

Fortinet and Saasyan Student Cyber-Welfare Solution

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

Executive Summary

Saasyan Assure adds industry-leading student cyber-welfare capability to next-generation firewall functionality from Fortinet. Alerts and reporting allow schools to act before an incident takes place, halting damage—and saving lives. Assure makes reporting and classroom control simple and intuitive, saving schools time and effort.

Thanks to its deep application programming interface (API) integration with the Fortinet FortiGate next-generation firewall, Assure enables schools to democratize access to the tools and the data non-ICT staff need to ensure the student's cyber wellbeing. This makes it possible for schools to proactively safeguard students from inappropriate online content, promote good digital citizenship, and protect students from cyberbullying and self-harm, while maintaining a modern and engaging learning environment.

Challenges

Internet and other networking technologies have improved the efficiency and richness of the learning experience in many schools. However, the risks created by potential network misuse or security breaches have also increased substantially and affected resources and cost for their ICT staff.

Fortinet FortiGate next-generation firewalls (NGFWs) enable security-driven networking and consolidate industry-leading security capabilities such as intrusion prevention system (IPS), web filtering, secure sockets layer (SSL) inspection, application control, user identification, and automated threat protection. Fortinet NGFWs meet the performance needs of highly scalable, hybrid IT architectures, enabling organizations to reduce complexity and manage security risks. Without these capabilities, schools have limited visibility into the network threats and the applications being used, and no granular control over web content their students can access and distribute. These capabilities address network security and access control. To ensure student cyber wellbeing in educational environments, there are additional needs such as the ability to identify students who are looking up suicide hotlines or getting cyberbullied constantly. This is where Saasyan Assure comes into the picture.

Saasyan Assure adds student cyber-welfare capabilities to NGFWs from Fortinet. Alerts and reporting allow schools to act before an incident takes place, halting damage—and saving lives. Assure makes reporting and classroom control simple and intuitive, saving schools time and effort.

Thanks to its deep integration with the FortiGate API, Assure enables schools to align, set, and democratize access to the tools and the data non-ICT staff need to ensure the student's cyber wellbeing. This makes it possible for schools to proactively safeguard students from inappropriate online content, promote good digital citizenship, and protect students from cyberbullying and self-harm, while maintaining a modern and engaging learning environment.

Joint Solution

Saasyan and Fortinet have partnered to deliver an industry-leading Student Cyber-Welfare solution to address these challenges. Saasyan's approach to student cyber welfare is fundamentally different from other vendor solutions. Assure, in conjunction with FortiGate NGFWs, enables schools to go beyond the network layers in their mission to protect their students and network from the dangers of the online world. This is achieved by automatically preventing successful cyberattacks and democratizing access to the tools and the data that school staff need to ensure the student's cyber wellbeing while maintaining a modern and engaging learning environment.

Joint Solution Benefits

- Adds industry-leading cyber-welfare capability to next-generation firewalls from Fortinet
- Enables K-12 centric reporting and alerting, thus allowing schools to act before an incident takes place
- Makes classroom control simple and intuitive, saving schools time and effort
- Enables schools to promote good digital citizenship and protect students from cyberbullying and self-harm, while maintaining a modern and engaging learning environment

FORTINET®

Fabric-Ready

The integration of Saasyan Assure and FortiGate, enabled through the Fabric-Ready Program in the Fortinet Open Fabric Ecosystem, delivers:

Effortless Reporting

Assure is designed for ease of use by teachers, pastoral care teams, and other school staff. Our reports quickly and simply display the websites visited, the applications and bandwidth used, the searches performed, and the videos viewed.

Alerting

The school staff pastoral care team can subscribe to alert notifications in order to be informed when students attempt to access inappropriate websites and videos, use potentially dangerous search keywords, or are involved in negative social media activity. Artificial Intelligence built into Assure helps teachers by automatically categorizing abusive content.

Self-service Web Overrides

Self-service web filter management allows teachers and non-ICT staff to grant temporary access to sites/content that is normally blocked, allowing teaching activities to continue unimpeded.

Joint Solution Components

Saasyan Assure

Saasyan Assure is a no-compromise Cybersecurity, Cyber-Welfare, and Data Aggregation solution specifically designed for K-12.

