AhnLab

KYONGGI UNIVERSITY

AhnLab TrusGuard Secures a Complex University Network

with an Integrated Security Approach

Organization Overview

Kyonggi University

Kyonggi University (KGU) was established in 1947 in the form of the Choyang Kindergarten Teacher School. The founder of KGU, Dr. Sang-kyo Son, established the Kyonggi Institute in 1957 and then Kyonggi College on March 1, 1964 in Seoul. The Suwon Campus opened in 1979, and Kyonggi College was upgraded to Kyonggi University on October 5, 1984.

In order to provide international learning opportunities for both professors and students, KGU has gone into partnership with approximately 50 foreign universities, including George Washington University, Long Island University, Michigan State University, Texas A&M University in the United States, Far Eastern State University in Russia, University of International Business and Economics, Tsinghua University in China, and Osaka Sangyo University, Kokugakuin University in Japan.

The Situation

At Kyonggi University, a leading Korean university with a state-of-the art information infrastructure, ensuring the security of academic materials, administrative data, and personal information for students and faculty is a critical concern. In the past, the university relied on a basic firewall defense system to prevent malicious codes from entering sensitive networks. However, as JongOh Park, Section Chief of the university's Computational Intelligence Service Team (CIST) explained,

"Basically, the university is an open environment. There were many cases of internal traffic bypassing the gateway via portable media, such as USB devices, and subsequent inflows of malicious code."

In this straightforward security approach, the central firewall effectively controlled external access to networks, but did nothing to prevent the introduction of viruses, worms, and other malicious code via internal network access in the campus labs.

Multiple Needs, Multiple Challenges

On busy, modern university campuses, information security is a challenging task. Students, faculty, and visitors require open and convenient access to various resources, both inside and outside the university's network. At the same time, research, grades, financial information, personal identities, and other sensitive data must be reliably secured from both internal and external threats. Without a comprehensive, flexible solution, these requirements cannot be met simultaneously.

Previously, Kyonggi University's centralized firewall did little to prevent infections from portable storage media in campus computer labs. The centralized security approach provided security for main access into and out of the university's network, but was ineffective at providing on-the-spot security for connected devices. This created a major challenge for the university's security personnel, as they had no real-time monitoring of infections and now way to quarantine or treat the devices remotely.

The university clearly needed a comprehensive security approach that included both a central firewall and network access control (NAC) at numerous points around campus. To be effective, the approach

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required central management and control of devices located in each of the university's labs and lecture buildings, as well as the flexibility to limit costs and disruption to network resources during implementation.

TrusGuard: The Integrated Security Solution

After evaluating competing security systems, Kyonggi University chose the AhnLab TrusGuard to provide the integrated solution to its complex information security requirements. The combination of TrusGuard's centralized management, automatic restriction and quarantine of problematic devices, and flexible implementation requirements made the difference for Mr. Park and the CIST:

> *"We carefully examined more than 10 domestic and foreign products and made the final decision to use TrusGuard. While other vendor's solutions required switch replacement for port control, TrusGuard supported detailed port control with the existing switches, which allowed us to cost-effectively enhance security."*

With TrusGuard devices now installed in each lecture building, malicious traffic can be effectively blocked at the source. Infected endpoint

devices are blocked from the network and quarantined into a separate security zone, until they are treated and deemed safe. Integrated with V3 antivirus software, the system automatically checks the security status of PCs and uses NAC features to then decide whether or not they are allowed to access the network. The TrusGuard system is also interlocked with the AhnLab Policy Center, to provide central management of V3 for automatic patching and updating.

As a result of the successful integration of the TrusGuard system in each lecture building, the service paralysis that was common before is a thing of the past. According to a satisfied HyunSoon Lee, CIST Chief Manager,

> *"TrusGuard checks in advance the security of endpoint devices that attempt to access the network. It only allows devices that are deemed safe and quarantines unsafe devices in a security zone, where it forces them to be treated, thereby protecting the network integrity. Since we introduced TrusGuard, requests for anti-worm and antivirus services have disappeared."*

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Long-Term Rewards

Kyonggi University has significantly raised its information security level by implementing a campus-wide, integrated security system. The increases in internal network efficiency, virtual elimination of service calls and network paralysis, and lower implementation costs all demonstrate that the TrusGuard system was the right investment.

Even though performance issues are often stated as an argument against implementing a multi-functional, integrated security system, the Kyonggi University case shows that, in a security environment with broad requirements, it is the best approach. Kyonggi University uses numerous functions, such as IPS, web filtering, application control, and firewall features through only one TrusGuard appliance.

The result is a high level of information security and improved service reliability in a cost-effective package. And because the TrusGuard system integrates seamlessly with AhnLab's other security products, the versatility and functionality of the system will grow and adapt as the university grows.

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