

Bringing Cost-Effective Internet Access to Boaters

Customer Highlights

Challenges

- Satellite communications extremely costly
- Existing indoor hot spot technology not cost-effective and signal did not extend to the boat dock
- Wireline services unreliable; high-speed broadband not available to docked boats

Solution

- Affordable, reliable high-speed Internet access throughout the boat harbor area
- Portal environment enables local businesses to advertise to the Marina del Rey community

Results

Users

- Lower cost alternative for high-speed, reliable wireless Internet access throughout the boat harbor area
- Ability to monitor boat (security, equipment status) remotely potentially saving thousands of dollars in damages
- Single vendor for providing range of multiple high-value services

Service Provider

- \$30,000 investment; breakeven in less than 1 year
- Fast installation and cost-effective network solution
- High network reliability and ease of management provide lower operating costs
- Network is the foundation for additional profitable services

Systems and Services

- Tropos Networks MetroMesh 5320 routers
- Planet Halo: System integration, network operation and network ownership

The city of Marina del Rey on the shores of Southern California is the largest man-made small craft harbor in the U. S., accommodating more than 5,300 vessels. The harbor, which offers comprehensive public and private boating facilities and services, has recently added Wi-Fi coverage to bring cost-effective and reliable Internet access to boaters, visitors, and nearby businesses. The service is delivered through a wireless mesh network based on Tropos MetroMesh routers. The network was built and is operated by Planet Halo, a wireless ISP and wholly owned subsidiary of publicly traded Concierge Technologies, Inc. (OTC:CNGC)

THE CHALLENGE

As in many harbors, the boating community at Marina del Rey has been under-served in terms of high-speed Internet access. Satellite communications is not a feasible alternative for daily use due to its high cost. Vendors have offered hotspot and hotzone services in West Coast marinas for a couple of years, including at Marina del Rey. However, these technologies have some shortcomings, such as limited range that often confines access to within a single building. The dock areas where live-aboard boaters and weekend sailors would like service are typically out of range from the wireless router inside the marina building.

Another shortcoming of the hotspot technology approach is that its limited range and speed makes it impossible to offer high-speed Internet access and other valuable services at the dock. For example, boaters could benefit greatly by being able to monitor the security and condition of their boats remotely over the Internet using video cameras or electronic sensors.

The marine environment also creates substantial problems for wireline carriers. Copper wires tend to corrode and are difficult to maintain in this environment. As a result, telecommunications carriers were not even offering DSL services at the dock.

With live-aboard boaters on the increase, and an already strong population of weekend boaters, Planet Halo wanted to address the needs of these users who have had difficulty obtaining reliable, affordable Internet access. Planet Halo viewed the situation as a ripe opportunity for the installation of a broadband wireless network that would be beneficial to all aspects of life in Marina del Rey.

RESULTS

Planet Halo initially considered installing WiMAX throughout the harbor, but ultimately decided on Wi-Fi and Tropos' MetroMesh technology, in particular for its flexibility and ease of deployment and use. Planet Halo successfully pitched their business plan to local investors and acquired funding for the construction of the network. Their two main goals for the network were that it be a cost-effective solution and that it be operational quickly, both of which would not be possible with a WiMAX solution.



“We’re on track to turn a profit on our initial investment in less than one year. The Tropos Wi-Fi mesh equipment was easy to install and provides us with a very reliable, cost-effective solution that gives Planet Halo a shorter path to profitability with fewer headaches.”



Marc Angell
President
Planet Halo, Inc.

As soon as Planet Halo gained permission to mount routers on government and utility-owned assets such as light poles and pier structures, they began deployment. The initial installation was up and running promptly, providing access throughout Marina del Rey’s harbor and waterfront area. This achieved Planet Halo’s initial goal of providing access to all privately owned crafts in the harbor, as well as in the California Yacht Club building located at the top of the harbor. The initial cost of the Marina del Rey network was roughly \$30,000 and Planet Halo is on track to break even on its investment in less than one year. The speedy installation and the fast deployment of the Marina del Rey portal, which

delivers local advertising and special promotions for members, have helped Planet Halo exceed their initial predictions for return on investment.

TROPOS SOLUTION

The wireless mesh network was based on Tropos MetroMesh 5320 Routers placed throughout the waterfront area, resulting in coverage for more than half of the city’s 1.5 square miles.

Access services are available at \$29.95 per month, \$9.95 per week or \$5.95 per day, compared to the \$4.95 per minute for satellite communications commonly used today by boaters. In addition to these fee-based subscription plans there is a free-to-members Wi-Fi hot-zone located in the California Yacht Club. With its reasonably priced Internet access and special offers from local businesses available through the Marina del Rey portal, Planet Halo has seen membership subscriptions grow rapidly.

The network is meeting not only boaters’ demand for wireless high-speed Internet connectivity, but also provides the foundation for Planet Halo to add high-value add-on services such as boat monitoring, boat alarms, boat-cams, and VoIP. Planet Halo intends to offer a video surveillance service and boat owners will also have the option to install bilge alarms and electrical monitors to transmit data over the network. These services are of significant value to boat owners, many of whom live miles away from the harbor. Boat owners are immediately notified if a problem develops so they can respond quickly and minimize the risk of costly mechanical problems or damage to their vessels.

Planet Halo also has plans to develop a social network called, “Wireless Village,” (www.wirelessvillage.com) which will provide an online community for local boaters and serve as a resource for local merchants to advertise to their target market in the harbor.

LOOKING FORWARD

The initial rollout of wireless access in Marina Del Rey is just the beginning of Planet Halo’s vision of delivering a set of high-value services for boaters in harbors along the California coastline. Just up the coast in Ventura Harbor, Planet Halo will soon launch their second wireless network. Plans are under evaluation for deployment in other neighboring harbors of San Pedro, Long Beach, San Diego and Santa Barbara areas. Expanded services include:

- Security Alarm Notification - The installation of security alarms for crafts in the harbor would replace today’s inadequate audio-only alarms and insufficient alerts sent to the subscriber’s cell phone or email.
- Video Surveillance - Crime is always an issue at boat docks. Video surveillance would not only help alleviate this concern, but also potentially reduce insurance and other safety costs for boaters.
- VoIP - With the introduction of Wi-Fi enabled phones, VoIP is becoming an extremely cost-effective alternative to expensive satellite communications.
- Wireless Village - Planet Halo and Wireless Village are developing a social networking website to bring local merchants, boat owners and the local community together through geographically driven, Web-based advertising, community portholes, classified ads for boats, marine products, news feeds, photo and video gallery, blogs and government access.