



Situation

Smart City is the leading provider of event technology services, including temporary voice and data services, counting customers from 15 of the USA's largest convention centers. With nearly two decades of experience punctuated by the delivery of technical services to the five largest computer and electronics tradeshow in the country, Smart City's reputation and expertise are without peers in its industry.

Authentication technology is business critical for Smart City. Each day, thousands of new users sign up for network access at events across the country and an authenticated connection prior to each user's session is required. Given the large number of convention centers that Smart City supports, multiple shows may coincide at any particular time, creating a dynamic and unpredictable demand on the network any given day.

Notably, Smart City services the annual Consumer Electronics Show (CES) in Las Vegas, Nevada. CES is the world's largest consumer technology tradeshow, which brings unique demands on the Smart City network. For example, CES 2008 included over 2700 exhibitors and 100,000 visitors, requiring a redundant and highly scalable authentication solution so that exhibitors, guests and staff could properly and safely access the network.

Solution

Smart City recently replaced its aging RADIUS authentication server with A10 Networks' IDsentrie network identity management appliance. Smart City's decision to upgrade to the IDsentrie appliance was based on its need to support increasing year over year growth at the convention centers, while ensuring scalability for predicted future growth trends.

With A10's IDsentrie appliance, all network authentications for the events are processed from over 3,000 wired and wireless networking devices that Smart City manages. IDsentrie features an advanced authentication and policy engine to expand the flexibility of authentication handling, serving as the lynchpin for Smart City's service. A mixture of Microsoft SQL, Microsoft Active Directory, and third-party RADIUS services (such as iPass and Boingo) are supported. IDsentrie's back-end flexibility allows a mixture of custom SQL queries and LDAP authentication requests to be sent and replied to via the IDsentrie platform.

Smart City's initial IDsentrie deployment for CES 2008 addressed redundancy in two ways to ensure success. A primary high availability pair was placed in the Las Vegas data center with an additional fail-over site designated in Orlando, Florida, where a third IDsentrie was deployed.

A10's engineering team worked with Smart City to configure IDsentrie's policies and performance for optimal levels. Having the IDsentrie platform supported by A10 was critical to Smart City so that any issues or custom feature requests could be addressed immediately. Open source was considered, but unpredictable support often posted on message boards was not an option for a business critical system.

Smart City delivers network services to the largest technology tradeshow in the USA.

A10's IDsentrie provides Smart City an authentication platform for its events, including CES 2008, which included over 2700 exhibitors and 100,000 visitors.

"With the combination of superior authentication performance, a highly redundant architecture, and 24X7 support, A10's IDsentrie serviced all the event's authentication requests without a single issue, allowing Smart City to provide a seamless experience to all the network users at CES 2008."

--David Langford, VP of technology for Smart City



Success

During the CES 2008 show in Las Vegas, authentications spiked to ten times the normal volume due to the high number of attendees. A total in excess of 34,000 unique events were processed during the three day event period. Within the Network Operations Center (NOC), the IDsentrie appliances were monitored and CPU and memory usage was assessed continuously.

"At Smart City we have over 3,000 wired and wireless network devices that authenticate thousands of users from convention centers all over the US," said Felix Windt, network administrator for Smart City. "We chose A10's IDsentrie identity management appliance to replace our existing solution as it is capable of handling a vast number of authentications per second. IDsentrie's RADIUS authentication module delivers scalability, redundancy and reliability, both for incoming requests from network devices and to multiple backend data stores. We also value the timely support and integration of feature requests from the A10 team - it helps us provide superior services in the event industry."

"During CES 2008, less than a tenth of IDsentrie's memory was used and the CPU usage varied only between one and seven percent," noted Windt. "This allowed for peace of mind during the entire show with rock solid performance. A10's IDsentrie appliances helped Smart City meet the authentication service requirements for CES 2008, allowing exhibitors, guests and staff to safely access the network."

After CES 2008, IDsentrie's reporting functionality showed immediate insight into the event's network volume increases, which helps Smart City forecast the network requirements for future events.

"With the combination of superior authentication performance, a highly redundant architecture, and 24X7 support, A10's IDsentrie serviced all the event's authentication requests without a single issue, allowing Smart City to provide a seamless experience to all the network users at CES 2008," said David Langford, VP of technology for Smart City."

About IDsentrie

IDsentrie is the industry's only network identity management appliance with instant user identity resolution, which helps organizations of all sizes save time and minimize risk by resolving security issues faster. IDsentrie delivers integrated features that improve password management, enhance network authentication and control, simplify user account management, and resolve IP addresses to identity (IP-to-ID) instantly.

About A10 Networks

A10 Networks was founded in 2004 with a mission to provide innovative networking and security solutions. A10 Networks makes high-performance products that help organizations accelerate, optimize and secure their applications. A10 Networks is headquartered in Silicon Valley with offices in the United States, Japan, China, Korea and Taiwan. For more information, visit www.a10networks.com

About Smart City

Founded in 1984, Smart City is the nation's largest provider of event technology in the convention industry. With corporate headquarters in Las Vegas and Lake Buena Vista, Fla., Smart City provides clients with design, installation and maintenance of data, voice, electrical and utility platforms, coupled with unparalleled voice, video and data network engineering, security and monitoring across the United States. Smart City also provides services to more than 5,000 trade shows at 60 convention centers located in Alabama, California, Colorado, Florida, Georgia, Indiana, Kentucky, Minnesota, Nevada, North Carolina, Ohio, Pennsylvania, Texas, Washington and the District of Columbia. For more information, visit www.smartcity.com