

SKT, Construction of Smart Office Environment

SK T-Tower



Over 1501 employees



Enterprise



WLAN



Summary

◆ **Office environment-oriented WLAN infrastructure increases work efficiency.**

- Stable Internet access anywhere in the office with the optimum RF pattern using multi-antenna technology
- Best performance on various mobile devices, including laptops, mobile phones and tablet computers.

◆ **“Security AP” solution enables the complete establishment of WLAN security infrastructure.**

- Unauthorized access detection and control by WIPS sensor through an embedded AP device
- TCO-saving effect compared with the establishment of standalone WIPS

Background

SK T-Tower is the headquarters of SK Telecom with office spaces constituting the entire 30 floors of the building. Inside the office, different types of mobile devices, such as laptops, smartphones and tablets, are in use, and with the increase in WLAN traffic and the use of quality multimedia data, the volume of wireless data sees an explosive growth. Also, users want limitless Internet access in various places, like meeting rooms and staff lounges, in addition to designated areas.

In response to such changes in work environment, Samsung’s WLAN system has been installed in SK T-Tower to ensure stable WLAN service, and the gigabyte-speed AP device has allowed 802.11ac mobile devices to exert their highest performances. The “security AP” equipped with a security sensor makes it possible to offer a flawless WLAN security service without an additional security sensor.

About SK Telecom (SK T-Tower)

SK Telecom is Korea’s No.1 mobile service provider dominating 50% of the market share.

SK T-Tower, the headquarters of SK Telecom located in Eulji-ro, Jung-gu, Seoul, has installed the AP solution of Samsung and employs approximately 2,000 people in its 30-storey building.

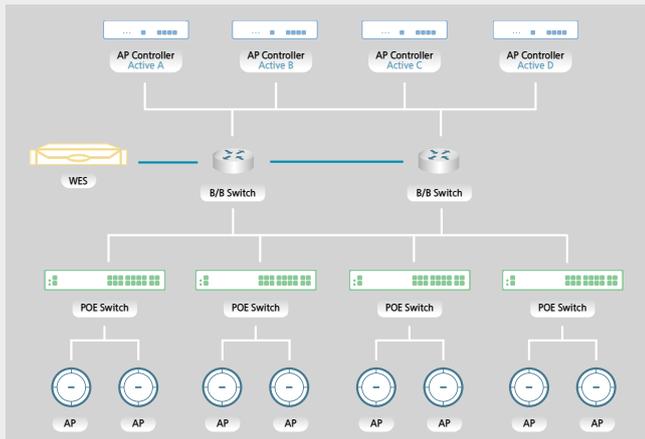
Acronyms

- WIPS : Wireless Intrusion Prevention System

Establishment of AP solution in response to the changes in work environment

WLAN Environment Configuration

- The four WLAN controllers secure a three-step backup in case of system failure for stable WLAN service.



System Details

SK Telecom has installed Samsung's WLAN solution in its headquarters SK T-Tower in order to realize a wireless office environment in response to the increasing use of mobile devices and changing work environment.

To ensure a seamless wireless data service throughout the entire 30 floors of the building, "WEA403i" that supports gigabyte speed was installed. WEA403i supports all types of 802.11a/b/g/n/ac mobile devices and is especially a perfect solution for 802.11ac mobile devices. The biggest feature of WEA403i is that it is a security AP with a built-in security sensor. With the widespread corporate trend of "bring your own device (BYOD)", the issue of corporate security is becoming more important than ever. Under such circumstances, SK T-Tower installed Samsung's security AP which can detect the intrusion of unauthorized devices in 10 seconds and block them in 30 seconds without adding any extra WIPS sensor.

For centralized control of AP, there are four WEC8500 installed which can accommodate 3,000 AP devices. As a result, in case of a failure in one controller, the other three controllers work as a backup to keep providing a stable service. Moreover, the Wireless Enterprise WLAN Manager (WEM) was also installed to monitor network traffic in real time and to save statistical data in various formats, thus leading to a more efficient data management.

Benefit

The biggest change derived from the introduction of Samsung's WLAN is found in the swift business handling using mobile devices not only in the office but in places, such as meeting rooms and lounges, based on the all-wireless office environment.

Samsung Electronics installed AP devices that support gigabyte speed, WLAN controllers and the WEM in SK T-Tower. As a result, it turned out that the newly installed LAN showed 4-10 times better performance than the existing WLAN. Samsung AP's Intelligent Beam Selectable Antenna provides the optimum RF pattern that sets up beams for each environment by considering the location of a user, thus minimizing shadow areas while broadening service coverage. As it also correctly receives signals from mobile devices with weak TX-power, a seamless and consistent WLAN service has become available anywhere in the office. In addition, "Traffic Scheduling" technology allows users to handle their business with any type of mobile devices by evenly distributing air time to different types of multiple devices, such as smartphones, tablets and laptops, while being connected to the same AP, thus maximizing their performances.

The AP installed in SK T-Tower is a security AP device with the WIPS sensor which enables absolute security in an office area by connecting to the WIPS server. It also saved cost for WLAN establishment more than 30% compared to a standalone WIPS and features a more powerful security function, such as detecting unauthorized devices in 10 seconds and blocking them in 30 seconds, than the standalone WIPS. The biggest advantage of Samsung's security AP is that it offers both data and security services without performance degradation. Thus, people working in SK T-Tower enjoy far better smart office environment with the high-speed and stable data and security services.

Components



WLAN

- Access Point : WEA 403i
- AP Controller : WEC8500
- WLAN Manager : WEM
- WIPS Server