M2M Case Study Global Net Commerce, Inc

GNCI integrates the latest weBoost cellular signal boosters into its automated wireless testing solution



THE CUSTOMER

Global Net Commerce, Inc. (GNCI) is a leading application service provider that delivers secure data transfer for its customers over wireless networks. GNCI has a large client base in the financial and retail industries, and is one of the largest providers of wireless applications for organizations that maintain national networks of ATMs.

GNCl's customers use the company's applications to securely exchange transaction data with branch offices over cellular networks. GNCl solutions also perform secure wireless branch backup, secure wireless ATM data exchange, and wireless failover backup for wired-line ATMs.

"We have thousands of locations deployed," said Mike Goraleski, CEO and owner of privately held GNCI. "Our technology allows us to provide a secure wireless alternative to wired lines."

Recently, GNCI introduced a new Advanced Wireless Support System (AWSS). Among other benefits, this program provides automated wireless site survey testing on both 4G and 3G carrier networks. This AWSS application integrates the latest weBoost 4G/3G cellular signal boosters into GNCI's testing methodology.

"Amplifiers are a great accessory for our clients because they reduce costs," Goralski said. "The business case for them is really good. About 80 percent (of clients) choose to install amplifiers."

THE CHALLENGE

The strength and reliability of locally available cellular signal is a critical factor for GNCI and its customers. In some locations, a weak cellular signal must be boosted in order to provide reliable data transfer to meet the customer's required level of service.

"We do thousands of wireless site surveys every year," Goraleski said. "At each site we test cellular signals from multiple carriers, both with and without amplification. We perform latency, packet loss and throughput testing. We gather a lot of evidence and can document very accurately data like packet loss and speed loss. One feature of the new AWSS program is automated site survey testing on both 3G & 4G carrier networks. This application integrates the weBoost Signal 4G booster into the testing methodology.

"Our customers want to have as many transaction points as they can. But because of signal problems, some locations just won't work without an amplifier."

THE SOLUTION

When the AWSS wireless site survey application reveals a weak signal, GNCI deploys cellular antennas and signal boosters from weBoost to improve strength and reliability. The metrics built into the program will recommend a preferred cellular service carrier and reveal whether a signal booster enhances site performance.

"weBoost amplifier units will take a marginal signal and move it higher," Goraleski said. "We'll see a signal at -90 decibels improve to -80 or even into the -70's. Sometimes that's the difference in whether the installation will perform or not." The new weBoost Signal 4G works with all cell service providers for 4G LTE and is backwards compatible to 3G networks.

"We see them speed up data transfer. We'll have sites where we get 2G speeds without an amplifier, and by adding an amplifier we can reach a 3G cell. At sites where we see significant packet loss, a booster can usually stabilize the packet loss even if the site itself doesn't have good logistical reception, for example a building with no windows."

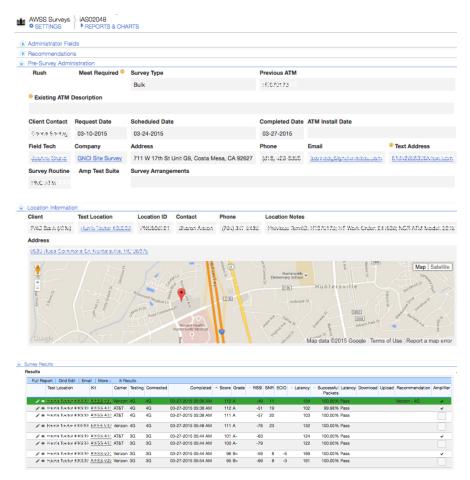
Occasionally a site that showed strong signal during the site survey will experience a weakening of the cellular signal. The solution in that situation is adding weBoost equipment to the system.

"If RF (radio frequency) conditions deteriorate, weBoost amplifiers improve them," Goraleski said. "Some clients order amplifiers installed not because of a site issue, but because they don't want to have to add them later. They just want the amplifiers there for peace of mind."

weBoost is GNCl's preferred supplier of cellular antennas. The company has tried other antennas from other vendors, but prefers weBoost wireless accessories.

GNCI has also tested other low cost boosters. "We found the cheaper amps just don't work very well," Goraleski said. "When we look at potential partners

AWSS SURVEYS



For more info about GNCI and the AWSS testing module, please visit www.gnciwireless.com or call 949-515-1960

we want those who provide certified hardware and reliability. Incorporating the new Signal 4G reduces the need for carrier-specific testing equipment. This saves time and money for GNCI and its clients. The weBoost amplifier supports all carriers in a single device."

THE RESULTS

According to Goraleski, GNCl's clientele has grown as a result of working with weBoost. "Without the boosters we could not sell as many installations, and obviously more is better for our business," he said. "We also have contracts with clients for ongoing maintenance, and (without boosters) we would not have as many of those revenue opportunities." There are three immediate benefits for using the AWSS/weBoost signal booster package.

- The AWSS program along with weBoost boosters/products remediates upfront site issues and dramatically reduces costly troubleshooting problems related to site specific RF conditions.
- The technical level required to launch the site survey is reduced. No laptops are needed. Just power up the test equipment and GNCI is alerted to start the testing.
- The AWSS testing module uses
 Iperf for throughput testing which
 provides consistent speed testing
 using client specific upload/download
 requirements.

GNCI's clients also share in the weBoost benefits, notably:

- Reduced costs
- Faster data speeds
- More reliable transfers

