Go Wireless NZ

Orana Wildlife Park Choose UniFi for Public Announcements and Streamlined Communication

Across **50** Acres of Land

Business
Education and IT Manager,
Orana Wildlife Park.

Set within an 80 hectare area, 15 minutes drive from Christchurch Airport Orana Wildlife Park provides the ultimate animal adventure. We get you up close and personal with the animals.

Problem:
Orana Wildlife Park had a unique issue – how to communicate with hundreds of visitors dispersed across 50 acres quickly and effectively in as short a time as possible.

Solution:
A unifi AP public address system that allows for public announcements from wherever you are in the park to the entire park.

Requirements:

UAP-AC-EDU

Nanostation NSM5

Nanostation LocoM5

UAP-LR

UAP-AC-M-PRO

UAP-AC-M

Results:
An impressive network set-up allowing for faster evacuation and greater flexibility in daily presentations.

"By adopting Ubiquiti UniFi's EDU devices we have streamlined communication across our 50-acre public area allowing for general communication to our park visitors for such things as presentation times and impending closing announcements. The system will also prove very useful if ever needed in an emergency."

-Toby Johnson - Education and IT Manager for Orana Wildlife Park

Reasons for the product(s) deployment?

The park has six existing Public Address Systems that are used daily for keeper presentations. Hardwiring to these from the office is out of the question, so wireless/ RF is realistically the only option for Orana.

“As many visitors would be aware, we have already deployed extensive Wi-Fi coverage throughout the 50 acres of public access space (the Park covers over 300 acres). This Wi-Fi coverage is provided exclusively through Ubiquiti equipment,” Toby describes.

UAP-AC-EDU installation

Several agencies were contacted to quote for the installation of a PA system that would utilise the network infrastructure to deliver a paging and announcement system across the Park; for Toby to install Ubiquiti UniFi was the most cost-effective yet flexible option that met Orana’s needs nicely.

“Through a referral from a contact at WiFi Guys Ltd, I learnt about Ubiquiti’s UniFi PA system, and with a few web-searches and email discussions with the team at Go Wireless NZ, I was ordering a test unit of the UAP-AC-EDU to test its capabilities,” recalls Toby.

What do you like about the product/service?

“Out of the box, the devices were straightforward and easy to use and deploy using Power over Ethernet, and the ‘locate’ functionality makes finding the access points a breeze. I particularly liked the ease and speed of scheduling announcements and using the UniFi EDU app as a trigger, recorder and microphone is exceptionally versatile,” explains Toby.
The affordability of the UniFi EDU meant we could achieve what we needed and was a desirable deciding factor.
UniFi also has excellent form factor too, it’s discrete and blends in well with the park’s surroundings.

What do you dislike about the product/service?

“I would like more control over user accounts for the UniFi EDU app, for example; allow users to broadcast but not allow changes to groups,” describes Toby. “You have to use the UniFi EDU app to upload audio files, schedule, set volume etc. I would have preferred this functionality in the UniFi Controller (SDN). For our job, being able to enable the inbuilt microphone would be beneficial to listen/hear people at each station.”

What business problems are you solving with the product and what benefits have you realised?

“By adopting Ubiquiti UniFi’s EDU devices we have streamlined communication across our 50-acre public area allowing for general communication to our park visitors for such things as presentation times and impending closing announcements. The system will also prove very useful if ever needed in an emergency,” Toby reports.

“The new system has given us greater flexibility to inform visitors about daily happenings at the zoo.” Toby continues.
“For example, we can announce impromptu presentations, such as enrichment items being given to tigers, which extends the visit experience. We utilse the system to deliver daily messages such as ‘welcome to the zoo’ and polite references to closing time ‘we hope you are having a great day, please note the zoo will close in 30 minutes so please start making your way to the entrance’. Naturally, the system will prove extremely useful if ever needed in an emergency situation.”

Recommendations for others considering the product:

“Do it,” says Toby. “If you require an affordable, useful communication tool this is it. On an existing UniFi network, this is a quick and easy deployment, especially for indoors.”

