

Case Study

Engage Helps Light Rail Network Migrate from SONET to 10G Ethernet Connectivity



Metropolitan Transit Authority Easily Migrates to Ethernet

When a major metropolitan transit authority was faced with an aging SONET network that was nearing end of life, it needed a more effective way to transport voice, video and data. The transit authority wanted to upgrade its legacy communication equipment to run on a 10 Gigabit Ethernet communication network.

This ambitious plan included upgrading the communication infrastructure of more than 50 stations, including the replacement of all rail station and operation center circuit-based equipment with native IP / packet gear.

However, after upgrading more than 10 stations, the transit authority found the complexity and time associated with a **full scale replacement of existing circuit-based equipment** put the project timeline and budget at risk.

Circuit to Packet Conversion Proves to be the Best Approach

After a detailed analysis was performed, the transit authority decided on a different migration strategy that involved connecting

the circuit outputs of existing equipment to the 10 Gigabit Ethernet network via circuit to packet converters. This greatly reduced the complexity of transitioning all equipment and network

The Challenge:

Update aging SONET network that included more than 50 stations to a 10 Gigabit Ethernet network

Engage Solution:

Circuit to packet conversion with the Engage IP•Tube, allows Transit Authority to seamlessly connect existing equipment to 10 Gig network

infrastructure to IP, and addressed the associated time, cost and training concerns introduced by the initial approach.

Engage Paves Affordable and Reliable Migration Path

Once the new migration strategy was approved, the transit authority conducted an exhaustive analysis of circuit to packet converter vendors and solutions. At the top of the list was the **Engage IP•Tube** product family.

Selecting the **IP•Tube** was easy due to its broad array of circuit to packet interfaces (T1/E1, T3/E3, Serial, modem, 4-wire, etc.), remote and central site chassis configurations, as well as

Engage Benefits:

- Retain legacy communication network
- Cost Savings
- High Reliability

Engage's **15 years of** deployment in **circuit to packet** solutions and development of products designed and built in the U.S.

Plus, Engage's extensive experience helping the Transportation industry with innovative and cost effective solutions that connect network elements, protect critical circuits and secure network traffic was also a deciding factor.

The transit authority implemented the **IP•Tube** and replaced numerous SONET rings. With the Engage **IP•Tube** in production across the network the transit authority realized their time and cost reduction objectives and no issues have been encountered. The availability and level of expertise of Engage personnel, and the quality, ease of use and simplicity of deploying the **IP•Tube** have been instrumental in the success of this new phase of the project.



About Engage

Since 1989, Engage has developed innovative products and solutions that help numerous organizations from various industries across the globe deploy and operate cost-effective and reliable communications, and meet their data security needs. We combine an experienced and responsive engineering team, highly scalable manufacturing resources, and a "whatever it takes" customer service philosophy to meet the demanding needs of our customers.