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Your School Network, Automated

Solution Brief
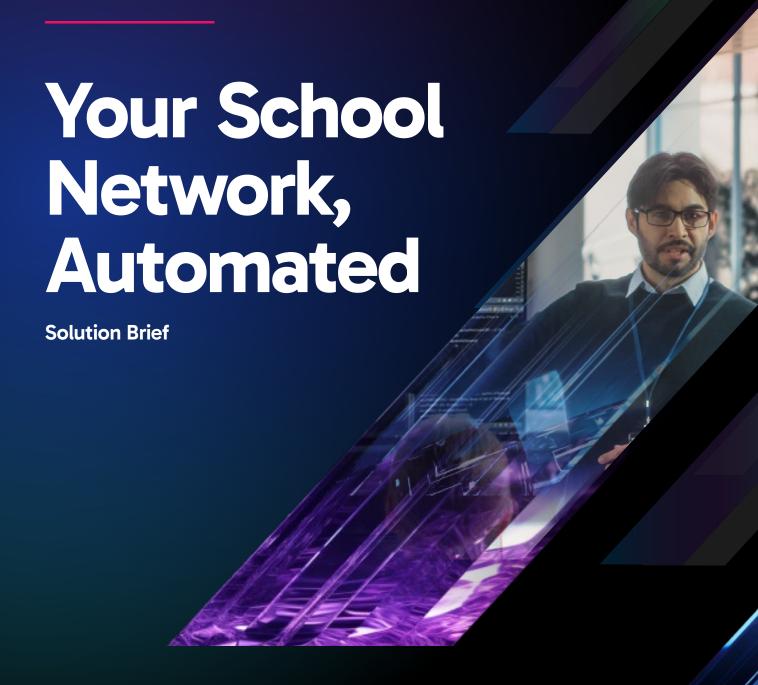
Introduction

In the age of digital transformation, primary education institutions are ardently integrating digital classroom technologies to revolutionize teaching and learning experiences.

From interactive whiteboards and digital textbooks to online collaboration tools, schools are leveraging these technologies to cater to diverse learning styles, promote active student engagement, and ensure educators have the tools they need for effective instruction.

These digital initiatives aim to bridge knowledge gaps, foster creativity, and cultivate a future-ready student body. However, while the promise of digital education is immense, the underlying challenge lies in maintaining an outdated infrastructure for wired and wireless connectivity, limited resources to manage generations of complex product centric solutions for security and operations, along with the ever-present budgetary constraints.

Enter Nile.

We provide an end-to-end solution that's consumed as a single entity within a school, meticulously designed, installed, and maintained to deliver robust and reliable connectivity. Nile focuses on elevating teaching experiences, safeguarding students, with a main goal to bolster educational initiatives.

With Nile, our customers are reporting network related IT tickets being eliminated, their digital learning infrastructure completely isolated from potential cyber threats and radically simplified operations thanks to continuous optimization across the wired and wireless network.

Keeping Students and Teachers Connected

It is as simple as 1-2-3: network disruptions significantly hinder teaching and learning processes. Aging infrastructure often fails to offer consistent connectivity. Utilizing continuous automation across its vertically integrated tech stack and an integrated data model, Nile proactively pinpoints and rectifies issues, ensuring continuous connectivity.

Sharing Responsibility for Student Success

To rise to the challenges of contemporary education, schools need robust connectivity that proactively monitors for extensive coverage, high speeds, and unwavering reliability. Digital learning is the mission, not constantly maintaining the school's network. Nile converges its high-performance network elements with cloud-native software, and accordingly can automate system care and maintenance of its Wi-Fi access points and wired switching.

Through this automated maintenance, a Nile network proactively performs software upgrades in predetermined maintenance windows, and tackles shipment of replacement units after automatically detecting if a device is impacted and is ineffective in operation.

Eliminating Upfront Capital Expense

Legacy wired and wireless access network consumption can be labor-intensive and time-consuming. It often entails significant upfront costs, extended deployment phases, compromises between cost, security, and performance requirements, having to navigate through multiple generations of product SKUs, and worse, many hours of product integrations.

Nile's 100% E-Rate eligible solution minimizes the burden of capital-intensive purchases through manageable annual or monthly payments. It takes one single step to start consuming a Nile wired and wireless network on a per building basis. With Nile, schools transition from upfront capital expenses and start benefiting from expedited deployment and decreased reliance on specialized expertise. Nile customers no longer manage support renewals on a product-by-product basis, since the costs for the solution already includes proactive maintenance.

Moving Beyond the Status Quo

Managing legacy networks consumes significant IT efforts that could be better utilized in education-centric missions. Such networks demand extensive manual configurations and reactive problem-solving. Nile alleviates this by integrating all network elements of its architecture, coupled with proactive monitoring and advanced automation via the cloud. This markedly diminishes operational expenses and overhead for IT staff.

Safeguarding Students and Their Data

Finally, across primary education institutions, enabling security against potential cyber threats and protecting student data are critical considerations for IT infrastructure installations. Conventional access networks often require perimeters of additional layers of software solutions to authorize, segment and isolate connected IoT devices and users.

This multiple product approach calls for potential design and configuration mistakes, leaving institutions susceptible to increasing cyber insurance costs, repeated network security audits and potential intrusions.

Nile addresses this by automatically implementing zero trust isolation principles within its network fabric automatically where each device is continuously authorized and isolated from any other device at the network edge by default. This eliminates the risk of malware proliferation across connected devices, and Nile's SOC-2 Type 2 compliant solution ensures data privacy and online safety for students, staff, and guests.

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What's included?

Delivered as a service, Nile is designed to share ownership in playing our part to make digital learning initiatives across primary education institutions successful. Supported by a single engineering, production and support team, the Nile Access Service integrates 10+ products and services that have traditionally been consumed separately, with different support contracts, software/firmware releases.

- Design and installation after predictive site survey,
- Tri-radio 802.11ax 4x4:4 Wi-Fi 6 access points,
- Wired access switching with 5 Gbps PoE+ ports,
- Wired distribution switching with 40 Gbps uplinks,
- User / device authentication and segmentation,
- Device profiling software for policy enforcement, and
- Cloud Guest service for guest access management,

Considering our shared responsibility, here are the line items that Nile would be leading:

1. Installation and activation of the network elements with Nile partners,
2. Proactive monitoring of the service quality across all users and locations,
3. Predictive troubleshooting of any quality changes compared to baseline,
4. Automated generation of support tickets in case of issues detected,
5. Closed-loop automation to achieve behind the scenes resolution, and
6. Software updates and security patches per maintenance window settings.

As a consumer of the Nile Access, IT teams gain access to:

1. Provision zero trust policies and role-based segments via Nile Portal,
2. Simple workflows to integrate with existing IT infrastructure components,
3. User authentication and authorization rules for wired and wireless access, and
4. Helpdesk ticketing system within Nile Portal for proactive alerts and support cases.

Conclusion

Nile is the go-to solution for primary education institutions aiming to deliver secure and automated connectivity that enriches teaching and learning experiences while minimizing operational strains.

Visit us at **nilesecu.re/primaryed,** move to a next-generation wired and wireless access network consumed in one simple step - and stop compromising student success due to limitations of traditional network infrastructures.

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