UBIQUITI NETWORKS

More Information - The Setup:

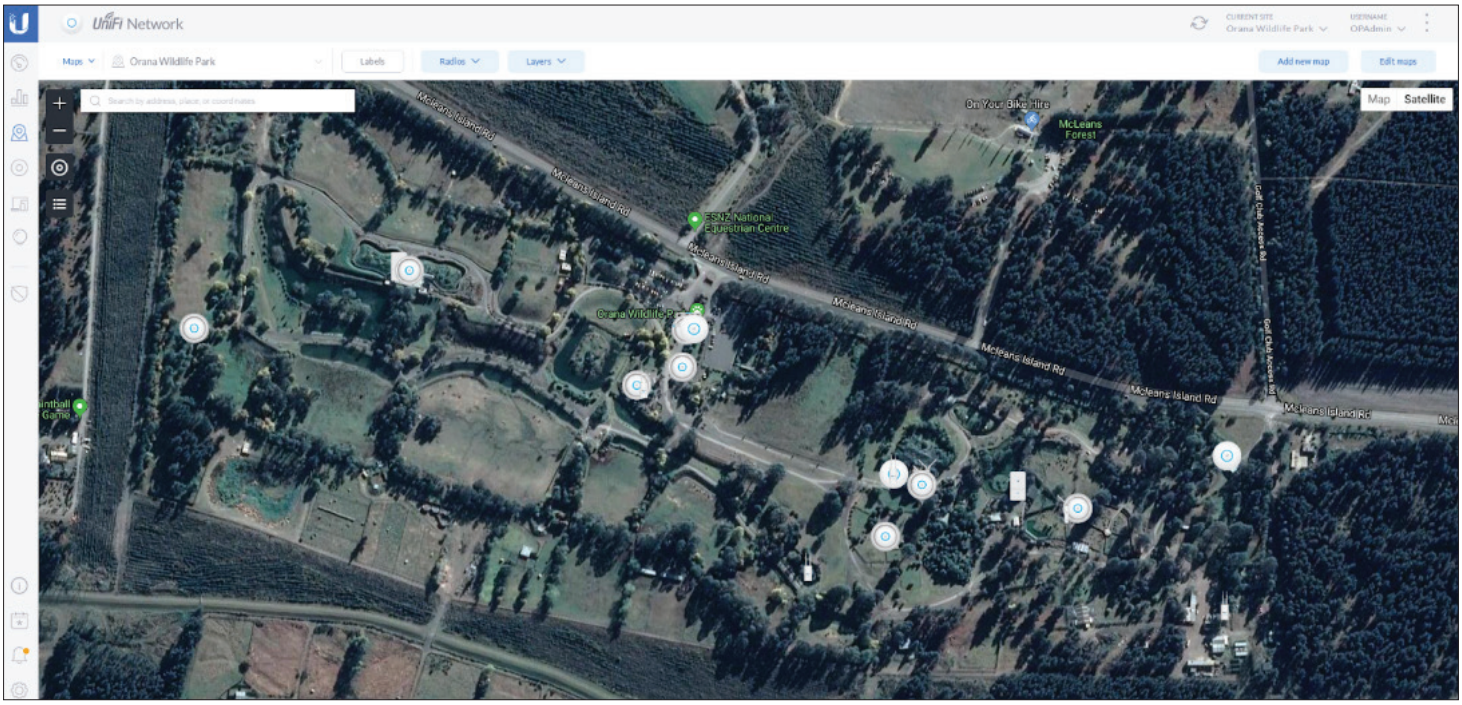
“The parks existing systems were not networked or interconnected so they had to be operated at each of the six sites; a solar powered mic, amp and speaker. What I have done is wire an output from the UAP-AC-EDU to a line-in on the existing amplifier so that (via the UniFi Controller schedule, or the EDU App) all broadcast points are connected to the network.”

From the offices at Orana Wildlife Park are six wireless backbones provided by paired NanoStation M5’s (On some of these backbones are additional pairs of NSM5’s to relay the signal around dense vegetation). Shorter links are provided by NanoStation LocoM5’s. Endpoints are Ubiquiti Access Points – indoor areas generally use the older UAP-LR’s, and the outdoor regions use UAP-outdoor, UAP-AC-M-PRO’s and UAP-AC-M’s (UAP-LR and UAP-outdoor being progressively phased out).

