

Connecting a Community to Each Other and the World



“As funds for this important connectivity project were limited, we needed a low-cost, low-maintenance connectivity solution that could withstand the environmental conditions of the Australian outback. We have just that with Cambium Networks wireless broadband.”

- DANIEL SACCHERO,
BUSINESS MANAGER,
EASYWEB DIGITAL

AN INNOVATIVE WIFI SYSTEM HELPS NG MEDIA EMPOWER AND CONNECT A REMOTE ABORIGINAL COMMUNITY.



Overview

WINGELLINA OR IRRUNYTJU COMMUNITY IS A

small Indigenous community located in a very remote part of Western Australia. NG Media is an indigenous-owned media organization empowering remote communities like Wingellina through the use of multimedia. They needed a wireless network system to broadcast digital radio services and deliver WiFi access.

NG Media contacted Easyweb Digital to design and construct the network. Easyweb built a system that provides connectivity to the entire community, allowing them to manage portal content and internet connectivity.

Challenge

TO DELIVER SERVICE TO THE COMMUNITY'S REMOTE

location, the connectivity solution had to provide consistently reliable WiFi access at outdoor locations with long-range capability.

“Because of the nature of the network, the solution had to be cost-effective, and require minimal labor and time to install,” said Daniel Sacchero, Business Manager, Easyweb Digital. “The technology had to be reliable to perform in harsh conditions and reduce maintenance and associated labor costs.”

Easyweb Digital provides Public WiFi at over 570 locations across all of Australia, many of them very remote. Familiar with the territory and available technology, Easyweb began to plan the network NG Media needed.

