COMTREND

RV PARK CUSTOMER INSTALLATION

The following is an interview summary with an RV Park's IT architect and implementer.

www.us.comrtend.com/RVpark

WHAT HAPPENED?

An RV Park received one too many complaints about their wireless Internet. They had migrated from 'common area' wireless [clubhouse, lobby, restaurant] to a slow expansion of wireless coverage through an array of Access Points. And this is when the trouble-calls started.
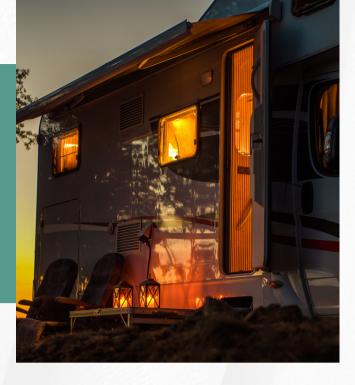
How did they change this around to 100% Satisfaction?

Simple. They delivered hard-wired internet and Wifi with far less effort than expected- thanks to existing coax lines that previously provided Cable TV. Here's the story.

IN THE BEGINNING...

"Here is a little blurb of our history, and what lead us to deploy this type of solution by Comtrend.

Prior to 2020, our seasonal RV park in Canada, with 150 sites, offered a Wi-Fi hotspot to its customers out of its store and multipurpose activity hall. This was a reliable service, but not overly convenient for its guests, as it required the guests to go to the hotspot whenever they needed access to the internet. Unfortunately, the RV park was also poorly serviced by an external cell network provider, due to its remote location. Just before the start of the 2020 RV season, we installed 17 additional Wi-Fi access points strategically placed over the park grounds for its guests to connect to. This was a convenient service for many guests that allowed for better cell-phone service (via a service called "Wi-Fi calling" that most Canadian carriers support) as well as internet access at the guests' RV locations. However, we began to get more complaints we'd received prior to 2020.

AT A GLANCE

CHALLENGES

- Broadband to All
- Dependable & Secure
- Lower Cost

BENEFITS

- All of the above

Many guests were simply unable to get a reliable Wi-Fi signal after we created park-wide Wi-Fi. This was mainly due to the Wi-Fi signal being obstructed by trees and RVs themselves (making matters worse, most RVs have aluminum siding acting a shield). It was quickly determined that it would be unrealistic to be able to put up enough access points to provide a reliable connection to every site. We began to explore the idea of building a hard-wired internet network as an additional RV hook-up. Providing the service via category 5e/6 ethernet cables was not considered convenient since it would be necessary to drill through the walls of the RV in order to get the cables through. The same would be true for twisted pair phone cables.

HOOKUP

However, virtually all RVs have an external coaxial jack. We started to look into methods of delivering an internet connection over coaxial cables. Our research led to choosing G.hn technology [vs. MoCA] via coaxial cables with Comtrend's GCA-6000 units as the most cost-effective option. In the summer, we purchased ten GCA-6000 units and created a pilot project to test the technology. We were able to quickly find several volunteers to test the hard-wired internet. To reduce costs of the pilot project, we ran RG6 (coaxial) cables above ground under the RVs and only burying the cables a couple inches underground (with a hand shovel) where there was foot traffic. Each volunteer was given a GCA-6000 unit which we installed in the volunteer's RV along with a home-grade Wi-Fi router. The result was a huge success. The internet connections that the volunteers received were reliable and fast. We received only positive feedback.

QUESTIONS

HOW MUCH BANDWIDTH TO EACH SITE?

"We have a 1 Gig symmetrical fiber connection and limit each site's connection to 30/30 Mbps Down/Up. So far, we've had no issues with this (plenty of bandwidth)."

"This is where our fiber broadband comes in and switches out..."

HOW LONG TO 100% INTALL?

"Probably a few years due to our size and resources, as well as our continued growth."

THE EXPECTED

The biggest, and expected challenge to deploying any hard-wired internet solution, is the installment of all the cabling. This is relatively easy in new construction, as we would be trenching in electrical cables anyway. To upgrade existing sites, additional trenching (for underground solutions) is necessary. This can be a challenge depending on soil conditions, and how easily you can navigate existing underground obstacles, like wires, pipes, etc.

THE UNEXPECTED

One unexpected challenge for us was getting the G.hn signal to the GCA-6000 unit through the trailer itself. It became apparent that RV manuals typically **do not** provide diagrams of the in-wall cabling. The RV is therefore a "black box"; it's a series of coaxial cables and splitters inside the walls servicing various jacks within the RV. It is therefore necessary to use a coaxial tracing tool to make sure that the GCA-6000 is connected to the correct interior coaxial jack that provides a link to the exterior coaxial jack. Luckily the coaxial splitters are usually just behind one of the wall plates. If the RV owner wishes to have the GCA-6000 and Wi-Fi router situated within a specific room inside the RV, it is sometimes necessary to pull out the interior coaxial jack wall plates and reconfigure the cables coming to/from the splitters, to ensure that there is a link between the exterior coaxial jack to the interior one in the desired room. This leads us to prioritize long-stay customers to invest our time wisely.

HOW DO YOU MANAGE THE EQUIPMENT?

"We resell the Wi-Fi routers pre-configured (plug and play); no campers currently bring their own, but they could in theory (their MAC address would have to be authenticated). We rent the GCA-6000 and retain owner-ship of these devices."

WOULD YOU RECONSIDER BETTER WIRELESS ACCESS POINTS?

"I don't think it's even realistic to be able to achieve this result with wireless APs. By having more APs (in order to have 1 AP per 4 sites) you wouldn't necessarily get faster speeds, as the APs would likely start interfering with each other (thus slowing the total uplink capacity of each AP). "

THE FINAL

In the fall, the owners of the RV park upgraded 13 RV sites in order to have them serviced by 50 Amp electrical circuits (as opposed to the standard 30 Amp). Since they had to trench and bury new electrical cables anyway, they used this opportunity to run additional conduit containing RG6 cables to each of the sites. These 13 sites had hard-wired internet access, via Comtrend's GCA-6000s, at the beginning of the season. The feedback the owners received mid-season (from both the continued pilot project guests, as well as the guests from the upgraded sites) was 100% positive. We now plan to use this model for all newly constructed RV sites (and have already started construction on 40+ new sites), as well as extend the G.hn coaxial network to all existing RV sites over time."

Sample Kits are available to qualified customers.

INSIDE   OUT

We appreciate the time and effort that our customer invested in both the deployment of this solution and their willingness to share such detailed information. In the physical world of networking, the rule is: Your Mileage May Vary. We do not guarantee that your results will be the same due to the numerous variables involved, including: your location's bandwidth, network materials, and installation.

"It's a clean look inside and out. Once a customer is set up, returning is extraordinarily easy- and we like returning customers."

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