

Wireless Management and Security Upgrade Required

Kyungpook National University, located in the Republic of Korea, with 20,000 students experiences a large amount of wireless traffic, with 20% to 30% of its students using the wireless network each day. To connect to the wireless network, each student has their account and PC, with its unique network MAC (Media Access Control) address, registered with a legacy RADIUS server in a manual process that could take up to two days. Along with the complicated and manual registration process, the network was running the older, less secure WEP (Wireless Equivalency Protocol). Administrators found tracking "who is on the network" difficult as they often had to start user resolution with only a MAC address, which assured the machine, but not necessarily the user on the machine.

Wireless Simplification, Security and Visibility

To streamline and upgrade the existing infrastructure, Kyungpook National University wanted to use WEP wireless access points and new 802.1x wireless access points, and then searched for an authentication solution that could offer multiple features in a single package. The solution needed to address three areas:

- A RADIUS server offering 802.1x or User ID based security to ensure individual ID versus MAC authentication, without breaking the bank. The project already required purchasing of new wireless access points that could also support WPA2.
- Reduce the manual process required to register a user via a MAC address to the current RADIUS server, ideally leveraging the back-end user database.
- Offer an accurate view of authentication to see which user is using which IP address at any given time, versus an assumption of the user simply by a manual MAC association.

Kyungpook National University found traditional RADIUS servers were lacking the complete required feature sets to be a fit. While Kyungpook National University investigated competitive solutions, it found A10 Networks' IP-to-ID, Authenticated DHCP and RADIUS solution to offer an integrated platform that is a unique solution compared to traditional RADIUS user authentication solutions.

Integrated Identity Tracking, RADIUS and Authenticated DHCP in a Single Appliance

The A10 ID Series appliances appeared to be the only choice based on the feature requirements. Kyungpook National University was pleased to find the cost was lower, even with the richer feature set, due to the all inclusive licensing model versus pricing on a per user basis. The complete solution was also available in a single appliance platform, versus a multiple box approach. Kyungpook National University required reliability, so choose to deploy an Active-Standby pair for maximum up-time.

The ID Series solved the key issues with:

- **Authenticated DHCP:** Wireless ID based access on demand is now possible without the need for any manual MAC registration process.
- **ID Based Access:** The ID Series by default comes with a customizable Web portal for users to authenticate to once their machine connects. If not currently authenticated, users are redirected to a Web login page that prompts for their username and password. Seamlessly, behind the scenes, the authentication is now passed

A10's ID Series provides Kyungpook National University with student authentication and tracking abilities.

"Kyungpook National University needed specific features to update our wireless infrastructure. We were pleased to find the unique feature mix in a simple to deploy and cost effective solution with A10 and the ID Series line. We found an offering that is not available from other vendors and has improved the service we offer students as well as decreasing the amount of admin work required significantly on an ongoing basis".

