

Easy Wi-Fi Expansion at National High School Tennis Championship

Customer: Japan Tennis Association



The network is indispensable for the Japan Tennis Association and the All Japan High School Athletic Federation. I would really like to employ Allied Telesis for the following event and onward and want to keep a win-win relationship with them.

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TBS GLOWDIA, Inc., Advisor to the Executive Committee

Market: Hospitality/Sport

Location: Fukuoka, Japan

Facilitating seamless information-sharing and communications at large-scale sporting events

Allied Telesis set up the entire wireless LAN environment for the 43rd national high school invitational tennis championships in Japan. This high-performance environment ensures stable communications and easy information sharing at this large-scale event.

The infrastructure utilized the AWC autonomous wireless LAN solution and AWC-Smart Connect (AWC-SC) to effortlessly expand the wireless coverage and ensure a seamless mobile experience.

About the 43rd National High School Invitational Tennis Championships

The event was held in Fukuoka, Japan in March 2021. It is one of two major tennis tournaments for Japanese high school students and draws a lot of attention from all over the country.

The Requirement

Construct a high-performing network environment to support the event's digitization

The Japan Tennis Association aimed to operate the event in a highly digitized environment. As the event's Bronze Partner, Allied Telesis supported the construction of the digital network environment at the event's venues. This environment set a strong foundation for digitizing this high-profile event.



The Challenge

Manual information-sharing and communications

While preparing for the 2018 championships, the Japan Tennis Association realized that more high schools were expected to join the memorial championships in the future. To meet the expected demand for seamless, more timely information-sharing, they began a process to replace older manual communications methods with electronic communications.

For instance, they wanted to eliminate the need to communicate the match progress and scores on an old-fashioned whiteboard. To meet these goals, they selected Allied Telesis as the vendor of choice.

The Solution

Allied Telesis set up the wireless and wired LAN network to facilitate event communications at the championship event. The network enabled various parties to share information about match progress at different venues easily and in real-time. We also provided support in a range of areas, including network design and post-implementation support.



Solution Benefits

The solution enabled a high degree of digitization at this event. All information was collected, sent to the headquarters, and shown on a large display as a list. The headquarters gave directions based on the information, for example, by specifying a court number or match starting time.

Once the solution was deployed, staff could share important information about each match with high schools using a communication app. The organizers also held an online coach meeting at the beginning of the event using the network.

The network facilitated timely, user-friendly communication, which ensured the efficient use of every court, as well as seamless event operation. It also enabled people to meet online to discuss important updates in a timely manner.

Solution Details

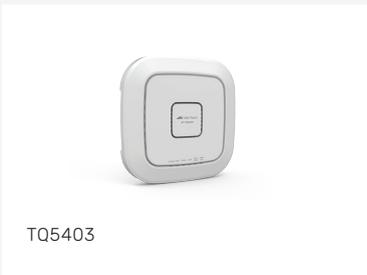
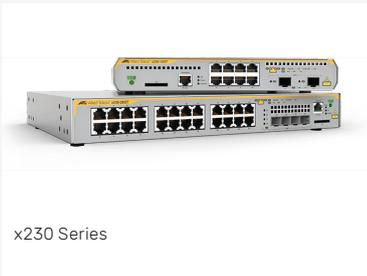
Allied Telesis set up a stable and easy-to-use wireless LAN environment. We also ensured fast, low-cost construction, and helped expand the Wi-Fi coverage area with Autonomous Wave Control (AWC) and AWC-Smart Connect (AWC-SC).

AWC was installed to manage the wireless LAN environment.

Benefits of AWC:

- ▶ Enables the access points to be *intelligent*
- ▶ Supports the autonomous adjustment of channels and radio-wave output, with no administrator action needed
- ▶ Minimizes radio-wave interference in the wireless area, which can be an ongoing issue at venues that attract many visitors and participants
- ▶ Ensures reliable performance of the wireless LAN.

Related products



AWC-Smart Connect utilizes backhaul communication between APs to create a wireless mesh network, thereby eliminating the need for expensive cabling. This is particularly valuable in an outdoors setting like this event.

Benefits of AWC-SC:

- ▶ Facilitates networking at outdoor venues where it's hard to wire cable
- ▶ Eliminates the need for switches and Ethernet cable, resulting in a significant reduction of construction period and cost
- ▶ Can use the 2.4GHz band to avoid potential problems from the influence of weather radar from the nearby Fukuoka Airport

Other key highlights of the Allied Telesis network solution:

- ▶ The solution used the Vista Manager Network Appliance (VST-APL) for integrated network management without the need for a separate administrative server or wireless LAN controller
- ▶ Advanced secure VPN access router units (AR3050S/AR4050S) were installed at the outdoor courts and center court
- ▶ Layer 2 plus gigabit intelligent switches (x230 Series) were placed as PoE switches
- ▶ Wireless LAN access points (TQ5403) were installed for indoor use
- ▶ Wireless LAN access points (TQ5403e) were installed for outdoor use
- ▶ The TQ5403e APs include 3 radios for simultaneous use of 1 x 2.4GHz band and 2 x 5GHz bands. They are suitable for outdoor and harsh environments that require an Ingress Protection (IP) rating against dust and moisture
- ▶ AWC-SC was used to install the TQ5403e APs – a versatile, easy installation that required no cabling.

Other Key Contributions of Allied Telesis

Allied Telesis was responsible for the network's operation. A support engineer was available to provide fast service and support in case of any problems. They regularly checked the logs of the wireless LAN access points and supported the network infrastructure to ensure that the event operated smoothly from start to end.

Future Direction

In the coming years, communications at the National High School Invitational Tennis Championships will become even more contactless and digitized. There will also be greater demand for more convenient operations and more substantial network services for coaches, players, and others.

A robust digital network will play a crucial role in these circumstances. It will enable such events to replace conventional communications methods with a high-performance, Wi-Fi intercom system.

Allied Telesis will continue to design, construct, and operate stable and high-performance wireless LAN environments and networks at large-scale sporting and other events.