WebDT

WebDT Digital Signage Bringing Dynamic Advertising to Beijing and Other Major China Airport Travelers

With over 150,000 travelers passing through every day, Beijing Capital International Airport is one of the busiest airports in the world and offers a major opportunity for advertisers to reach their highly valuable audience. In the recent terminal expansion project, a state-of-the-art digital signage network was implemented to highlight the airport modernization. Both the media operator and advertisers were keen on delivering high-quality advertising content to consumers via the new digital signage network.

The Challenge

To manage a large digital signage network, the media operator required one centralized system capable of managing over 1,000 digital signage players across the airport. A powerful yet compact and energy-efficient player design was also crucial for maintaining a high standard of operation.

In addition, administrators must be able to remotely control the digital content for each signage display so that information and advertisements can be broadcast and updated in real time without costly on-site staff support.

For advertisers, it was vital to show high quality, compelling content to meet viewer expectations. Thus the signage must be able to display multiple media formats, including full high-definition (Full HD) images, RSS feeds, video and Flash.

WebDT SA1000 and WebDT SA3000

The Solution

Beijing Capital International Airport deployed WebDT Signage Appliances – SA1000 and SA3000 signage players and WebDT Content Manager software – capable of delivering dynamic content while communicating with the server for continuous updates.

With an industrial-grade design, the robust and fan-less WebDT SA1000 and SA3000 feature powerful and energy-efficient processors with high-performance multimedia processing capability. Integrated with large displays, the WebDT SA1000 and SA3000 allow advertisers to show Full HD content, up to 1920×1080, in major media formats.

WebDT Content Manager (WCM) software is a web-based server software providing central management of WebDT signage players and remote control of content design and distribution over a network. Administrators sitting in offices offsite can manage the entire signage system inside the airport terminal via the WCM server. Real-time updates of data and playlists and upgrades for the whole site can also be executed from any location.

To implement this exceptionally reliable system, the WebDT signage network uses Edge Servers as intermediate servers between the WCM central server and local signage players to reduce bandwidth demand. With Edge Servers and balanced bandwidth demand, the network is capable of scaling up to thousands of players in different locations under one system. Currently, there are over 3,000

WebDT by **DT Research**

WebDT Signage Appliances in 30 airports in China - all managed in one central office located in Beijing.

WebDT Signage Appliances support content synchronization on multiple digital signage screens. The same advertisement shown on large displays, such as 108" screens, can be seen in chorus and changed simultaneously to provide a spectacular visual experience to viewers.

To avoid heavy network loading and slow internet access during the daytime, administrators can schedule after-hours downloading of data and playlists when the airport is closed. They can also remotely schedule power on and off timing to save energy and cut down operation costs.

Results

With WebDT Signage Appliances, the media operator can offer the most optimal visual experience to travelers while addressing key challenges of administrators.

- **Enhanced Traveler Experience:**
  Beijing Capital International Airport has deployed over 1,000 WebDT Signage Appliances from Terminal 1 to 3. In Terminal 3 alone, 328 WebDT SA1000 signage players connected to 50'' and 42'' displays and another 90 players with 82'' screens can be seen at the departure lounges. In the baggage claim area, 30 WebDT SA3000 signage players are integrated with 108'' displays, providing advertisers a stunning digital medium to attract consumers' interest and promote branding.

- **Increased Productivity:**
  Managing information and multiple content sources is easier and less time-consuming using WebDT Content Manager's centralized content management capability and intuitive content design interface. Administrators can remotely schedule playlists, set up content layouts, update last-minute changes and provide proof-of-play for advertisers.
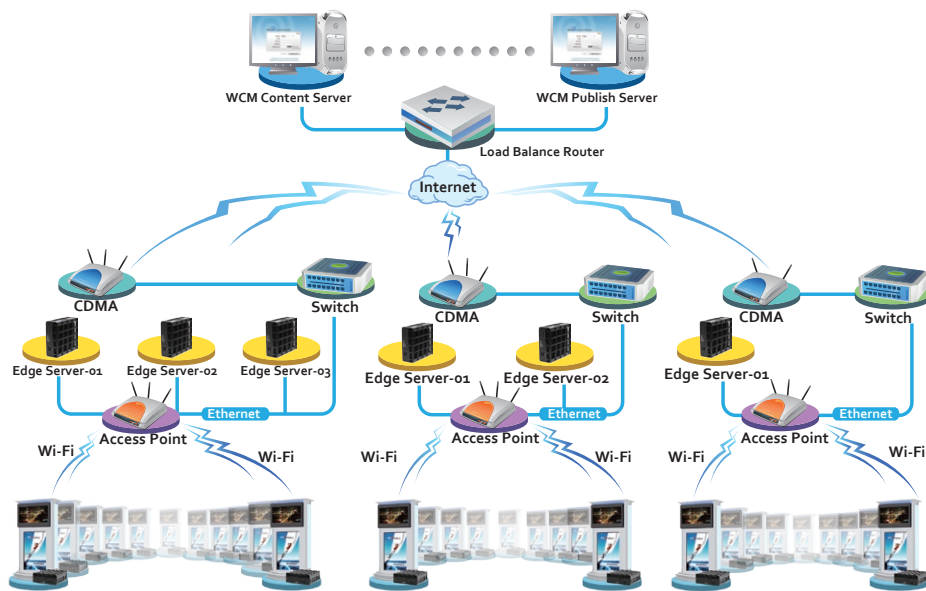
- **Reliable Performance:**
  WebDT Signage Appliances provide compact, easy to install, industrial standard media players with fully integrated content management software. The seamless integration eliminates system compatibility issues and reduces operation problems.

- **Green Operation:**
  With lower power consumption and power saving options, WebDT Signage Appliances are designed for an energy-efficient and sustainable environment.

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

System Architecture

WCM Content Server · · · · · · · · · · · WCM Publish Server

Load Balance Router

Internet

CDMA — Switch
Edge Server-01 Edge Server-02 Edge Server-03
Ethernet
Wi-Fi Access Point Wi-Fi

CDMA — Switch
Edge Server-01 Edge Server-02
Ethernet
Wi-Fi Access Point Wi-Fi

CDMA — Switch
Edge Server-01
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About DT Research

DT Research

DT Research™ develops and manufactures web-enabled information appliances for vertical applications. The WebDT family of products is based on embedded computing platforms for secure, reliable, and cost-effective computing. WebDT 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® Embedded and Windows XP operating systems, WebDT 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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