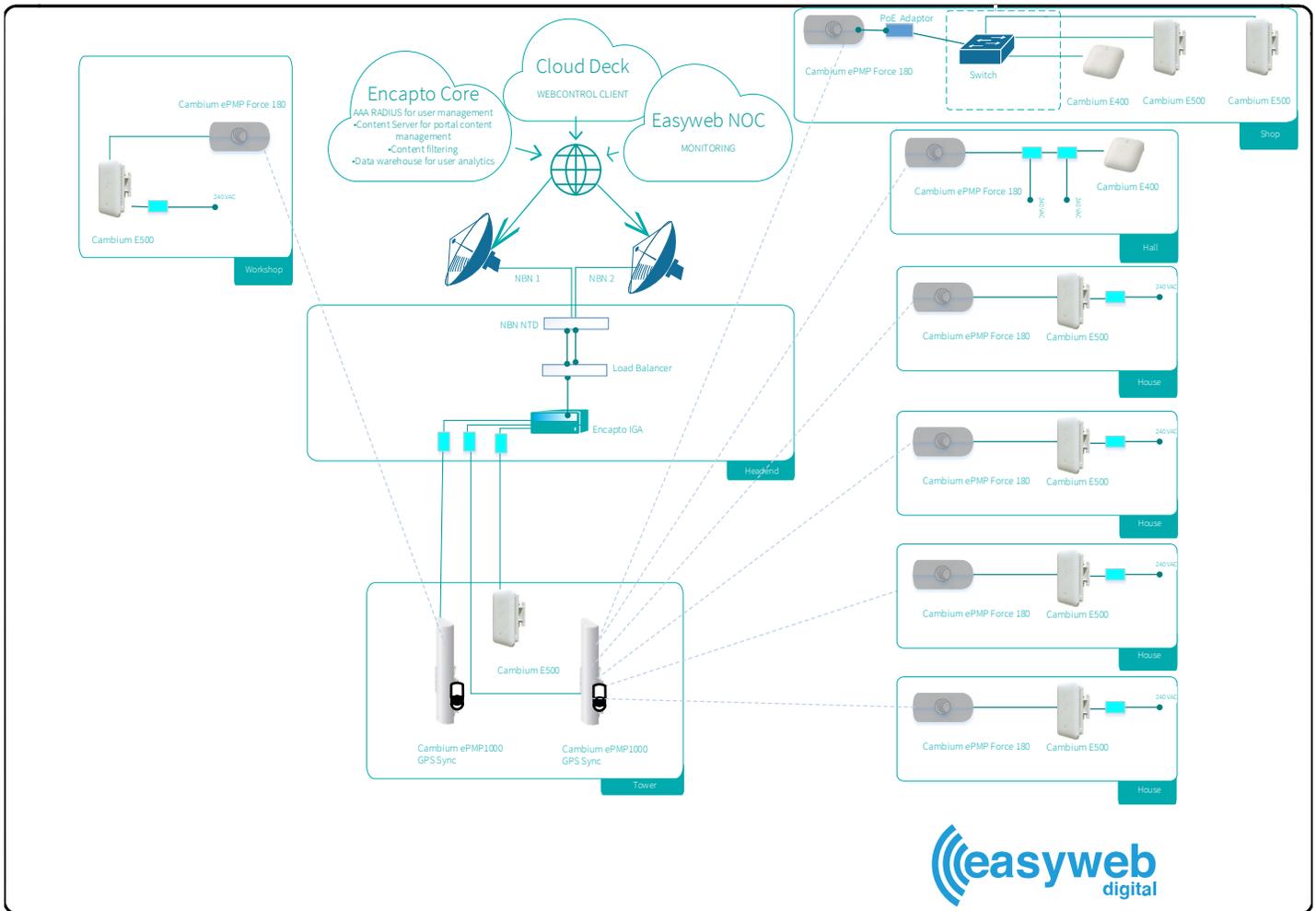


Solution

BACKHAULED WITH A COMMUNITY PROVIDED SATELLITE SYSTEM

connected to the NBN, Easyweb designed and built a network covering the entire Wingellina community. They installed Cambium Networks' ePMP™ 1000 point-to-multipoint wireless distribution network equipment on a centrally located communications tower, providing the infrastructure for multiple cnPilot™ E500 outdoor WiFi Access Points deployed throughout the community. The use of Cambium equipment throughout the system also enabled the entire network to be managed with the cnMaestro™ management system through a single interface.

“We deployed Cambium E500 outdoor access points for WiFi access and Cambium ePMP point-to-multipoint links for the wireless backbone,” says Sacchero. “We have had great experiences with Cambium equipment and the price point made for cost effective coverage of the community.”



WIRELESS DISTRIBUTION

ePMP 1000 Distribution Network Solution	
Frequency	2.4 and 5 GHz
Throughput	100 Mbps in a 20 MHz channel

WIFI ACCESS

cnPilot™ E400 Indoor Enterprise WiFi Access Point	
802.11ac dual band access point with MIMO	
16 SSIDs supporting 256 concurrent users	
Cloud-managed via cnMaestro. On-site controller option available	

cnPilot™ E500 Outdoor WiFi Access Point	
802.11ac dual band access point with MIMO	
16 SSIDs supporting 256 concurrent users	
Cloud-managed via cnMaestro. On-site controller option available	



“Because of the remote location, we wanted to minimize down time, and make remote management as easy as possible,” said Sacchero. “Easyweb is very familiar with Cambium products and we like their capability and reliability. Remote WiFi management with cnMaestro was also an important criteria for this project.”

Results

BEFORE ANY INSTALLATION TAKES PLACE, EASYWEB PROJECT MANAGEMENT HQ TYPICALLY PLANS AND

coordinates access requirements including site induction and permits to enable quick network deployment. This careful preparation facilitated rapid installation at 9 different buildings in under a week.

“NG Media was looking for a multifunctional platform to deliver and manage Internet access to Wingellina community as well as broadcast local digital content straight to a user’s device. Easyweb integrated NG Media’s broadcasting equipment with Encapto’s management platform to manage connectivity and enable community access to NG’s programmes, all from a single location.”

NG Media is able to control its internet usage by setting time and download limits, as well as filter content to ensure appropriate use. Encapto WiFi’s OpenDNS-based content filtering blocks key content categories and sites and redirects users away from inappropriate material.

NG Media’s captive portal displays NG Media branding and important information for users in the community such as links to internet banking, weather forecasts, and council sites. The splash page is fully mobile responsive to display seamlessly across the range of devices used throughout the community, and the intuitive portal builder enables authorized NG Media staff to update content at any time with minimal technical knowledge.

The WiFi Control Panel enables NG Media to access Easyweb network monitoring data and present it in graph and table format. Upload, download, and device type and location are just a few of the metrics accessible via the Control Panel’s user-friendly interface. Easyweb’s Network operations Centre provides full end user support from 8am until 8pm daily, with a manned toll free number that enables users with WiFi questions or issues to access a trained team of skilled engineers for speedy resolution.