Saasyan believes schools should not have to choose between cutting-edge network security and best-in-class pastoral care tools. They should be able to benefit from both, in an affordable manner. This is why Saasyan's approach to student cyber welfare is fundamentally different from other vendors. Saasyan hasn't attempted to reinvent the wheel by developing its own web filter and has focused on adding industry-best student cyber-welfare capability to industry-leading NGFWs.

Fortinet FortiGate

FortiGate NGFWs enable security-driven networking and consolidate industry-leading security capabilities such as intrusion prevention system (IPS), web filtering, secure sockets layer (SSL) inspection, and automated threat protection. Fortinet NGFWs meet the performance needs of highly scalable, hybrid IT architectures, enabling organizations to reduce complexity and manage security risks.

As an integral part of the Fortinet Security Fabric, FortiGate NGFWs can communicate within the comprehensive Fortinet security portfolio as well as third-party security solutions in a multivendor environment. To increase the speed of operations and response, they share threat intelligence and improve security posture and automated workflow.

Joint Solution Integration

Assure receives the URL Filtering, Traffic, and Threat logs from the FortiGate via Syslog. It also interacts with the FortiGate API in order to create temporary custom web categories, schedules, and security policies to facilitate self-service classroom control.

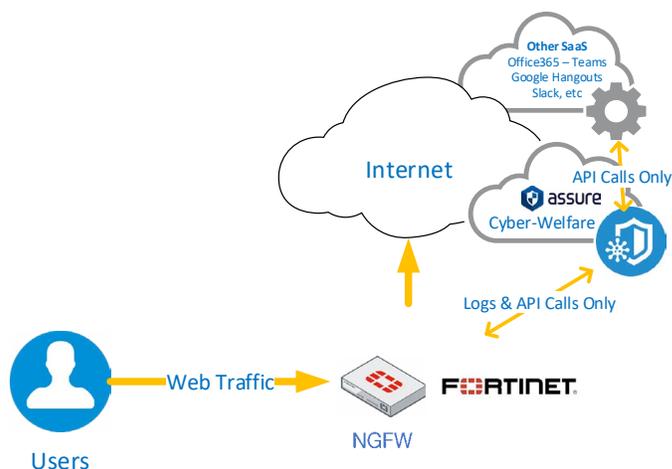


Figure 1: Integration diagram.

Joint Use Cases

Use Case #1

Challenge: Schools need to keep an eye on the online activity of the students who are deemed to be at risk of self-harm.

Solution: Through its industry-leading application control, User Identification, and Web Filtering capabilities, FortiGate firewalls allow students access to only the applications and websites sanctioned by the school. It also performs SSL decryption on selected traffic. Assure analyzes log and packet capture data from the NGFW to allow schools to act before an incident takes place, halting damage—and saving lives. It does this by:

- Continuously scanning the web searches performed, the streaming content accessed, and chat messages sent and received by these students
- Identifying the activities that are indicative of self-harm
- Notifying the school's pastoral care staff about these activities

Use Case #2

Challenge: Schools need to recognize and promote good digital citizenship among students.

Solution: Through their industry-leading Web Filtering and User Identification capabilities, FortiGate next-generation firewalls provide granular logs on the sites accessed and applications used by each and every student. Saasyan Assure makes use of these logs to calculate each student's web and cyber rating on a daily basis and highlights the ones who are at risk. Schools can also allow students to log on to Assure to have visibility into their own internet usage.

Use Case #3

Challenge: Teachers need to easily and temporarily allow access to online content without being reliant on the ICT team.

Solution: Self-service firewall and web filter management allows teachers and non-ICT staff to grant temporary access to online content that is normally blocked, allowing teaching activities to continue unimpeded—and integration with leading Learning Management Systems (LMS) allows access to be controlled within the LMS. Assure leverages the feature-rich FortiGate API to allow nontechnical staff to perform these tasks on-demand and in a truly self-service manner.

About Saasyan

Saasyan is an Australian owned and managed EdTech software company with a track record of providing quality solutions to the education sector. Saasyan creates open, cloud-enabled software to help schools fulfil their duty of care to students, and operate more efficiently. Its solutions range from Cyber-Wellbeing software to data integration tools that are used by teachers, students, student well-being officers and ICT staff. With a culture of continuous improvement and software integrations with major players in the Edtech ecosystem – SIS providers, LMS and timetabling software vendors, Saasyan is committed to helping private and public schools with their digital transformation journeys and duty of care. Learn more at <https://www.saasyan.com.au/>.

