ElastiFlow

CASE STUDY:

Optimizing Network Performance Across 65 Schools with ElastiFlow

Overview

A local government organization responsible for 100 sites, including 65 schools, faced a critical challenge: persistent network slowdowns disrupted student learning. To effectively identify and resolve these performance bottlenecks, the organization turned to ElastiFlow. The solution quickly provided the Network Team with the deep visibility they needed, enabling them to pinpoint root causes and implement targeted, effective remediation strategies.

Challenge:

- Local government organization responsible for 100 sites, 65 being schools.
- Network slowdowns impacted multiple schools, causing connectivity interruptions and impacting students' learning.
- Limited and fragmented visibility into traffic patterns and performance issues made identifying and resolving network issues challenging.

Solution:

- ElastiFlow enabled teams with comprehensive, granular network visibility.
- Intuitive dashboards, ease of explorability, and consolidated datasets made network insights easily actionable, regardless of their skillset.
- Highly scalable solution based on open data allows for ease of scalability as the organization's needs and network evolve.

Results:

- Reduced troubleshooting time from days to minutes.
- Improved collaboration between network and on-site support teams.
- Accelerated time to detect and resolve network issues.
- Organization expanded their ElastiFlow deployment to cover additional sites outside of school systems.

Challenge

The increasing integration of Chromebooks and iPads into student education made reliable network connections more critical than ever.

"Several years ago, we had laptops and iPads in schools, but the volume of those devices has significantly grown in recent years," explained a Network Analyst.

"We're finding that some schools are hitting 60% of their bandwidth regularly, and the infrastructure demands will only continue to grow."

The network was inundated with complaints like "The network was really slow yesterday." The team knew they had to identify the underlying issues quickly to resolve them. "We had to pinpoint the issue because it wasn't going to fix itself," stated the team lead.

"We're finding that some schools are hitting 60% of their bandwidth regularly, and the infrastructure demands will only continue to grow."

Network Analyst

"When 20 schools report the same problem on the same day, you know it's only going to get worse."

The lack of granular visibility into network traffic was a major hindrance, making it difficult to move beyond mere speculation to data-driven solutions.

Solution

Simply increasing broadband speeds was considered, but quickly dismissed. While it might offer a temporary fix, it would significantly increase costs for each school without addressing the core problem. The organization needed a solution that offered true insight.

They chose ElastiFlow to gain the critical visibility necessary to diagnose the cause of network slowdowns in classrooms and design appropriate, long-term solutions.

"ElastiFlow gave us the data we needed to pinpoint the issues, allowing us to start applying solutions."

Network Team Lead

Key aspects of their implementation included:

User-friendly Interface:

ElastiFlow's intuitive design allowed individual school sites to quickly identify and isolate network issues, a crucial feature given the large number of locations the team monitored.

Detailed Traffic Analysis:

The solution provided comprehensive analysis of traffic patterns and high-usage areas, offering clear insights into the exact nature and location of network performance problems.

Decentralized Troubleshooting:

Support teams at each school were granted read-only administrative rights and trained to use ElastiFlow for initial local troubleshooting, empowering them to address common issues without escalating to the Central Network Team.

