Case Study
Mowanjum Community
Wireless Internet for a remote community

10 km South East of Derby
In the Kimberly region of Western Australia
Within the Shire of Derby-West

http://www.mowanjum.crc.net.au/

"We believe that what we have done can be repeated at other remote communities."
- Client

About the Client

Mowanjum is a medium sized Aboriginal community, located 10 km south east of Derby in the Kimberley region of Western Australia.

The Mowanjum Community was established as a mission of the Presbyterian Church in the late 1800s. The most recent living area was established in the mid-seventies, following government requirements for additional land for the Derby Airport.

Strong links to the traditional country have been preserved and the numerous outstations, including Pantijan and Kunmunya are directly linked to both European and traditional history. Mowanjum's outstations are under Mowanjum Community management.

The Client's Requirement

The client required an internet system as a means for the community to share the cost of an Internet connection, and hence to make Internet access affordable to the residents in the community.

The project was initiated by the "Floreat mob". Floreat is a suburb of Perth and the Uniting Church in Floreat has a group (the Floreat mob) who are working with the Mowanjum community. The Floreat mob had been given 40 old desktop computers and they had an idea that they should put these computers into homes in Mowanjum so that the local residents could become computer literate, and enjoy the benefits of the Internet, such as Internet banking, from their homes.

Floreat mob approached Arinda Internet and asked for Arinda Internet's assistance to help them design a wireless network throughout the community. Before approaching Arinda, the initial assessment was that the concept was not feasible because the wireless networks would not have enough coverage.

The client secured a State Government grant to establish a Telecentre within the community, and identified a building that could be used to house the new Telecentre.

Arinda's Solution

Arinda supplied a Surf Easy Indoor Standard Wireless Hotspot and two Surf Easy Outdoor Extreme Wireless Hotspots. The indoor hotspot is used inside the Telecentre, while the two Surf Easy Outdoor Hotspots provide coverage to the houses in the community.

The client had some difficulties finding a local installer who had worked with wireless antennae and had an understanding of the requirements for the coax cable installation. But with remote assistance from Arinda, the installation was successful.

Signal Coverage

After the equipment was installed, the client drove around the community with a laptop, a wireless USB adapter and a parabolic dish (a noodle stir fry dish!) and tested the wireless signal coverage. (They did get some strange stares from some of the houses as they drove around with their strange looking test equipment). To their amazement they had good signal nearly to the Arts Centre approximately 1 km away.

Arinda's wireless hotspots provided 70-80% coverage of the community, which was far beyond the client's expectations (they had anticipated having to install several repeaters). Wireless signal coverage over such a large area with minimal equipment was possible because the land is dead flat, with no signal interference, and with only small and medium vegetation.

The only place they did not have a good coverage was where the signal was blocked by trees close to the external antennae. This was unavoidable, and can be resolved by placing a second external antenna at the nearby Administration building should the need arise.

Usage

The wireless internet service has been so popular that the client had to double the number of laptops in the Telecentre from 10 to 20 in order to keep up with the demand.

"I really appreciated the assistance which was top class – Arinda had step by step trouble finding procedures that quickly homed into the problem. I have been in the computing industry since 1971 and can tell you from experience your support was as good as it gets. Thank you."

– Ian Wiese

Contact Us

If you would like a similar wireless internet solution for your remote community or property then please contact Arinda Internet on 1300 882 780.