



Enhancing Network Environments to Empower Digital Innovation in Education

Overview

To adapt to the digital learning era, Hualien Sun Dance Vocational Senior High School has implemented campus-wide wireless networks to ensure easy and convenient internet access for teachers and students via various mobile devices. With many Taiwanese schools lacking professional IT management, Zyxel Networks' Nebula cloud networking solutions have streamlined wireless network deployment and supported the development of smart classrooms, thereby improving educational quality and advancing campus technology integration.

Challenges

To adapt to the digital learning era, campus networks must increase bandwidth to ensure convenient internet access for teachers and students while meeting educational needs. Previously, wireless access points suffered from poor coverage and performance, highlighting the need for an integrated wireless and wired solution to enhance network communication quality. A major challenge is managing network equipment effectively, requiring quick detection of issues and remote troubleshooting via mobile devices to boost efficiency. The other challenge is technical support that could immediately resolve the network issues.

Solutions

To drive digital transformation and improve teaching quality, Zyxel Networks evaluated the school's network environment and requirements, recommending the USG FLEX 700 Firewall, GS1900-24EP Smart Managed PoE Switch, GS1008HP Unmanaged PoE Switch, and WAX610D WiFi 6 access points.

Customer

Hualien Sun Dance Vocational Senior High School

Industry

Education

Location

Hualien, Taiwan

Customer Background

Founded in 1971, Hualien Sun Dance Vocational Senior High School has over 40 years of history and offers diverse departments such as Aviation Maintenance, Automotive, Fashion Styling, Culinary Arts, and Tourism. The school focuses on real-world applications to enhance students' professional skills and practical abilities, enriching their education and laying a solid foundation for their future careers.



The GS1900-24EP smart managed PoE switches were selected for their fast and flexible connectivity, energy-saving features, and IPv6 support, ensuring the network is prepared for future expansion. For classroom needs, PoE switches were chosen for their power-over-ethernet support and smart fan designs, which guarantee efficient and quiet operation. The GS1008HP unmanaged PoE switch was recommended for its ease of device connections, eliminating the need for additional power configurations.

To deliver an exceptional wireless network experience, the WAX610D WiFi 6 access point was introduced, providing high-speed and stable connectivity for teachers and students. The USG FLEX 700 firewall was then implemented to offer robust, cloud-based collaborative defense, ensuring comprehensive network security.

Product List



- WAX610D WiFi 6 Access Point



- GS1900-24EP Smart Managed PoE Switch
- GS1008HP Unmanaged PoE Switch



- USG FLEX 700 Firewall

Results

The new network enables the school to bridge the urban-rural divide and embrace the digital learning era. The school has successfully enhanced network performance and simplified equipment management, allowing IT staff to promptly detect and resolve issues remotely using mobile devices, thereby improving operational efficiency. Additionally, the Nebula cloud networking management platform offers direct support for configuration issues with quick responses from dedicated personnel, eliminating the need for phone calls or searching for the right support staff.

- Improved education quality and network performance enable seamless digital learning
- Simplified management and quiet operation make the network ideal for classrooms
- Futureproof connectivity is flexible and capable of handling increased demands
- Hassle-free cloud management is paired with dedicated and immediate technical support

