

CASE STUDY

Delivering Robust Security With Effective Application Performance for One of China's Largest Online eLearning Providers

Beijing Waiyan Online Digital Technology Co., Ltd. ("Waiyan Online"), with its concept of "Enrich Learning, Empower Teaching," is the core organization behind the digital transformation of the Foreign Language Teaching and Research Press (FLTRP). Relying on high-quality resources and the long brand history of Beijing Foreign Studies University (BFSU) and FLTRP, Waiyan Online built Unipus, which creates a new and open platform for foreign language teaching and learning by blending superior resources and advanced information technology.

Unipus aims to be a professional, scientific, and efficient one-stop solution for users of all ages. More than 70 million students and 1,700 colleges and universities in 31 provinces, municipalities, and autonomous regions use the Unipus platform and the company has ambitions to expand.

Securing Online Cloud Services

Waiyan Online runs Unipus entirely in the cloud, which allows the company to rapidly deploy and update applications. However, as its cloud platform provider Amazon Web Services (AWS) does not offer a complete native solution for advanced threat prevention, Waiyan Online sought additional help to secure its cloud services.

A chief concern for Waiyan Online is the size of its threat surface. Already, millions of gigabits of traffic are transacted on the Unipus platform during peak periods, and the platform is growing fast. Waiyan Online's security team was aware that Unipus' large user base and the significant number of services it provides means that the platform is potentially exposed to a large number of threats.

Business continuity was another challenge for the company, as millions of students need to access its online education content and services 24 hours per day, seven days per week, securely, and from any location.

Waiyan Online therefore initiated a search to find a security solution that could protect its services and the security of its millions of users, while allowing it to remain in the public cloud.

Robust Security with the Ability to Scale

The company was looking for a security partner that could enable a high-availability architecture supported by a strong business continuity plan. The partner would also need to be able to cope with the large volume of users on the Unipus platform and be able to scale up to meet Waiyan Online's ambitious growth objectives.

Additionally, Waiyan Online's security team was keen to automate security updates to applications and improve the accuracy of security alerts, by reducing the number of missed incidents and false positives. Jinpeng Dong, CTO at Waiyan



"Before Fortinet, our application team reported frequent attacks and the level of exposure made it a challenge to securely upgrade applications without downtime. FortiWeb and FortiGate mitigate most attacks and have generated significant benefits. While our security team monitors attack mitigation logs on FortiWeb and FortiGate, our application team can focus on improving our products and services for our millions of users across China."

– Jinpeng Dong (董晋鹏), CTO, Waiyan Online

Details

Customer: Beijing Waiyan Online Digital Technology Co., Ltd

Industry: Education

Location: Beijing, China

Online comments: “We had identified a clear need for adaptive security capable of working within our cloud platform. Importantly, we wanted the solution to be easy to operate both in terms of identifying and mitigating threats, and so we were looking for a high degree of automation.”

A Complete Security System from Fortinet

Following a successful proof of concept, Waiyan Online found the solution it was looking for at Fortinet, deploying a combination of the FortiWeb Web Application Firewall (WAF) and the FortiGate Next-Generation Firewall (NGFW).

Jinpeng Dong explains: “Fortinet offers a more complete security solution than was possible with our cloud platform partner, one that future proofs Unipus and provides our users with greater security. The proof of concept demonstrated that Fortinet’s solution delivers the high-availability architecture we need, stopping attacks in their tracks while also ensuring that our platform and services perform to the high levels of quality that our customers need.”

With FortiWeb, Waiyan Online can now protect its web applications from threats linked to both known and unknown threats, leveraging features such as web server and application signatures, IP address reputation, WebSocket protection, and signature enforcement. Meanwhile, the FortiGate NGFWs enable fully scalable enterprise security at the edge with full visibility and threat protection.

Enhanced Threat Detection and Response

Through its partnership with Fortinet, Waiyan Online has been able to experience the best of both worlds: a high-performance network and applications underpinning the Unipus platform and the highest levels of security.

One crucial benefit has been around ease of use. “Before Fortinet, it was the responsibility of our applications team to deal with attacks, and they often found it hard to upgrade the applications that were the root cause of vulnerabilities,” says Jinpeng Dong. “Now the FortiWeb and FortiGate NGFW systems automatically mitigate most attacks, and only very few need to be reported to the applications team for further investigation. More commonly, all that is required is for our security team to monitor FortiWeb and FortiGate attack mitigation logs, which is a significant improvement in security and efficiency.”

With the applications team freed from routine security tasks, they can focus their time on higher value work, such as application development. All the while, Waiyan Online can rest assured that its web applications and edge connections are secured and its service available whenever users need them.

Business Impact

- Integrated public cloud security solution
- Robust high-performance network and application security architecture
- Efficient and effective threat mitigation

Solutions

- FortiGate Next-Generation Firewall
- FortiWeb

“Fortinet has enabled us to secure Unipus applications and workloads in the public cloud, which means we can continue to leverage the scalability, metering, and time-to-market benefits of the cloud knowing that our systems and users are safe. Fortinet is a valuable partner, and we will continue to consider its wider product portfolio as our needs evolve over time.”

- Qikun Shang (商其坤), CEO, Waiyan Online

The Fortinet Difference

Above and beyond the effectiveness of the Fortinet solution, Waiyan Online has also benefited from the partnership-based approach that Fortinet takes to working with clients. For instance, throughout the deployment phase of the project, Fortinet engineers provided professional services in solution and architecture design to ensure a seamless integration. Concurrently, Fortinet supported training efforts to get Waiyan Online's team up to speed on its new security systems.

Qikun Shang, CEO at Waiyan Online concludes: "Fortinet has enabled us to secure Unipus applications and workloads in the public cloud, which means we can continue to leverage the scalability, metering, and time-to-market benefits of the cloud knowing that our systems and users are safe. Fortinet is a valuable partner, and we will continue to consider its wider product portfolio as our needs evolve over time."



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