Centralized Global WIFI Management

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Introduction

The proper management of a WIFI network can determine both short and long term success of the network. You need to be able to handle the load of the bandwidth, monitor the equipment in the field, and control the end user experience all at once while also handling security and liability issues, to name a few. These are some examples of what the WiDirect's central management capabilities can handle, ensuring a network's successful launch to the public goes off without a hitch.

Problem

A simple stand-alone hotspot is easy enough to monitor, whether you are on site or not. You only have one piece of equipment to worry about and a limited number of users that would be connected at once, given the range of a single access point. But that is not the case with an entire network of access points. Be it a smaller deployment of five to ten access points covering a city square or a larger deployment of hundreds of access points blanketing an entire town with WIFI, you will need some sort of centralized management device to help you monitor the network and send alerts automatically. It is simply not cost effective, or sometimes even physically possible, to be on site checking each piece of equipment around the clock.

As a network operator, you need to know at all times the stability of your equipment and the safety of the network itself. You need to have a finger on the pulse of the happenings within your deployment without running all over town testing and retesting equipment manually.

Product Design

The WiDirect offers vast central management capabilities enabling it to run and monitor a network of any size or location. It can handle different tiers of service, both in relation to payment types and bandwidth restrictions / allowance, which the network operator controls and can tailor to fit their business model. PayPal and other common payment gateways are standard with the WiDirect making it a plug and play network deployment. (Figure 1)

The WiDirect's security suite ensures that a deployment remains secure, no matter what, supplying the operator with automated daily system logging in case of an emergency. This type of redundancy offers piece of mind to the network operator, enabling them to work more efficiently in running the business. Integrated network monitoring with WIFI mesh graphs come standard with the WiDirect, making the control of your

network as easy as looking at a picture. (Figure 2)

The end user experience is seamless with the WiDirect as well, even in a non-contiguous network. With MAC address user authentication and site branding, the customers can get the same experience from location to location. Conversely if the operator wants the end user to have different experiences based on their location, such as different advertising or splash screens, that is possible with the WiDirect as well. The customizations are all set up in the centrally located WiDirect and fed out to WiClients in the network not directly connected to the core network, enabling the operator centralized management of the entire deployment no matter how large or small.

Deployment Diversity

The WiDirect can be deployed in a wide variety of deployment configurations, such as discontinuous networks like hotel chains, car dealerships, and retail shops. Essentially the operator would deploy radios of their choice in the different locations, be it in New York, Tokyo, and London, with a WiClient on site. Each WiClient would then authenticate its reporting back to the WiDirect which would be centrally located at the headquarters network operations facility. From the central WiDirect, operators are able to manage all of the various networks in the field, no matter how close or separated the specific locations actually are placed. (Figure 3)

Additionally, the WiDirect can also be placed in smaller type deployments such as the one off coffee shop or pizza parlor. These smaller networks would either have a WiDirect on their location, or use the WiDirect in a similar manner as the larger deployments using a smaller version of the WiDirect. These smaller deployments would reap the benefits of the WiDirect and have the luxury of being able to scale up as they grow their networks in the future, adding more capabilities to their specific feature list while maintaining the network monitoring piece that they need to have in place, no matter what features they want to utilize. (Figure 4)

Conclusion

Managing a network centrally is necessary to maintain your deployment's integrity and have it thrive. The WiDirect can make this happen in a fail proof, easy to scale and tailored way, taking the burden of controlling your network out of the field and putting into one location.

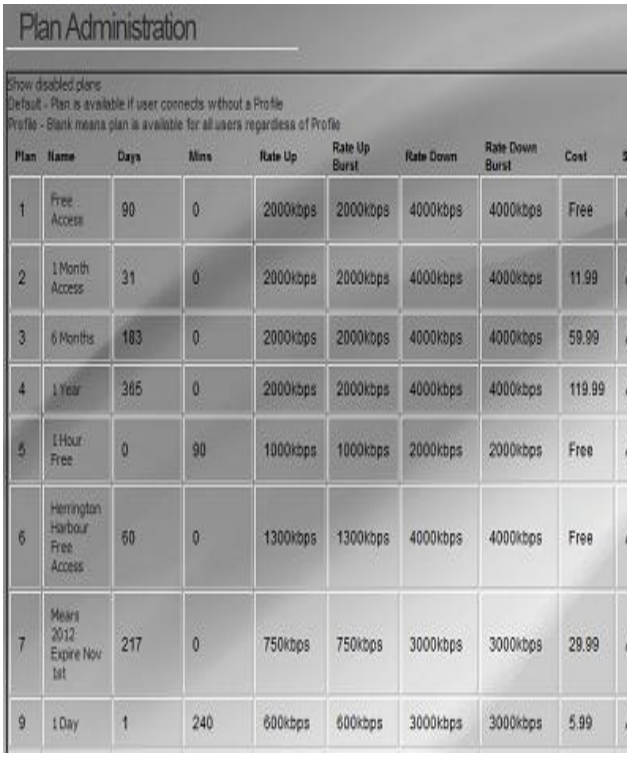

Figure 1- Service Plan GUI page

Figure 3- World Wide Network Deployment

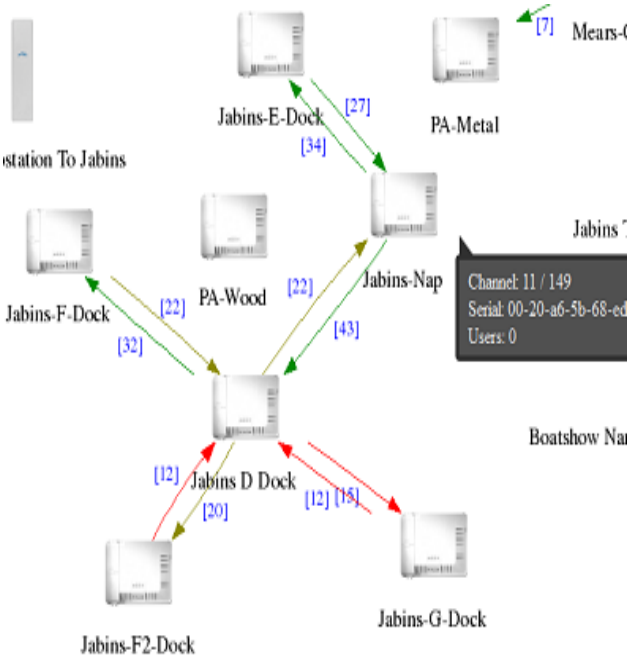

Figure 2- Network Map GUI page

Figure 4- Tools