

Connecting Sarawak of Malaysia to the World

With an aim to accelerate the broadband Internet penetration rate, in line with the Sarawak State government's initiative to nurture a knowledge-based economy, Danawa Resources has officially launched its free WiFi services to Sarawak residents in January 2008.

Danawa Resources is the leading Internet Service Provider in Sarawak to offer ubiquitous wireless Internet connectivity. In line with the Sarawak Government's vision to increase the household broadband penetration rate from the current 1.3% to 50% by 2009, Danawa offers wireless broadband via the DeConnexion WiFi service around the state. Major cities such as Kuching, Miri, Sibul and some other towns in Sarawak are chosen for this pilot project.

To blanket the city with coverage at minimal cost, fewer access points is expected to be installed per square kilometer so as to keep the cost low. Altai's A8 WiFi cellular base station was selected to serve as the foundation to improve the economy and lives of citizens and businesses in Sarawak due to its superior coverage, high scalability and low total cost of ownership.

The project is divided into different phases. In the first phase, 13 major cities such as Kuching, Miri and Sibul have installed Altai A8 base stations all over the major areas to provide seamless wireless broadband



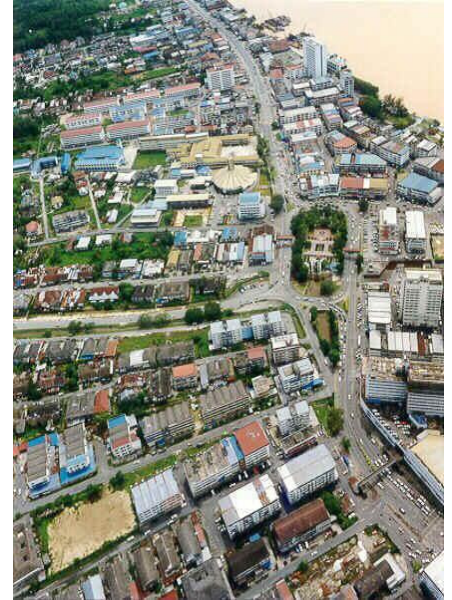
coverage. The coverage spans from 500m to 1km within the public areas and inside the commercial building.

With Altai metro-scale WiFi solution, the conventional WiFi hotspots which provides a very limited coverage on a fixed location can now be extended to a wider coverage using similar IEEE 802.11b/g standards commonly found in devices such as laptop, PDA, mobile phones and others. Residents of Sarawak can now enjoy unlimited Internet speed of up to 384kbps and this service is provided for free for a period of 2 years and it is accessible to over 250,000 users. After 2 years a minimum amount will be charged at an affordable price.

Danawa Resources will stretch its plan to other cities and rural areas focusing on the rural schools and local community centers in Sarawak. The whole project is expected to be completed by mid 2008.

About Sarawak

Sarawak is situated on the island of Borneo, and is one of the two states that make up East Malaysia. Sarawak and Sabah are separated from West Malaysia (Peninsula Malaysia) by the South China Sea about 600 km away. With an area of 124,449.51 square km, Sarawak is the largest state in Malaysia, making up some 37.5 per cent of the country's total area.



Requirements

- Cover major areas of each city
- Flexible antenna deployment for various site conditions
- 802.11b/g coverage for the city center and main streets
- Ease of deployment

Solution

- Altai A8 base stations have been installed in 13 cities such as Kuching, Miri, Sibu and some other cities for providing seamless city-wide WiFi network
- The Altai A0 WiFi bridge complements to A8 base station to form the point-to-multipoint wireless backhaul

Benefits

- Latest affordable technology for immediate deployment with future scalability to include content and application
- To accelerate the penetration of household broadband throughout the state
- To bridge the digital divide gap between the rural and urban areas, in particular the rural growth centers
- Enable users to access wireless network with their laptops, PDAs, WiFi-equipped smart phones