Case Study: Bonnaroo Music Festival

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Background

Outdoor events such as concerts are an experience all unto themselves and generally draw crowds of all sizes. The Bonnaroo music festival held in June every year is the epitome of one of these festivals. People have flocked to Manchester, Tennessee for ten years now, helping to make it one of the biggest and arguably one of the best four day music festivals on the globe.

As one of the largest camping festivals in the world, Bonnaroo temporarily turns the town of Manchester into the 4th largest city in Tennessee. As a city of 80,000+, with more than 5,000 workers, festival promoters are tasked with providing all the utilities of a major city, in the middle of a hay field. Water, sewer, power, and internet are all installed year after year. Historically, internet access has been provided for all production staff and sponsors, however in 2011, the festival IT vendor, Yellow Dog Interactive Media, was tasked by promoters with providing internet access for all 80,000 patrons in about 80 acres of activity and concert venue areas.

Thankfully through their partnership with AllCity Wireless and Cisco, they were able to find a solution.

The plan was to use a mix of Cisco access points, the 1242s and the 1131s, along with some D Link DWL7700s to cover a smattering of areas for the patrons. These included higher density areas, such as in front of the stages, as well as lower density areas like the activity areas (Centeroo).

Event promoters demanded a solution that would provide flexibility over many years and many different events. An event in the spring of 2011 might demand pay as you go access for patrons, the same event in 2012 might leverage sponsor involvement and require ad insertion or interstitials. Additionally, the trend towards cloud based controllers was not appropriate in the festival environment due to tenuous power and WAN connectivity. In researching the solutions out there, Yellow Dog staff found only one device that met all the requirements for the current event and future events, which was the WiDirect from AllCity Wireless.

Layout

The physical deployment of the network was as challenging as any metro wireless build out. Locations of power, backhaul availability, and potential density issues all played a roll in development of the site plan. These factors, which any site would face, are combined with the fact that 70% of the structures that needed Internet and public WiFi access did not exist 10 days prior to the event. After all elements were taken into consideration, the rapid deployment features of the WiDirect were key in the success of the event. The final deployment saw over 200 client access points backhauled via a mix of fiber, Ethernet, and point to multi point wireless to the WiDirect. Discrete locations on the site were segmented on separate VLANs for management and accounting purposes.

In selecting the WiDirect and AllCity Wireless as a partner for the event, Yellow Dog Interactive Media knew that the support element would be key to the success of the event. AllCity Wireless'

technical staff facilitated the user experience as requested by the event sponsor.   The goal of sponsored public wifi was the generate buzz and exposure for an iPhone app, a mobile device real time social networking site. Introducing a mobile App to 80,000 potential customers is a very good way to get exposure for that application, especially since folks who wanted to use the internet had to look at the App info before proceeding to the internet. The WiDirect was configured for the Bonnaroo concert experience to the end customer's request. Specifically the WiDirect Firewall was configured to allow facebook.com as well as color.com direct access bypassing the preproxy. This allowed for the customer's domain to appear faster to users on initial connection. The WiDirect login procedure was also modified so that new devices would automatically be auto-registered when they first connected. Fine-grained reports for registrations and connections (hourly) were initiated so that real time reports could be generated on registration and usage. Finally the WiDirect presented a unique host page that a user would see after accepting the terms and conditions.

The Solution

With the WiDirect, Yellow Dog was able to solve all of their challenges, as well as many they had not thought of as well. Tom Porter from Yellow Dog had this to say, "The WiDirect was brilliant right out of the box. The WiDirect performed superbly and everything associated to the product went off without a hitch. The help received from AllCity Wireless was equally superb. It really helps a lot to have these guys involved as they seemed to be prepared for anything we could throw at them. WiDirect was by far everything we expected it to be, and a whole lot more. These guys (AllCity Wireless) really know what they are doing." WiDirect was also responsible for providing the following services in addition to user management and experience; DHCP, DNS, PreProxy, Rate Limiting, Captive Portal + Redirect, and VLAN management. "WiDirect does it all, just turn on your Access Points and let WiDirect take care of the rest."

Very Easy, Super Smart