

# Case Study

**TCA Online, Camperdown, Vic.  
Rural Wireless ISP**

Camperdown businessman Rob Van den Eynde doesn't get too far along the town's elm-lined main street before he receives a friendly "gedday" from a satisfied customer of his thriving regional wireless ISP business, TCA-online. Boasting beautiful 19th century buildings and an iconic Gothic clock tower, the prosperous small township in which Rob is based nestles amidst the conical hills of Victoria's Western volcanic plains; discretely dotted atop these hills are 9 base stations that bring wireless Internet to more than 300 households in the town and the surrounding district.

Each base station relies on a pair of Mikrotik routers from DuxTel to connect to a core Mikrotik router at the heart of the network while another pair of routers link to the Internet backhaul feed: a series of microwave hops to Melbourne 200 Km's away.

Not only is TCA's core network reliant upon Mikrotik hardware but many customers are being migrated to RouterBOARD CPE (Customer Premises Equipment) that is supplied with integrated antennas and pre-configured software from DuxTel's Geelong headquarters. "We were pioneers in this area" says Rob, "There was no book that said, 'this is how to build a wireless ISP' and we experimented with a lot of different hardware before we were introduced 5 years ago to Mikrotik hardware and the DuxCommander management platform. The hardware is easier to program, to manage remotely and it's more flexible allowing us to swap in different radios for longer links or to penetrate obstacles such as foliage and the configuration, management and discovery tools are superior. There is no better product".

In common with many regional and rural areas the long distances and limited infrastructure hamper the delivery of data over the copper wire network. Prior to TCA Online many on the land resorted to expensive satellite systems for timely access to data essential to managing a modern agri-business. Indeed the geology of the fertile volcanic plain itself presents a unique challenge to the provision of even basic telephone services as the tough rocky terrain makes laying cable impossible in some areas.

Early settlers used the stone as a raw material to create a network of remarkable dry stone walls readily seen from the Princes Highway between Camperdown and neighbouring Colac and TCA Online has brought cost-effective high-speed Internet access to these outlying homesteads for the first time. "Probably our greatest success is bringing Internet access to the people in the rocks" says Rob.

The bright and spacious premises from which Rob operates TCA Online and his Leading Edge Computers and Telecoms franchise give no hint of the tragedy that befell his business in 2008 when the original building was destroyed by fire. On the phone to DuxTel as the remains of the shop still smouldered, a strategy was devised to restore Internet access to anxious customers. While Rob rigged a temporary core router on the roof of the video shop next door DuxTel founder Mike Everest remotely bypassed the Radius authentication servers destroyed in the fire. Rob laughs as he recalls customers' disappointment as their fortnight of unrestricted access came to end once the administration systems were fully re-established.

Rob has always found DuxTel a responsive supplier open to customer feedback and keen to incorporate new features and suggestions. "Duxtel adapted their software to integrate with my payment gateway and to automatically email invoices to clients saving me an enormous amount of time on end-of-month billing and payment processing. I can easily answer customer usage queries, set up new customers and reset passwords, suggest better plans, see invoice histories and calculate excess data fees".

However Rob attempts to minimise excess fees by using a DuxCommander feature he requested called "Predict" that allows him to warn customers who are in danger of incurring excess fees based on their current usage pattern. "I'm a small business and it's a small town. I would rather save customer's money by moving them to a more appropriate plan than charge them excess fees. I go out of my way to support my customers and DuxTel's support, backup and knowledge is invaluable to me".



Solar-powered base station overlooking the picturesque Western Victorian town of Camperdown.



Rob Van den Eynde of TCA Online at hilltop base station

"Mike is a legend in the industry, he knows exactly what he is doing and DuxCommander makes management easy because everything is so clear. We wouldn't have got this far without DuxTel's great support. They stand behind their product".

**Rob Van den Eynde**