



CASE STUDY

# Exceptional Holiday Park Wi-Fi on a Nationwide Scale

Wifinity Connects 550,000 Guests and 1,000,000+ Devices in Wi-Fi Network that Spans 20,000 Holiday Park Vans in 66 Parks Across the UK

Vacationers want to get away from it all AND still be connected. Buffering and inconsistent Wi-Fi can ruin the ability to share experiences and relax. Consistently reliable Wi-Fi is as important as any other amenity.

Nationwide Network	
Parks	66
Holiday Park Vans	20,000
Guests per Year	550,000
Devices per Year	1,000,000



Figure 1: Nationwide Holiday Park Network



The legacy 5-year-old solution was just trying to beam from long distances through metal boxes. It's no surprise that customers were getting slow speeds and poor reliability." - Kendal Stacey, Director, Parks & Hospitality, Wifinity

wifinity

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#### Measurable Business Value

The client holiday park operator has experienced significant improvements since implementing the new network solution we provided. Key results include:

- Enhanced customer satisfaction (CSAT) scores: Reflecting increased customer satisfaction due to better network performance and connectivity.
- Reduced mean time to repair (MTTR): Faster resolution of incidents and problems, minimizing the impact on endusers.
- Improved network visibility: Enabling proactive issue identification and resolution.
- Increased network speeds, better service quality, and scalability to support growth.

## Reliable Wi-Fi Across 30,000 Endpoints Nationwide

A leading holiday park resort operator will in the UK runs 66 parks across the UK coast and countryside. Many are caravan parks where families go to get away from it all. Part of getting away is staying connected. To vacationers, Wi-Fi is as important as any other amenity.

"Connectivity inside of the caravans had degraded over time," said Kendal Stacey, Wifinity. The higher demands for bandwidth, higher specification caravans and significant growth in the size of Parks meant that a traditional "outdoor Wi-Fi mesh" approach was no longer providing the level of connectivity that guests required.

The legacy network performance in more recent times began to struggle as a result of the dependency on delivering connectivity using equipment installed on the outside of the vans. Furthermore, meshing performance on outdoor hardware, particularly on the parks where extensive foliage was present challenged the stability of the network. Wifinity was called in to design and operate a nationwide network for the holiday parks.

In addition, providing internet access and backhaul infrastructure over the same Wi-Fi frequencies resulted in significant congestion and degraded user experience across the site. As client devices and data requirements continued to evolve, the network struggled to keep pace with the end-user guest experience and limiting the ability to scale.

# A Re-Designed Connectivity Solution

Reliable, ultra-fast Wi-Fi is a huge driver of holiday park customer satisfaction and can make or break a guest's holiday. Wifinity have expertise in the Holiday Park sector and have seen first-hand the difference it can make

"We don't do one-size-fits-all. Instead, we will design a network that meets the unique needs of leisure parks and their guests," says Stacey. "We understand the quirks and unique features of every site. We'll make sure the network reaches every cabin, caravan, and corner of the property, and with ultra-fast and reliable Wi-Fi, the whole family can stay connected."

The solution provided holiday guests with high-speed internet in their vans using a wireless backhaul solution comprising point-to-multipoint (PTMP) and point-to-point (PTP) technology operating in the 60 GHz spectrum. The solution is connected to core switching, firewalls and backhauled at the core locations. Employees can connect through to a corporate network or to their own employee account.



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Hospitality, Wifinity



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To support the park operator to keep pace with other competitors in the industry, a straightforward solution was designed: bringing connectivity closer to the client and implementing dedicated backhauling for user traffic. Wifinity recognized the complexity of the resorts' requirements and partnered with the best suited vendors to create the next generation of holiday park networks.

"Cambium Networks was a chosen solution partner because they offered a comprehensive suite of software and hardware tailored to meet project's needs," says Stacey. "This ensured the successful delivery of services."

A challenge faced in holiday parks is that the caravans are structures that are known to challenge Wi-Fi transmissions. Choosing to replace traditional Wi-Fi mesh architecture with a multi-gigabit speed, distributed fixed backhaul wireless, and an indoor Wi-Fi access point (AP) inside each caravan solved the challenge. "This architecture solves a lot of problems," says Stacey.

"The customer required a network solution with reliable performance, scalability, and adaptability to various environments," says Stacey. Cambium's PTP and PTMP technologies met these requirements enabling Wifinity to install, manage, and deliver a cost-effective solution with minimal disruption. Cambium Networks' solution provides gigabit speeds, high-density endpoint support, scalable deployment capabilities and is highly reliable with centralised monitoring and management through a single pane of glass.

# **Installation with Minimal Disruption**

The installation of outdoor hardware (including PTP and PTMP) was completed on telegraph poles, galvanized poles and existing street furniture such as lamp posts. The Wifinity installation teams received specific training from Cambium Networks relating to mounting, bearing, powering up and testing of Cambium Networks products. The physical installation (in most cases) was carried out using mobile elevating work platforms and establishing connectivity that proved to be a relatively straight forward site activity while working.

Caravan installation of subscriber modules was also carried out, and fine-tuning alignment was speedily done by Wifinity engineers. Once aligned, connectivity was quickly established. Wifinity provided zero-touch provisioning that made extensive use of application programming interfaces (API) and Scripting prior to dispatching equipment to site to further aid minimization of site disruption.

