

WLAN Application Demonstration Area Project – Taipei County

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Case Study

WLAN Application Demonstration Area Project

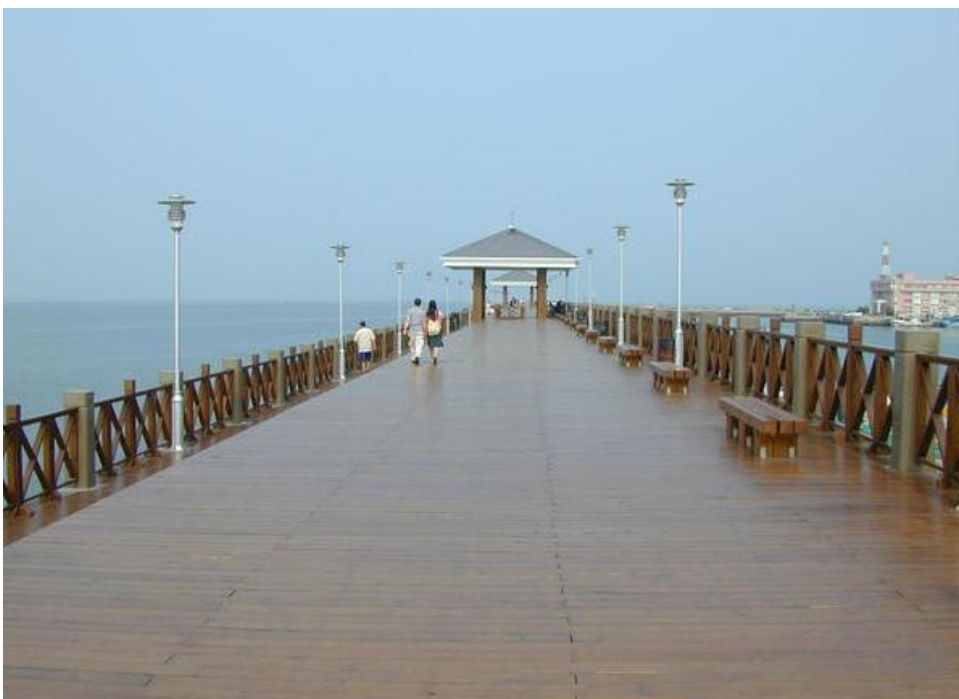
– Taipei County

Deployment Requirement and Coverage Areas

Deployment objectives:

The objective of WLAN deployment in Danshuei & Bali of Taipei County is to establish six wireless access areas for the public and tourists, including: (1) Plank road area of Fisherman's Wharf, (2) the old street in front of Danshuei police station, (3) under the old banyan in Danshuei (mobile coffee shop at Danshuei post office), (4) from Danshuei golden coast to the Ferry Pier, (5) Left-bank clubhouse, (6) Wazaiwei Nature Reserve.

The objective of the project is to install wireless network access at the above-mentioned six areas, providing the paid wireless Internet service or an access for local tourist information to well-arrange the trip schedule for tourists and public. Moreover, tourists can use the accounts from other demonstration areas to carry out roaming, and the charges will be shared by different demonstration areas.



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The challenges for the deployment are as follows:

1. Authentication systems are capable of recognizing different sources in order to deliver different contents
2. Demonstration areas are requested to connect to roaming center in order to provide account roaming services.
3. Authentication mechanism needs centralized management

Solutions and Strategies

Provide different contents after being online:

The project selected a solution based on Cipherium NCS and NAM-A2000 to support the authentication mechanism. Implemented inside the Shihsanhang Museum of Archaeology, the NCS is managed by network administrators of the Museum, and is associated with the facilities such as NAM-A2000 and wireless APs, installed in various positions such as Fisherman's Wharf, to transmit and execute commands that are given.

When users log in to the Internet through AP, the NCS will start processing the identification authentication according to users' data sent back by different NAM. After being authenticated, the NCS will go through content server for relevant information and then provide content (such as location maps or exhibition information) to users, or direct users to specific web pages



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Account roaming:

The objective of account roaming is to build a nationwide PWLAN roaming network, integrating customer information and system resources of domestic business. This will create a new business model not only providing mutual benefits, but also easy-to-use public wireless broadband services for general public.

Distributed Architecture, Centralized Management

The wireless network accesses are scattered on both shores of the Tamshui River. All authentication information will be encrypted and sent back via Internet to the control room inside the Shihsanhang Museum of Archaeology through Cipherium NAM A2000 to carry out identification authentication. If users fail the authentication, they are not able to access the Internet, and can only browse the defined web pages without being charged (walled garden). As every access site is implemented with individual ADSL connection, so the disconnection of one access will not affect the whole area, in order to achieve the objective of “distributed architecture and centralized management”.



Benefits

WLAN Infrastructure

The WLAN infrastructure is a significant platform for various application services in the future. For instance, attraction areas will create different business opportunities by providing services such as IP phone, e-commerce, Location Based Service (LBS), and online games.

Create e-commerce opportunities

Through wireless network facilities, attraction areas can provide more interactive services for tourists, allowing tourists to gain store information (such as promotion information or store directions) via electronic devices in real time; as well as to enhance “immediate” connection between stores and tourists

Create new incomes

In addition to providing wireless Internet access and rented wireless guiding devices (PDA and Tablet PC) to increase incomes, the attraction areas can develop various online application services (such as network telephone, advertisement) once the WLAN infrastructure is completed. Those services can be transferred into sources of income, and create more business opportunities for attraction areas in the future.