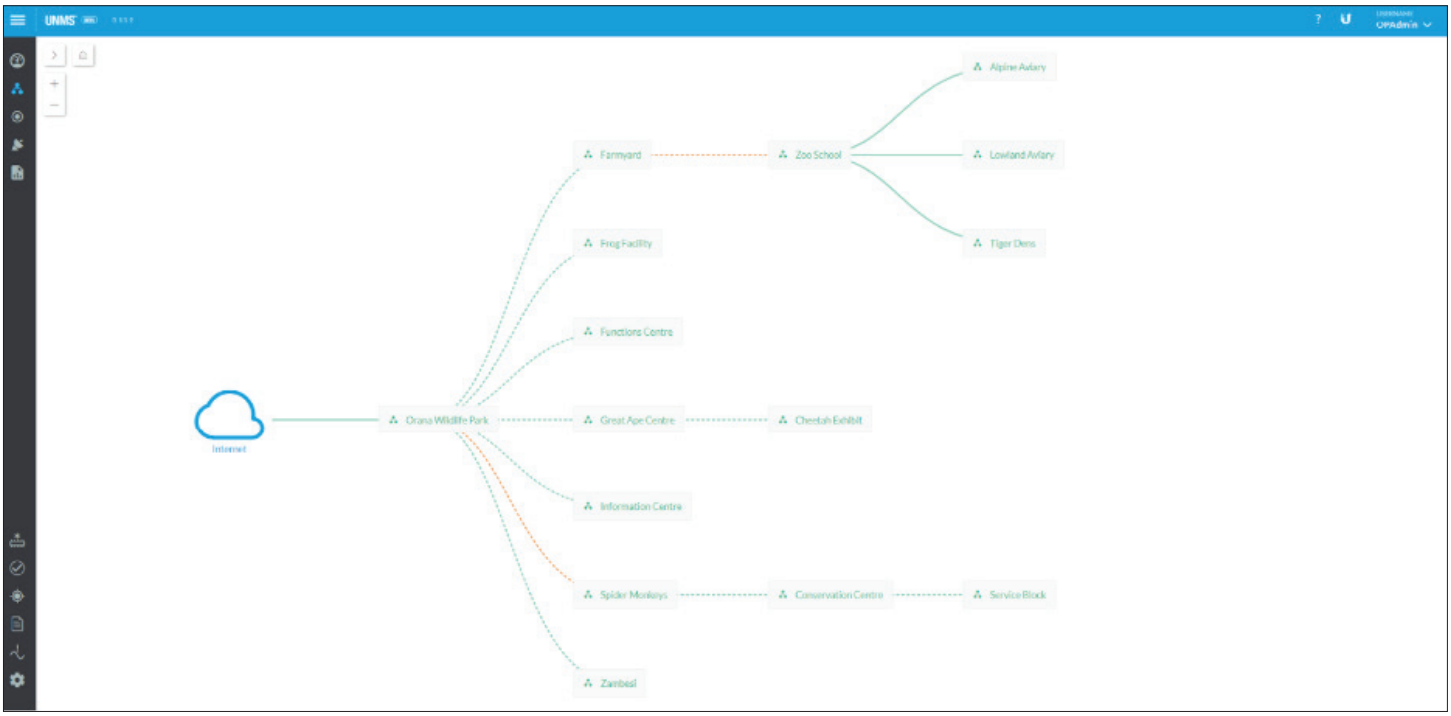
This adds considerable complexity to our network, which Ubiquiti have simplified;

- 20 devices in the backbone are monitored and managed by Ubiquiti Network Management System (UNMS) running on Ubuntu in a Hyper-V Virtual Machine
- 16 (now 20) Access Points are monitored and managed by the Ubiquiti UniFi Controller; currently running on Server 2016 in a Hyper-V Virtual Machine
    - 3 guest networks are managed for upload speed, download speed and data-cap
    - Additional data is purchasable at reception through Hotspot Manager vouchers

Setup diagram



UniFi SDN Controller



UniFi UNMS Structure Layout