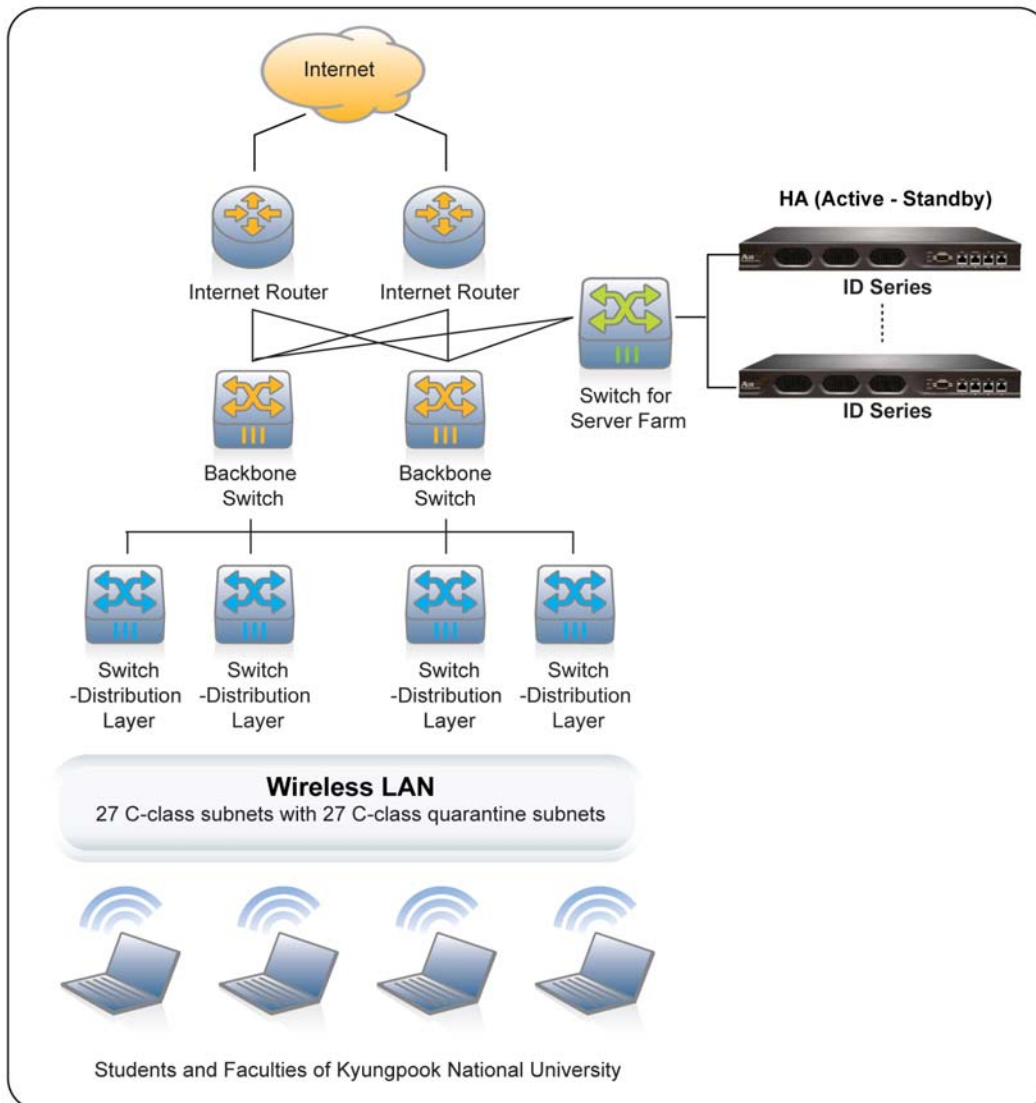
--Dong-Ji Bang, team manager for Kyungpook National University

directly to the user data store running on an Oracle DBMS. The direct authentication eliminates the need for MAC registration and the prior manual processes, and ensures real-time accurate user authentication takes place from a single source.

- Identity Tracking:** The ID Series IP-to-ID identity tracking feature provides a list of all the current and historical authentications in a simple to use Web interface, eliminating manual lookups and providing instant data when needed. Identity reports based on logins, MAC addresses and successful or failed logins are all available in seconds.

The ID Series product offers a solution to all the issues while demonstrating a clear price/performance advantage. The appliance based solution also eased deployment, as the solution was ready to be configured out of the box on day one.

The implementation resulted in a complete, cost effective solution with the option to use additional ID Series services later as needed.



About ID Series

The ID Series is a network identity management appliance that delivers integrated features to improve password management, enhance network authentication and control, simplify user account management, and resolve IP addresses to identity (IP-to-ID) instantly. The ID Series is the industry's only network identity management appliance with instant user identity resolution, which helps organizations of all sizes save time and minimize risk by resolving security issues faster.

About A10 Networks

A10 Networks was founded in 2004 with a mission to provide innovative networking and security solutions. A10 Networks makes high-performance products that help organizations accelerate, optimize and secure their applications. A10 Networks is headquartered in Silicon Valley with offices in the United States, Europe, Japan, China, Korea and Taiwan. For more information, visit www.a10networks.com

About Kyungpook National University

Kyungpook National University (KNU) was started in 1946 with Colleges of Education, Medicine and Agriculture in Daegu city upgraded to National College under the principles of truth, pride and service. In 1951, the Colleges of Education, Medicine, Agriculture, Liberal Arts and Sciences, Law and Political Sciences were then all combined into Kyungpook National University. Embracing the educational goals of the Republic of Korea, the mission of Kyungpook National University is to pursue truth by researching and teaching in-depth academic theories, inspire pride through fostering able and innovative leaders, and promote public service for national and world level development. With the goal of global recognition and international competitiveness, Kyungpook National University is committed to innovation in IT and BT, while also adopting global standards for quality education and research.