

CASE STUDY

Fortinet and Saasyan Help Two Australian Schools Enhance Their Security and Cyber Welfare Capabilities

St Aidan's and St Margaret's Anglican Girls' Schools are sister institutions located near Brisbane in Queensland, Australia. Both schools teach children from pre-prep to year 12. Whereas St Aidan's is a day school, St Margaret's also accommodates boarding students. The schools share IT infrastructure and applications.

Fulfilling a Duty of Care

Greg Anderson, CIO at St Aidan's and St Margaret's, believes that he and his team have a duty of care to the schools' students. "A key area of focus is protecting students' welfare online. During school hours, we need to ensure that they are not visiting sites they should not be. Rather, that they are focused on their school work. We also need to keep an eye on online activity to protect students against a range of issues that can affect young people such as bullying and self-harm," he explains. "At St Margaret's, that task is a little more difficult because we have boarders. Outside of school hours our facilities are their home, and that means taking a different approach as to what they can access online."

Both schools therefore needed a flexible approach to controlling and monitoring internet usage. Anderson and his team also required a system that could provide granular and timely reporting. With only a small team, he lacked the time needed to generate sufficiently detailed reports on students' internet activity. Anderson comments, "We are a premium school and offer a premium service. The only way to achieve that with a small IT team is through automation and self-service capabilities for teachers, boarding 'mothers', and other key staff."

A No-compromise Cybersecurity and Cyber Welfare Solution for K-12

For the past decade, St Aidan's and St Margaret's have used various iterations of the FortiGate Next-Generation Firewall (NGFW) to protect the network edge from cybersecurity threats.

"The FortiGate NGFWs have proved to be an excellent cyber defense," Anderson explains. "It is our main security tool, and we use it for access control, content filtering, deep packet inspection, and single sign-on capabilities. However, when it came to reporting, we really needed a cyber welfare solution tailor-made for the K-12 environment."

Around this time, Anderson came across Saasyan, a company that provides AI-powered online student safety controls, alerts, and reports for the K-12 environment through its Assure platform. Impressed by the platform, Anderson asked Saasyan whether it could integrate with the FortiGate NGFW.

"The timing could not have been better," says Sidney Minassian, CEO of Saasyan. "We had been working to integrate with FortiGate NGFWs for a while and were looking for a school to run a pilot with. St Aidan's and St Margaret's were therefore



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Details

Customer: St Aidan's and St Margaret's Anglican Girls' Schools

Industry: Education

Location: Brisbane, Australia

Partner: Saasyan

Business Impact

- K-12 centric reporting and alerting allow the schools to act before a welfare incident occurs
- Enables the schools to promote good digital citizenship and protect students from cyberbullying and self-harm

the first customers for what was to become the Fortinet and Saasyan Student Cyber Welfare Solution. Since then, we have signed up scores of schools across Australia and are now looking to help schools in the U.S.”

The Fortinet and Saasyan Student Cyber Welfare Solution

The integration of Saasyan Assure and FortiGate NGFW, enabled through the Fabric-Ready Partners Program in the Fortinet Open Fabric Ecosystem, adds advanced student cyber welfare capability to Fortinet’s industry-leading NGFW.

As a result, Anderson and his team can leverage AWS cloud-based internet monitoring, alerting, investigation, and reporting tools fed by log data from the FortiGate NGFWs. The front-end of the solution is a user-friendly, web-based interface that St Aidan’s and St Margaret’s staff use to view student internet activity information in real time. The management dashboard provides a complete view of online behavior including drill-down access to view the websites, videos, and other online applications and services students are visiting.

“Our decision to continue to stay with Fortinet when deciding to renew our firewalls was based on our previous experience with the FortiGates, as well as the ability that it works and integrates well with third-party products like Saasyan Assure,” Anderson says.

