Connecting the Nganampa Health Council



Overview

NGANAMPA HEALTH COUNCIL (NHC) IS

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- PHILIP CRAIG OF NEUTEX PTY, LTD an Aboriginal Community-controlled health organization operating on the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands in the northwest reaches of South Australia. The NHC operates seven clinics and the Tjilpi Pampaku Ngura Aged Care facility, administering a wide variety of wellness programs for community members at all life stages, and training future health care professionals.







Unmanaged Wi-Fi from standard ADSL modems & Access Points existed in the NHC system's numerous staff houses, health clinics, Aged Care facility, and two offices. The many doctors and staff who rotate between these remote outback sites needed reliable connection to the internet to access medical data, email, and general communications.

"We average 80-100 users with access to the network via laptops, phones and tablets – but we also faced the big problem of Wi-Fi keys being leaked to non-staff members, which often resulted in large data downloads and bandwidth degradation to our critical services", explains NHC's IT consultant, Philip Craig of Neutex Pty, Ltd. The task of managing all those connections was eating up IT support time. This, along with generally substandard coverage, prompted NHC to consider a total network upgrade.

As a not-for-profit organization, Nganampa needed a solution that not only fit a tight budget, but also enabled users to roam within the clinics on the one SSID, authenticating from any location in the organization to the council's in-house RADIUS server. After a Cambium product night held by BluechipIT in Adelaide, and trialing a couple of test units, NHC purchased 68 cnPilot e400 Indoor Access Points to connect the bulk of their sites, and four cnPilot™ e500 Outdoor APs to extend coverage to the mobile dental unit that rotates between the clinics. "Unlike some other vendors whose license fees would bankrupt a small country," Craig explains, "Having the cnMaestro™ management portal included in the solution was a massive plus in our decision to rollout the Cambium system."

cnPilot Indoor Enterprise Wi-Fi Access Point Portfolio								
Model	Standard	Frequency	SSID	Max	Technology			
				Users				
e600	802.11ac wave 2	2.4 & 5 GHz	16	512	4x4 MU-MIMO			
e410	802.11ac wave 2	2.4 & 5 GHz	16	256	2x2 MU-MIMO			
e400	802.11ac	2.4 & 5 GHz	16	256	2x2 MIMO			

cnPilot Outdoor Enterprise Wi-Fi Access Point Portfolio							
Model	Standard	Frequency	SSID	Max Users	Coverage		
e500	802.11ac	2.4 & 5 GHz	16	256	360° omni		
e501S	802.11ac	2.4 & 5 GHz	16	256	120° sector		
e502S	802.11ac	2.4 & 5 GHz	16	256	30° sector		

Installation in the Outback clinics, houses, and Alice Springs Office took about 10 days (see map).

Remote management and monitoring of the network have been the most significant improvements for the NHC, saving both time and costs. Also the coverage is far superior – leaving no dead spots. Another major practical benefit is the ability to use RADIUS secured phones in the clinics (most of the APY lands lack 3G or cellular service), which enables doctors to reach patients remotely, such as using a smartphone camera to send a photo of a wound to a doctor for diagnosis and subsequent advice.

Phillip Craig's summary of Cambium's impact on the NHC is simple and satisfied, "The cnPilot range has given us exceptional value, coverage performance, and Wi-Fi management capability. It has reduced our support costs, increased our network access security, and given NHC users a better experience across our sites."







