CASE STUDY

River Spirit Casino Sets new Standards for IP video Surveillance Solutions and Security

When building a $195 million showcase casino, you can bet that there are numerous complex design, construction and management decisions that are essential to the ultimate success of the project. The new River Spirit Casino, located on the banks of the Arkansas River in Tulsa, Oklahoma, presented its own set of unique challenges that included the design and installation of a "one-of-a-kind" security system with the latest in integrated alarm, access control, IP video surveillance and storage solutions, all connected to one of the largest virtual matrix systems in use today.

At 300,000 sq. ft., the River Spirit Casino hosts one of largest gaming floors in the state and features state-of-the-art amenities, including 2,800 high-tech machines, 24 table games, 15 poker tables, four dining venues and the uniquely designed Mystic River Lounge. The River Spirit Casino is an economic development project of the Muscogee (Creek) Nation of Oklahoma.

The original Creek casino opened in 1984 and was the first high-stakes tribal bingo establishment in the state of Oklahoma. The River Spirit Casino provides a positive economic impact for Tulsa and surrounding towns, with over 650 employees. Proceeds from gaming operations help to fund a variety of Muscogee (Creek) Nation service programs for tribal members such as housing, education, elderly assistance and healthcare.

B.J. Waggnor, Director of Surveillance, and Jason Nichols, Gaming Commissioner for the Muscogee (Creek) Nation Office of Public Gaming, are charged with managing the $7 million dollar security operation and with ensuring that the products, services and technology deployed at River Spirit Casino are the best available. The entire casino building project took only 14 months to complete and involved several hundred suppliers, contractors and vendors. In addition, Waggnor, who is a member of the Creek Nation, oversees the video surveillance operations at all 11 Creek Nations casinos located in Oklahoma.

Brody Carlson, President of ConnectionsIT, a security system integration company, was asked to help pull together the various security technologies, products and companies to handle the challenge of protecting the casino's guests, employees, assets and facility. ConnectionsIT has a long and impressive history of working with Native American casinos such as the Comanche, Choctaw, Paiute and several Pomo Bands. ConnectionsIT has offices in California, Nevada and Oklahoma.

ConnectionsIT involved such top tier security product providers as Axis Communications, Genetec, IQinVision, Pivot3, American Dynamic, HID, and HP to provide the various compo-

nents that make up the River Spirit video surveillance solution. The casino hosts approximately 1,400 IP cameras, along with a virtual matrix and clustered storage solution that provides over 1.5 petabytes of storage and reduces the need for duplicate servers. It is a unique security application that provides ease of use and the flexibility for future product expansion and casino growth. The video surveillance solution is completely incorporated into the overall casino security system to provide live video at all gaming stations, casino tables, money exchanging areas, and all public dining and lounge areas. The system is designed to provide continuous monitoring and observation opportunities and offers complete PTZ capabilities, as well as the ability to detect pre-programmed events and immediately notify security officials at remote locations throughout the casino. The system operates over a Cat 6, 10 gigabit cable infrastructure and all of the IP cameras operate by power over Ethernet.

Axis Communications and IQinVision provided all IP and Megapixel cameras for their specific casino monitoring locations. American Dynamic provided its analog PTZ cameras into the overall network. The PTZ cameras are primarily used over the black jack and card tables, where you may need to zoom in to observe a specific activity. The 1,400 cameras sustain almost six gigagits of network traffic, which amounts to a lot of stored video.

Genetec provided its advanced Omnicast software solution to interconnect all of the cameras, monitoring and storage activities. Omnicast's open architecture and robust operating capabilities make it a good fit to manage the surveillance operation. It also hosts an easy to use management console that can provide several surveillance functions at one time and keep records of all data entries.

The River Spirit Casino project represents Pivot3's largest virtual matrix petabyte cluster storage install to date. The Pivot3 solution is a clustered storage array that aggregates capacity and bandwidth using the company's RAIGE™ (RAID across Gigabit Ethernet) technology. The Pivot3 storage introduces a new level of system fault tolerance that eliminates planned downtime and realizes significant cost benefits. Pivot3 worked to minimize the amount of server related storage and helped create a more efficient and cost effective storage solution.

"This has been a very challenging design and installation process, and we all have learned a lot that we can apply to our other casinos," saidWaggnor. "We will continue to upgrade and expand our security surveillance systems as newer and more cost effective products are introduced into the market. It is a never-ending process."

"The Office of Public Gaming's goal is to ensure we have the most advanced surveillance technology when it comes to protecting tribal assets and customer safety," said Nichols.

"We are fortunate to have access to the latest camera and compression technology today, and to be able to put it together in such a way that it actually enhances the overall performance of all the security products involved in the River Spirit Casino project," said Carlson. "This is a very complex and challenging assignment, and one of the largest single projects that most of my partner suppliers have even been associated with. Tribal casinos have become the premier testing ground for a lot of the advanced security technologies that are being developed by the industry."