A Smarter Approach to Cyber Welfare

The Fortinet and Saasyan Student Cyber Welfare Solution provides exactly the levels of automation and self-service required by Anderson and his team. Automated email alerts are sent to teachers and other relevant staff the moment a student tries to access an inappropriate website or search for inappropriate content. Similarly, alerts are raised when concerning conversations are detected on chats. All alerts are calibrated by student grade level because what is appropriate web usage for a year 12 student may be highly inappropriate for younger age groups.

The solution also provides school staff with a highly intuitive and reliable system to create and schedule reports, without IT assistance. “The ability for staff to surface their own data and reports is a huge benefit,” says Anderson. “And as if that was not enough, the solution also allows us to control exactly who can access data on which students. For instance, year 2 teachers will only be able to access reports and data on year 2 students.”

Sidney Minassian adds, “We only serve the K–12 space, and that factors into our design principles. So, when schools like St Aidan’s and St Margaret’s use our front end, they are using a system that applies directly to their space and the data management and analysis capabilities directly related to their needs. That includes factoring in that a lot of non-technical staff will need to use the system with ease.”

Addressing Student Welfare Issues in a Timely Manner

The self-service reports result in a significant reduction in IT workload and cost savings. But more importantly, teachers and welfare staff are better able to identify potential welfare issues and intervene early because data extraction and analysis no longer relies on IT alone. “That is a huge benefit,” explains Anderson. “It means we can have conversations with students about potential issues much earlier—whether that is spending too much time on YouTube and not enough on their studies, or if there are concerns around bullying or self harm. The solution arms our staff with the information they need to really help students thrive academically and mentally.”

Business Impact (contd.)

- Affords web content controls configurable by grade level, and use at school vs. use by boarders outside of school
- Highly intuitive interface democratizes data analysis and reporting and frees time and resources for the IT team

Solutions

- FortiGate Next-Generation Firewall
- Saasyan Assure

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- Greg Anderson, CIO, St Aidan’s and St Margaret’s Anglican Girls’ Schools

The real-time data that the system provides is an additional benefit in this respect. “When a student is at risk, action needs to take place immediately—something that is not possible with backward-looking reporting,” says Anderson. “With Fortinet and Saasyan’s solution, we can query live data to identify potential issues before they become a problem.”

The granular data provided by FortiGate NGFWs also enables the Assure platform to provide contextual insights. Not only can teachers and welfare staff see the sites students visited but also the content they viewed. As Anderson explains, watching YouTube during school hours could in some cases be acceptable if the student is watching educational content. Fortinet and Saasyan’s solution enables the school to make that determination.

“One of the most powerful features of the solution is that it enables us to build a complete picture of students’ browsing habits. Aggregated, that visibility allows grade-year leadership, the dean of students, and the dean of studies to understand what students are doing from a curriculum perspective, as well as what they are doing outside of lessons when they should be studying,” adds Anderson.

Enabling Students to Thrive

The ultimate beneficiaries of the solution are St Aidan’s and St Margaret’s students. The information gathered by the system allows the school to have targeted conversations about specific behaviors in given contexts—conversations that can have a profound effect on the lives of students. “Whether that is by helping a student manage their workload better, self regulate their internet activity, or avoid potential harm, the information provided by the solution is invaluable to our teachers and welfare staff. It is making a real difference in improving outcomes for our students.”

The Fortinet and Saasyan Student Cyber Welfare Solution was also relevant during recent crises including the COVID-19 pandemic and the Queensland floods. These events have been stressful for students and caused high levels of anxiety. The system proved invaluable in alerting staff to students who may be having a tough time, so that they can check in and offer help. In a similar way, the system helps monitor anxiety levels of staff members during these challenging times.

Improving the System

Looking ahead, Anderson thinks about ways that the solution can be enhanced. One feature currently not in use is the ability to enable teachers to block and unblock sites as they see fit, a capability that is in consideration. Anderson concludes, “We know that Fortinet and Saasyan have a range of additional features we can use. But next, we want to really embed the system in the schools and ensure everyone is using it to its fullest extent.”

