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The Buzz: Installation Spotlight: Capital Off-Track Betting, Schenectady, N.Y.

Staff Report

The applications that fall under the umbrella of digital signage continue to grow as professionals in virtually every video business learn more about the power of the signage network. While the visual aspect of digital signage in the AV world has traditionally received the bulk of the attention, a range of varied applications in operation today demonstrates the significant crossover possibilities of digital signage from AV into other markets.

One company taking advantage of the multifaceted potential of digital signage is Schenectady, N.Y.-based Capital Off-Track Betting (Capital OTB), a quasi-government agency established to serve as a legal bookmaker for horse wagers and return its profits to local government and the horse-racing industry. The Schenectady facility has implemented digital-signage technology as the basis to compile, edit, and transport racing information with video, which is made available to Capital OTB's 54 off-track betting branch locations throughout upstate New York.

In addition to providing off-track betting services, the Schenectady facility doubles as a television broadcast network. The broadcast facility includes a production studio used to create local programming and a full-blown master-control center to distribute the station to regional cable services around the state. The station broadcasts races from an average of 20 tracks around the globe each day from noon until midnight, with inhouse and local productions composing the bulk of programming overnight and throughout the morning hours.

“Capital OTB is a true rarity in the world of off-track betting,” says Jim Barber, general manager of Capital Off-Track Betting Television Network. “We are one of only two off-track betting facilities with a TV station, and are unique in that we have our own television network available through Time Warner and other cable service providers.”

Barber and his integration team prepped for the digital-signage and master-control system integration in other areas by installing Cat-5 wiring around the facility and tying it all back to main routing system in the technical core to facilitate signal distribution throughout the house. Barber also tied the audio and video together with high-speed Internet for the purpose of sharing sources between workstations. This allows operators to pull data from other machines as necessary.

The digital-signage system, featuring Harris InfoCaster media players and software from Bannister Lake out of Cambridge, Ontario, is the central repository for all the racing information coming into the house for eventual broadcast. The solution is integrated at the facility's “mutual information-gathering point,” where operators collect a stream of information for each race scheduled for broadcast that day. The information is then ingested into a centralized database and later mixed in master control.

“We don't broadcast all the races we receive information on, but we pick a selected few that meet our higher handle

racetrack requirements, and then fill out the remainder of the schedule with races from regional, national, and international tracks," Barber says. "But we do receive information from just about every race, and we rely on the Harris and Bannister Lake solution to make sense of everything."

VIDEO DISTRIBUTION

Video signals and data information come into the facility separately. Roberts Communications Network, a disseminator based in Las Vegas, delivers video signals from tracks around the world to Capital OTB and its branch locations via satellite. Operators at Roberts Communications Network authorize Wegener Unity satellite receivers at all locations to receive video of all the races listed on the schedule that day.

The signals are downlinked at several dish farms on the Capital OTB campus and delivered to the Wegener Unity satellite receivers in the technical core, which is co-located with master control and production control. The signals are conditioned, converted, and synchronized for inhouse distribution over an existing Sigma Electronics house router, which distributes both video and audio sources throughout the facility and elsewhere.

"Because every source is available for distribution out of our main routing switcher, workflow is improved between our main control room area, our mutual information gathering point, and the totalization center where races are properly opened and closed and bets are gathered and processed," Barber says. "The routing system also connects to private, bidirectional fiber links used to transport our programming to our more high-profile branches for redundancy purposes in the event the satellite connection is down."

DATA INTEGRATION

Racing information, supplied by TrackData Systems of San Diego, is downloaded over an FTP connection every 15 minutes. This is an essential piece of the facility's digital-signage system workflow. While it sounds simple, the wealth of data received is so immense that the facility required an advanced data management solution to parse, translate, and manage selected dynamic XML racetrack data. This information — which includes venue, horse, jockey, and track assignment data — is later sent to the InfoCaster media players as a data crawl.

Programmers and integrators from Bannister Lake worked with TrackData and totalization firms such as United Tote of Woodland Hills, Calif., while building the data management solution. Bannister Lake representatives sampled data from each source company and developed data parsers to automatically pull and retrieve the required data for upcoming races. Each scheduled race is automatically given a start and end time, and track abbreviations are translated and written to the database track table. Open text fields allow operators to enter any last-minute information about racetrack conditions and scratches.

"Before installing the software in the signage application, we needed to understand where the content was coming from and how Capital OTB was receiving that content," says D'Arcy Pickering, director of sales and marketing at Bannister Lake. "We developed data parsers for each source, with each parser formatted specifically for the layout presentation in the Harris InfoCaster player. This application communicates with the FTP site to retrieve, process, translate, and feed the files to InfoCaster as one large text file. That text file is then displayed as a continuous crawl over the inhouse signage system."

The Bannister Lake solution is based on the Microsoft .NET environment, and it communicates with the InfoCaster players via basic open database connection (ODBC) protocols to display the data. Some of the applications run as required for data conversions, while other applications — such as OTB Crawl Manager — are constantly pulling and retrieving information coming in from the various external sources.

CHANNEL PLAYOUT

The InfoCaster players, along with a video server for archived material, are housed in a single equipment rack located in an area separate from the technical core. According to Barber, the main reason for the separation was a lack of space in the control room — already overloaded with gear assigned to master control, production, and signal routing and processing tasks.

"We converted a reception area into an IT room and built out a distribution system strictly for InfoCaster signage and archival playout, with most of the material from the video server streamed to our website or scheduled into our pre-race morning lineup," Barber says. "We wired the space with Cat-5, with direct connections to the Sigma routing system. The InfoCaster signals are routed to master control to mix the video and data. The final broadcast product is then routed to our outbound cable equipment for transmission and around our facility for our CCTV network."

The CCTV network offers a select number of channels that are only seen inhouse, but those channels feature races and other information that will eventually be mixed into the live cable broadcast. One channel simply broadcasts an

InfoCaster display featuring various racing information, including winning horses from recent races. That display page can also be switched to air at any time using a Harris Videotek 1×10 switcher if other programming is unavailable.

BENEFITS

Barber says he believes that the digital-signage solution from Harris and Bannister Lake is the jewel of his facility, serving two distinct functions tied to the organization's mission. That mission involves bringing together data and video from multiple sources and making them available to viewers and bettors across the state, as well as delivering pertinent information to employees that is vital to the daily operation — all while allowing his staff more creative freedom in piecing together the broadcast product.

“Our operators essentially produce these visuals race by race, using the system to generate creative displays that provide the information our viewers need,” Barber says. “But they are also putting together promotions throughout our organization about events taking place both here and at our branch locations. For example, we're using the signage system to promote ladies' day at the Kentucky Oaks, special giveaways, and handicapping contents. The InfoCaster serves as a posterboard of sorts when there is a lull in the racing action.”

Barber adds that the simple, intuitive operation of the technology is essential to keeping everything moving forward in a fluid motion.

“There's not a ton of bells and whistles to confuse people when the pressure is on, and the system provides a clear set of preferences for file conversion and managing the overall video and data workflow,” Barber says. “The need to process this amount of information requires a rudimentary application that any professional or volunteer can pick up within a matter of minutes, and we've found that with a simple but powerful digital-signage system that essentially replaces the traditional broadcast character generator.”