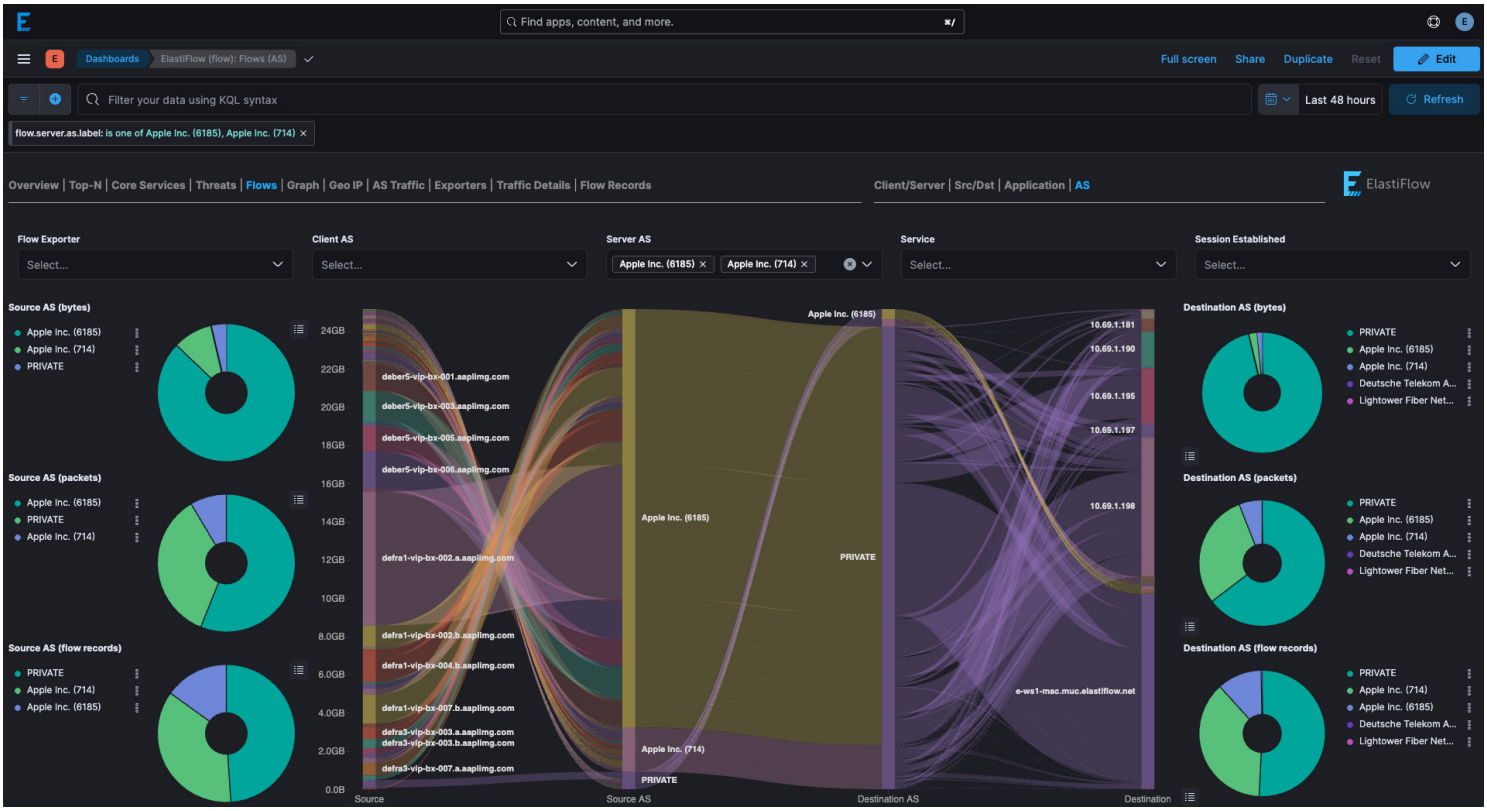
According to the Network Team Lead, a major benefit of ElastiFlow was its ability to deliver the granular insights the team desperately needed. Their previous tools offered limited analysis and filtering options. In stark contrast, ElastiFlow's powerful drill-down capabilities allowed the team to quickly investigate specific issues with remarkable detail.

Leveraging these capabilities, the Network Team identified a significant volume of Apple and Google traffic, directly linked to the primary student devices—iPads and Chromebooks.

This critical discovery enabled them to implement targeted solutions, including:

- Installing Apple caching servers at each site to reduce cross-site traffic for device updates.
- Adjusting Chromebook profile storage settings to optimize syncing processes and reduce bandwidth consumption.

"Before ElasticFlow, we could only guess where the problems originated, with no solid evidence," the team lead explained. "ElastiFlow gave us the data we needed to pinpoint the issues, allowing us to start applying solutions."



Results

Shortly after deploying ElastiFlow, the team rapidly identified two major issues causing classroom slowdowns. This quick detection allowed them to swiftly pivot from identifying the problem to implementing solutions.

Additional results included:

- **Improved collaboration between teams** ElastiFlow's user-friendly interface and shared access with role-based access control (RBAC) fostered better collaboration between the Central Network Team and the school support teams. On-site teams could conduct initial troubleshooting in ElastiFlow before escalating issues to the Network Team.
- **Significant Time and Cost Savings.** The ability to quickly pinpoint and resolve network issues translated to substantial time and cost savings. What once took days or even weeks to diagnose could now be identified in minutes, reducing staff hours spent troubleshooting and minimizing related expenses. "Using ElastiFlow gives us hard evidence of the problem within minutes, and we can use that intelligence to ask, 'Okay, what's the potential solution? How do we move forward in resolving this issue?'" noted the Network Team Lead.
- **Increased User Satisfaction.** As network performance improved and issues were resolved more quickly, user satisfaction grew across all sites. On-site teams gained greater visibility into network performance issues and felt more empowered to solve them, regardless of their prior technical skill level.

"With other solutions, the data was there, but the display wasn't user-friendly," the Team Lead shared. "Instead of drilling down to specific school sites, you saw a visual representation of all sites at once, which was overwhelming. With ElastiFlow, once you identify the site, you know you're only viewing traffic within the area you need."

Beyond its robust features and ease of use, the Network Team highlighted the exceptional level of ongoing support they received from ElastiFlow. "I can't count how many times I've contacted ElastiFlow's support team, and they've implemented solutions the very same day. I can't think of another organization that offers such a high level of service—it's brilliant."

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>
> **Network Team Lead**

ElastiFlow has enabled the organization to proactively address network performance issues, enhance collaboration between teams, and optimize network performance across its many sites.

It has also positioned them to identify and solve future unexpected network issues more proactively, ensuring a consistently reliable learning environment for students.

About ElastiFlow

ElastiFlow ensures complete visibility across complex networks by providing real-time, contextualized observability for all connected services and applications. By eliminating data silos and connectivity blind spots, we enable seamless, proactive collaboration across NetOps, SecOps, and DevOps—accelerating detection and response, optimizing resources, streamlining service deployments, and delivering exceptional user experiences.

Additional information can be found at ElastiFlow.com or connect with ElastiFlow on X and LinkedIn.