



DT Research Digital Signage Improving Speed and Accuracy of **Passenger Information at Taipei Bus Station**



Taipei Bus Station is part of the urban development project of Taipei Main Station in Taiwan that houses a transportation hub consisting of the Taiwan High Speed Rail, Taiwan Railway, Taipei Mass Rapid Transit System, Taipei City Bus and Inter-city Coach Lines. With approximately 6,600 people passing through per hour during the rush hour, Taipei Bus Station required an efficient, effective, and easy to manage digital signage system that could collect, organize, and communicate multiple types of transportation information to all travelers.

The Challenge

Taipei Bus Station has 30 ticket counters, 50 departure and arrival platforms, and a waiting area for 3,000 people. To meet the communication demands of the station, it was imperative to have a digital signage system that could quickly deliver real-time information such as ticket pricing, departure and arrival times, and platform information to passengers. There are numerous updates to schedules throughout the day, therefore integration with the bus station's backend database system was crucial for station staff to ensure live updates and the accuracy of the information on the screens.

As a major revenue source, advertisements in dynamic media formats must be easy to broadcast and update via the signage network, and detailed reports can be generated for billing advertisers.

The Solution

Taipei Bus Station chose the DT Research Signage Appliances consisting of DT Research SA2000 robust signage players and WebDT Content Manager software capable of real-time updates of data and playlists from any location.

The DT Research SA2000 is an industrialgrade design, compact and easy-to-install signage player with high-performance

multimedia processing capability. Using the DT Research SA2000, advertisers can show digital content in many major media formats including images, video, Flash, RSS feeds, and streaming video.

The web-based WebDT Content Manager (WCM) software provides an intuitive interface for straightforward maintenance, central management and remote updates. Administrators can publish data and playlists, schedule power on and off timing, and monitor the status of each signage player from an office offsite. With customizable screen layouts and multiple zones, layout styles are easily incorporated for dynamic designs.

The WCM software provides a webservice API allowing the signage system to be fully integrated with the station's backend database. Real-time data captured from the database can be transmitted to the DT Research SA2000 via the WCM server and displayed on the screens. Bus arrival time, boarding information, and platform information can be collected from the database and shown in real time on the digital signs in the bus station. The WCM server periodically compares and updates data from the database server. The DT Research SA2000 also communicates with the WCM server on a regular interval. When the data is updated on the server, it will then be re-loaded onto the DT Research SA2000 for playback.

Using the WCM software's Playlist Group Management function, administrators can easily assign players in one group to playback the content of another player group. In the case of a lastminute change of boarding platforms, administrators can quickly replace the content on the platform signage players to show the new information and direct passengers without any delays.

Taipei Bus Station also deployed the DT Research DS4700 - the DT Research SA2000 player connected to a 47" display with an IR touchscreen - at the station's



SA2000



main entrance. With a vivid and high-definition display performance, the DT Research DS4700 provides a refreshing interactive experience for passengers to access directories and maps for exploring the bus station and surrounding area. Advertisements at the top of the touchscreen offer advertisers the most visible placement to attract viewers' attention.

Results

With the DT Research digital signage solution, Taipei Bus Station can efficiently manage a digital signage network and provide crucial information to employees and travelers, as well as generate revenue with compelling digital advertising.

• Real-time Information Delivery

Taipei Bus Station has installed 100 DT Research SA2000 players connected to 42" displays on the first through fourth floors, showing transportation information to passengers in various locations:

Ticket/ Waiting Hall:

 Bus information (bus company, destination and departure time), current status (on time, departed, standby, or delayed), and live ticker news (in Chinese and English).

Ticket Counter:

Ticket prices, discounted fares and counter staff names.

Platform:

- Current bus status (in Chinese and English) and advertisements with static images or video.
- During boarding, the entire information line blinks to alert passengers.

Floor Entrance:

Live news, information, and video advertisments.

Console Room:

 Available capacity of each bus and overall bus status - updated in real time for station monitoring purposes.

• Improved Productivity and Accuracy

WebDT Content Manager software, integrated with the station's backend database system, enables an accurate and efficient workflow. As data can be changed quickly and frequently, there

is less time elapsed between updates, keeping the information timely. Staff are more productive with their time as they are no longer required to manually update a LCD display, or print and put up a poster. Staff can control the signage system remotely, from any location with access to the network.

Enhanced Advertising Platform

The DT Research digital signage solution provides the dazzling digital medium for advertisers to promote products and branding in a variety of formats. Reports can be easily generated for proof-of-play, and advertisers can get the exact details they need specific to their location in the bus station.

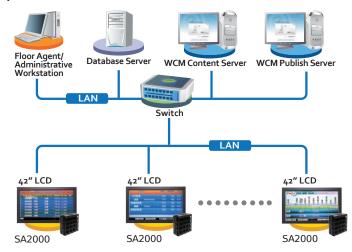
• Seamless Integration, Green Operation

As DT Research is the manufacturer of both digital signage hardware and software, compatibility is guaranteed for smooth installation and operation. The flexibility and usability of the DT Research Signage Appliances make it effective to integrate with the station's database system. The DT Research signage solution is energy-efficient, with low power consumption saving energy use and operation costs.

For more information about DT Research Signage Appliances, visit http://signage.dtri.com



System Architecture



About DT Research



2000 Concourse Drive San Jose, CA 95131 USA Tel: 408.934.6220 Fax: 408.934.6222 www.dtresearch.com DT Research™ develops and manufactures web-enabled information appliances for vertical applications. The DT Research family of products is based on embedded computing platforms for secure, reliable, and cost-effective computing. The products include digital signage solutions, wireless tablets, point-of-service handhelds, compact modular systems, and display-integrated information systems. These systems emphasize mobility, wireless connectivity and touch displays. Powered by Windows® operating systems, the devices offer durability and ease in integration, leading to solutions that can be remotely managed with the comprehensive WebDT Content Manager and Device Manager software. For more information, visit http://www.dtresearch.com

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