UniFi Provides Wi-Fi to Outdoor Music Festival

Ubiquiti Networks’ UniFi® provided Wi-Fi access to staff and VIPs across the entire venue.

Ubiquiti Networks airFiber® delivered the necessary Internet pipeline to the entire festival.

JMF Solutions uses Ubiquiti products for its excellent price-to-performance value, ease of use, and access to the Ubiquiti Community.

The Hangout Music Festival is an annual outdoor music festival that began in 2010. Held in Gulf Shores, Alabama, USA, it is a widely popular event sponsored by MTV. The three-day festival features some of the world’s most popular musical acts and attracts about 40,000 people every year.

JMF Solutions is a Wireless Internet Service Provider (WISP) and wireless solution provider in the Broadband Wireless Access (BWA) market. Headquartered in Daphne, Alabama, JMF delivers Internet and Voice over Internet Protocol (VoIP) services under the brand name, WaveFly, to business customers across the southeastern United States, at sites that vary in size from a small office up to a city’s entire infrastructure.

CHALLENGES

The Hangout Music Festival required reliable, high-speed Wi-Fi for festival personnel in a sprawling venue. The Wi-Fi network had to support over 2,000 devices of 70 different groups, including bands, production crews, producers, vendors, and sponsors. Most groups arrived on a single day and immediately wanted Internet and VoIP services. In many cases, a trailer would be put in place, power was connected, and broadband services started within an hour.

The primary technical challenge was RF noise from the audience and festival systems. From a generator-equipped golf cart, JMF repeatedly ran the airView® Spectrum Analyzer using airMAX® Bullet™M radios at different sites to analyze frequencies and select the proper channels and power levels for all devices.

UBIQUITI PRODUCT SOLUTION

JMF had less than a week to set up. Because UniFi is easy to deploy, the six-member team had the network up and running in two days.

“The whole process was turn-key. It was a great experience for my team... being able to set up that many access points in just a couple of days.”

Mike Francis, Founder and CTO
HANGOUT MUSIC FESTIVAL

Stage and audience during the day

UBIQUITI DEPLOYMENT

The deployment included the following:
- 20 UniFi AP-PRO Access Points
- 20 UniFi AP Outdoor Access Points
- 10 airRouter™ devices
- 2 airFiber devices

The UniFi 3.1 Controller software made it easy to deploy and manage multiple sites. Each site supported multiple groups; for example, the Stage 4 site supported its production crew, management team, and bands. Some groups had festival-wide Wi-Fi; any band member could roam across the entire festival and still use the same artist Wi-Fi network.

JMF deployed UniFi to support multiple wireless networks over large areas. airFiber was used as a backhaul link to send traffic from the festival site to JMF’s closest fiber ring. Installation of the airFiber connection took only 20 minutes.

SUCCESSFUL DELIVERY OF HIGH-SPEED WI-FI

The UniFi network reliably delivered fast Wi-Fi coverage to support the festival’s network activities, which ranged from VoIP to credit card transactions to mapping software:
- 8-10 Mbps, synchronous performance for each group on the network
- 2-3 Mbps to each user

UNIFI AP-PRO IN ACTION

The UniFi AP-PRO is a simultaneous dual-band device, so it can leverage top performance on the 2.4 and 5 GHz frequencies. The UniFi AP-PROs were installed under tents at every entry point and gate. They connected approximately 200 Android-based scanners in the 5 GHz frequency range. These scanners controlled access to all festival areas – hundreds of thousands of transactions each day.

Access control was vital; the VIP area had privileges reserved for VIP ticket holders, including access to the VIP Wi-Fi network, which was protected by a password available from the VIP concierge.

“Having that 5 GHz capability made all the difference for our vendors. Despite having such a noisy environment, we were able to deliver the high availability and low latency they needed with ease.”

Mike Francis, Founder and CTO

FUTURE GROWTH

JMF is growing throughout the states of Alabama, Mississippi, and Florida; it even competes with large Local Exchange Companies (LECs) and cable companies in cities such as Mobile, Alabama, and Pensacola, Florida. JMF also plans to pursue new markets across the southeastern United States from New Orleans, Louisiana to Tallahassee, Florida.

Visit JMF Solutions at www.jmfsolutions.net

For more deployment case studies, visit: www.ubnt.com/customers