"Cambium Networks' LINKPlanner software was invaluable in the planning of network deployments. It provided us with the outputs required to deploy the network nationwide," said Stacey.

The zero-touch functionality ensured a fast turnaround of a successful installation of caravans. During the initial process, the Wifinity provisioning team would ensure the correct firmware was uploaded and the hardware was correctly labelled. On arrival at the site, following the installation of the caravans,



## **Applications Supported**

- High-speed internet access:
   Provides reliable backhaul of Wi Fi connectivity for guests to use their personal devices, such as IoT gadgets, smartphones, tablets, and smart TVs.
- Video streaming and entertainment services: Ensures seamless streaming of movies, TV shows, and other content on smart TVs, smartphones, etc.
- Voice and Video Conferencing services: Enables guests to make voice and video calls over the internet using their personal devices.
- Network monitoring and management: Provides real-time insights and control over network performance, usage, and security to our network operations center (NOC)

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connectivity with the sector was generally established within 10 minutes of installation and pointing to the sector. In summary, the provisioning requirements were minimal, and the installation turnaround time was fast. Wifinity installed around 20,000 caravans using this approach with an excellent success rate and minimal revisits.

## One Centralised View for Management

"For management, we have a single portal where we can see the network end to end on our devices," says Stacey. "We can see from the core router all the way to the access layer for each customer. We can also manage the switches and configurations remotely to keep the system at peak performance."

## **Solution Technology**

- cnWave 60 GHz fixed wireless
- 5 GHz fixed wireless
- cnMatrix switching
- Indoor Wi-Fi AP
- · cnMaestro cloud management

## The Results

The holiday park operator has seen considerable improvement in user satisfaction, operational efficiency, and potential for expansion.

In 2022, Wifinity's "Direct to Van" solution, designed for the hospitality and holiday sector using Cambium's switching, PTP, PtMP infrastructure, reached an impressive milestone of 550,000 unique account registrations. With each account typically comprising multiple devices, the total device count exceeded 1 million, in its first year of operation. User numbers continue to grow in line with industry norms and is expected to surpass 1.5 million connected devices in the near future.

In addition, the reliability and performance of the network saw a significant increase in CSAT and a reduction in user to contact ratio of under 1% - industry standard for excellent service is 5%.

# 60 GHz Millimeter Wave Best Practices and Tips

- Bring high capacity as close as you can to the access point. "When you bring it in inside of the caravan and you use 60 GHz for infrastructure backhaul, you are suddenly enabling much higher bandwidths, a much lower latency connection, and a much more reliable signal." Stacey
- Wi-Fi Mesh divides the signal too much. "By using 60 GHz infrastructure, you deliver Gigabit speed nearly everywhere. Even the latency is always low to support gaming. It is amazing." — Stacey

## **Looking Ahead**

In the future, Wifinity plans to continually refine and expand the holiday park solutions to incorporate the latest advancements and technological innovations. Their commitment to the client is to manage a cutting-edge and ever-evolving network that consistently meets their needs and exceeds expectations.

### Cambium's ONE Network

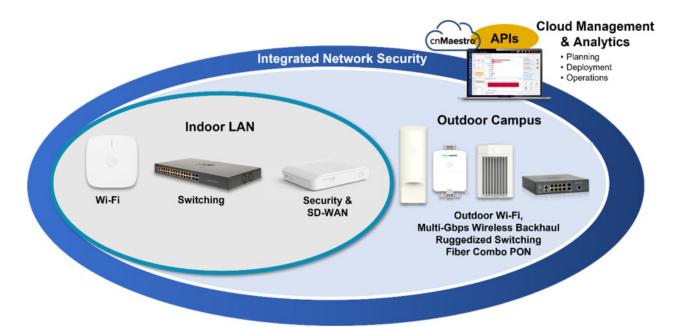
ONE Network enables excellent online experiences with fewer resources and IT personnel. Enterprises, managed service providers, broadband service providers, and government agencies can shift to managing the network holistically, freeing up IT resources to focus on their business



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and specific applications.

Our broadband fabric weaves together numerous networking standards and reduces complexities, helping network operators create purpose-built, reliable networks that are cost efficient and secure.



## **About Wifinity**

At <u>Wifinity</u> we care about keeping people connected wherever they are. And because we understand that WiFi is an everyday need, we are always working hard to make the very best experience possible. We help individuals, businesses, and groups of people stay connected to what they need and love. Our customer-centric approach means that from start to finish, we collaborate with you to provide the solution that is right for your business, and your users. Our experience covers defence, multi-tenant housing, student accommodation and some of the biggest players in the holiday park sector. While we offer

technology solutions, at our heart we're a people business. Our success is based on the passion that our teams bring every day, working together, and with our partners, to act quickly, make things happen and always strive to be better than yesterday. We're always on the lookout for new people, so if you think you've got what it takes have a look at our jobs or email us your CV and we'll keep you in mind for future opportunities.

#### **About Cambium Networks**

Cambium Networks enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences, and device connectivity, with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We deliver connectivity that just works.

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