Skynet Maximizes Their Workday With cnHeat

The Challenge

SKYNET, A WISP BASED IN THE HOUSTON, TEXAS AREA, needed an accurate RF planning solution to plan service for their residential, commercial and enterprise customers. Their network, which consists of 3,000 subscribers across 40 towers, serves mainly the southeast and southwest areas of Texas down to the Gulf Coast.

As part of their RF planning, the WISP needed the ability to pinpoint trees, obstructions, exact signal levels and locations. After working with other RF planning tools that didn’t meet their needs, Skynet decided to work with a new technology partner that would offer them an accurate RF planning service.

The Solution

cnHEAT PROVED TO BE THE ACCURATE RF SERVICE Skynet desired. Shahan Warsi, IT Director for Skynet, decided to try cnHeat out at their Santa Fe tower. The Santa Fe tower is fitted with ePMP 2000 Access Points (AP) at 400 feet providing service to ePMP™ Force 300-25 Subscriber Modules (SM). cnHeat quickly proved that it predicted line-of-sight (LOS) coverage correctly and at the correct received signal strength indicator (RSSI) levels. cnHeat provides various install height predictions for SMs, allowing Skynet to know how to optimally connect to customers. These installations range anywhere from one foot to as high as 50 feet.

Skynet extended service to their East Bernard tower, which is equipped with nine Cambium Networks ePMP 1000 APs providing service to customers using ePMP Force 200 SMs. Since cnHeat is charged per site, this was advantageous for Skynet and East Bernard as two rings of APs, nine total, were modeled at the tower.

“Without cnHeat, we wouldn’t have been able to successfully complete those installations, resulting in lost revenue. cnHeat’s heatmaps are very accurate. We were able to skip testing across the property. We knew exactly where to go. We saved at least an hour of surveying and went straight to the location where we could find signal.”

SHAHAN WARSI, IT DIRECTOR, SKYNET

Skynet uses 50-foot tower mounts for customers. cnHeat optimizes tower location placement and speeds installation.
The Results

OVER A ONE-MONTH PERIOD, 12 customers requested service on Skynet’s Santa Fe tower. Using cnHeat, Skynet found that nine homes had no coverage, while three homes had coverage using 30-foot towers. This allowed Skynet to avoid nine failed truck rolls. For each of those failed truck rolls, Skynet saved $175. Survey and installation crews saved time on these 12 requests for service, leaving them time to work on other tasks that help existing customers.

Skynet also saved $175 for each successful truck roll. Without cnHeat, Skynet would have visited the site twice; once to survey the site, and a second time to install a 30-foot pole. cnHeat allows them to skip the site survey.

Customer satisfaction improved as customers were told on the first phone call if service could be obtained, and they were notified about the type of installation that would occur. Specific benefits include:

- $2,100 saved over a one-month period
- One hour of time saved for each of these 12 service requests, so installation crews could help existing customers
- Increase in customer and overall sector throughput performance

Maximizing the workday is important for everyone. For Skynet, this means that their installation crews now know the exact quantity of what they need before they visit a site, and they can focus that saved time on serving other customers.

BEST PRACTICES

“It’s just good knowledge to have where you can get the best possible signal. There are locations with okay signal, better signal and the best signal. Naturally, the objective for any WISP is to install in the best location possible, resulting in better performance for the individual and overall sector throughput.”

Shahan Warsi, IT Director, Skynet