## Challenge

Educational Institutions face complex and evolving cybersecurity challenges daily. IT teams must balance securing sensitive data – such as student records, research assets, and faculty information – while maintaining open access for students and staff. These networks must be highly secure without impacting performance or access to critical educational resources and services. Recently, a large K-12 school district approached Garland Technology seeking a solution to enhance their network's security posture and feed traffic into a Palo Alto Firewall, which they identified as a potential single point of failure in their campus network.

## ■The TAP to Tool™ Solution

- 1. Garland Technology proposed a robust solution featuring Network TAPs and Packet Brokers to integrate with a firewall that was previously identified to be a single point of failure within the network, ensuring improved visibility.
- 2. This design strategically positions an inline packet broker, equipped with built-in Bypass TAP, between the network and the firewall. This configuration copies the traffic between the router and the switch, delivering complete visibility into network activity for monitoring and analysis.
- 3. With the Inline Packet Broker in place, the customer benefits from real-time threat detection and enforcement. The solution also acts as a safeguard for the network, with an automatic failover through heartbeat packets from the Bypass TAP, ensuring uninterrupted traffic flow during firewall maintenance or failures.
- 4. This solution leverages High Availability inline bypass TAPs to deliver enhanced resiliency and reliability. In the event of a primary link failure, traffic is automatically redirected to a secondary firewall or a redundant link without disruption.
- 5. This approach allows for customers to have a secure, high-visibility network environment with enhanced monitoring and troubleshooting capabilities.

## Benefits

- Seamless failover and Reliability.
- Enhanced Visibility Without Compromising Performance.
- High Availability Design for Maximum Resiliency.
- Optimized Performance.



