



## CASE STUDIES

# Hansung University Improves Security Posture and Consolidates Network Equipment with F5

[Hansung University](#) needed to improve their security posture and enhance the performance of applications during the course registration period due to the heavy traffic from thousands of students at the same time. By consolidating security solutions and network equipment with F5, the university protected itself from cyberattacks, provided a reliable end-user experience, lightened its operational workload, and reduced its maintenance costs by 20 percent.

**“By deploying multi-function equipment with the capabilities of DDoS protection, load balancing, and SSL visibility, we simplified the network and cut maintenance costs. This was a great help to us.”**

**– Seong Kil Kim, Computing Center Information team leader, Hansung University**

## Business Challenges

Hansung University—an ‘Imagination Incubator’—was founded in 1972 and is located in the center of Seoul. By fostering self-management and interpersonal skills, Hansung University builds a culture of creativity and inclusivity. It also helps its students develop into citizens with strong communication abilities and global consciousness.

Hansung University needed to upgrade its security solutions with proactive protection against cyberattacks and improved flexibility with a customizable security policy.

“We aimed to be the top university in security posture, not only by upgrading our web application firewall (WAF), but also by deploying DDoS solutions in advance,” said Seong Kil Kim, leader of the Computing Center Information team at Hansung University. “Our previous WAF could not provide data transparency, which we needed to set up the proper security policy and ensure reliable user experience.”

In addition, the complexity of the network impacted the performance of the university’s applications, leading to increases in both the time and cost of network management. During the course of the busy registration period, server-based security solutions could not handle the massive traffic, causing a decline in performance. This resulted in the need for additional servers and escalated the cost of a scalable IT infrastructure.

“It was hard to figure out the root cause of the problems, due to the complexity of the security solution and the network. We needed to check every single piece of equipment



task for administrators.”

**“The F5 solution provided data transparency. It helped to cut time by 50% to figure out problems and fix issues.”**

**– Seong Kil Kim, Computing Center Information team leader, Hansung University**

## **Solution**

After having difficulties with the limited functionality of their existing WAF, Hansung University decided to look for a solution that could reduce the complexity of the network and deliver stable performance for reliable user experiences—while keeping maintenance costs low. During the search, they expanded the plan to implement a DDoS protection solution as well as an upgraded network solution.

The university sought vendors that could provide security and network solutions together to simplify the network and improve performance. “Only F5 could provide the level of data transparency which we requested,” said Seong Kil Kim. “We wanted to clearly see the transaction of data. We wanted to see how the WAF protects from cyberattacks to set up a customized security policy, but none of the other vendors could provide log information.”

Hansung University adopted BIG-IP Application Security Manager (ASM)—a comprehensive WAF—to protect them against attacks at the application layer and deliver SSL visibility, along with [BIG-IP Local Traffic Manager](#) for load balancing and smart traffic management.

The university also deployed [BIG-IP Advanced Firewall Manager](#) for application-centric protection, DDoS mitigation, and data security. Finally, they chose [BIG-IP Centralized Management](#) to control all these solutions in a single window.

This new architecture, which uses a diverse set of F5 solutions transformed Hansung University’s IT infrastructure into a highly secure, manageable, and scalable platform.

## **Benefits**

Hansung University deployed a flexible security solution with visibility into data flow, which lowered total maintenance costs by 20 percent and reduced time spent on operational management.

### **Strengthen security policy management**

With the BIG-IP ASM module, Hansung University has the flexibility to deploy a customized security policy with enhanced efficiency of IT security governance. The solution offers extensive reporting features so that users can visualize data, such as attacks and operation status, and display graphical analysis showing the nature of attacks at any time. The IT team appreciates the ability to respond quickly when an anomaly is detected.

“Before implementation, we had to check every piece of equipment when we detected an anomaly, but now we can identify the problems quickly, because the F5 solution provides transparency of current data flow.”



less effort; it has helped to cut time to identify and fix issues by 50 percent, and enables the university to deliver a reliable user experience.

### **Improve application performance**

Hansung University enhanced the performance of its course registration application during the course registration period through this consolidated security infrastructure. With the new, consolidated network, there was no longer a need to purchase an additional L4 switch for real-time attendance management. Existing infrastructure could support the concurrent massive data transactions without additional equipment. In addition, the F5 solutions can process resource-intensive SSL traffic in a centralized way, reducing the loads on the university's web servers.

### **Reduce time and cost to manage the network**

Using F5 solutions that consolidate their network helped Hansung University reduce administrative and operational tasks substantially and cut the cost of network management.

“Before the implementation of BIG-IP ASM, the server administrators had to upgrade more than 30 servers separately in order to attain SSL visibility,” said Seong Kil Kim “Now, only a one-time upgrade on BIG-IP ASM is required. The overall management time is cut by more than 50 percent, which is the greatest help to us.”

One of the key benefits of consolidating with F5 security and network solutions is that the university can streamline the inquiry process when there are problems or questions, which lightens the burden on the administrator.

“By deploying multi-function equipment with the capabilities of DDoS protection, load balancing, and SSL visibility, we simplified the network and cut maintenance costs,” said Seong Kil Kim. “It was a great help to us.”

In addition, “using a consolidated solution with one vendor means that we need to retain a single maintenance service contract instead of many separate contracts with various vendors,” said Seong Kil Kim. “That has helped us cut 20 percent of the total cost of our maintenance service contracts with vendors.”



### **Challenges**

- Limited functionality to deploy customized security policy
- Low performance due to complexity of security solutions
- Increase in operational cost and management burden

### **Benefits**

- Streamline security policy management
- Boost application performance