noction IRP we are able to ensure that our network performs at its full capacity by routing traffic across best possible paths while having minimum engineering input".



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**Lee Williams,**  
Network Engineer at TETN

