



# Brookfield Schools Invests in Multi-function Firewall to Protect Students and Staff from Online Threats



## Case study

### SCHOOL STATS

- Academy — 45 students
- Elementary — 37 students
- Transition to College — 6 students
- Satellite Learning Centers — 200 students
- Administrators — 11

### INDUSTRY

- K-12 Special Education

### CHALLENGES

- Secure school information and information systems from malware and other threats
- Provide students with a safe and reliable environment in which to learn
- Permit the integration of new technology as appropriate
- Improve security delivery while reducing security expenditures

### PRODUCTS UTILIZED

- Fortinet FortiGate 100 Series

### RESULTS

- Centralized security management of school information networks and devices
- Ability to expand or enhance information facilities without compromising security
- Low, predictable security costs

## Introduction

Brookfield Schools serves students needing intensive behavioral/therapeutic intervention at three sites. Brookfield Academy serves high school age, Brookfield Elementary serves kindergarten through eighth grades, and Transition to College provides a unique opportunity for high school juniors and seniors. Intensive group and individual counseling, art therapy, cosmetology, horticulture and culinary arts are provided.

The mission of Brookfield Schools is to provide innovative, practical, and effective educational and therapeutic services for students with special emotional and behavioral needs that will put them on the pathway to success toward becoming productive members of society.

## Brookfield Schools Learning Technology Challenge

Like all modern K-12 institutions, Brookfield employs the latest IT technologies – desktops, laptops, tablets, and associated learning software – to enhance the educational experience and prepare students for information era jobs.

Realizing, however, that Internet-connected digital infrastructures can be compromised by outsiders (hackers) and even some insiders (tech-savvy students), Brookfield looked for a proven technology partner with network security experience, selecting **PBG Networks**. PBG identified and prioritized Brookfield's security and privacy needs and recommended the deployment of two Fortinet FortiGate next-generation firewalls (NGFs).

*"PBG's deployment of the Fortinet system has enabled us to confidently allow our students to use the Internet for project based learning."*

**-T. J. MCSTRAVICK, PRINCIPAL OF BROOKFIELD ELEMENTARY**



Brookfield Schools is also responsible – and accountable – for complying with relevant security and privacy laws, regulations, and guidelines, including those pertaining specifically to education. This can only be achieved by enforcing a tiered security scheme with one standard for teachers and administrators and another, higher standard for students.

As revealed by teachers and administrators, the challenge for Brookfield Schools was to enable student and staff access to web-based assets while simultaneously detecting and deterring viruses, worms, and other malware; blocking access to inappropriate web content; preventing loss of critical data (through exfiltration or other means); eliminating spam e-mail; and exercising application control.

## Brookfield Schools Achieves Student Safety Goals

To address all of Brookfield Schools' concerns in one integrated package, PBG installed two Fortinet FortiGate unified threat management (UTM) appliances. FortiGate UTM appliances, now referred to as NGFs, are powered by the FortiOS operating system.

FortiOS features anti-malware software, an intrusion prevention system (IPS), protection against distributed denial of service (DDoS) attacks, URL-based web filtering, and anti-spam applications.

FortiOS also offers a data loss prevention (DLP) mechanism to stop sensitive information from leaving the school network and virtual private network (VPN) monitoring for site-to-site security.

## Results

Bolstered by FortiGate security, Brookfield Schools was able to effectively safeguard students from offensive, even dangerous content, while enabling the deployment of a diverse range of information devices, including Apple iPads, Google Chromebooks, and Microsoft Surface notebooks/tablets. In addition, Brookfield was able to leverage Microsoft Office 365 for total e-mail management.

Most importantly, the Brookfield Schools' family realized peace-of-mind knowing their information ecosystem supported their special needs mission.

## Concluding Remarks

Brookfield Schools is extremely pleased with their selection of PBG Networks as their primary technology partner. As evidence, PBG is now responsible for all technology management at Brookfield, leaving Brookfield teachers and administrators free to concentrate on preparing Brookfield students for the rapidly evolving world outside.

**T. J. McStravick, principal of Brookfield Elementary** stated,

*"PBG's deployment of the Fortinet system has enabled us to confidently allow our students to use the Internet for project based learning. Today many websites use similar names of commonly searched websites to lure in unsuspecting students to their inappropriate sites. PBG's use of Fortinet for our schools has allowed us to safely capitalize on the enormous power of the Internet for teachers and learners. PBG has well trained and knowledgeable staff that have provided us with information and capabilities to best serve our students and their families."*