

High capacity SAF-CFQ system providing QoS for AgFirst in New Zealand

“Link capacity has now increased ten fold, reliability and QoS is good and the performance of the link is exactly as was promised by SAF.”

Paul Horak
Managing Director
Fast Data Solutions Ltd.

SAF CFQ systems provide the following services for AgFirst Bay of Plenty:

- Ethernet for Internet services

Advantages:

- Quality of Service (QoS);
- Cost effective solution
- Full service through local partner

Partner: Fast Data Solutions Ltd.
Customer: AgFirst Bay of Plenty Ltd.
Location: New Zealand
Industry: Agriculture
Challenge: Increase quality and capacity of an existing system
Solution: 155Mbps SAF CFQ-IDU
SAF CFQ-ODU 13 GHz

AgFirst Bay of Plenty (BOP) is a member of the national AgFirst New Zealand group of consultants spread throughout the country providing a range of agribusiness services including: Agricultural Consultancy, Environmental & Structural Engineering and Horticultural Consultancy in other crops. AgFirst BOP has diversified to provide numerous horticultural data capture services to grower, packhouse and industry bodies, such as comparative reporting, crop estimation and maturity monitoring. Amongst other projects Agfirst BOP collect and process samples from every Zespri Kiwi fruit orchard in New Zealand.

Challenge

AgFirst BOP is situated in Katikati, Bay of Plenty, the heart of Kiwi fruit country. A 5.8GHz solution using Public Park spectrum was in place prior to the SAF upgrade. This solution was half-duplex and relatively low capacity. Quality of service was also more difficult to guarantee without the protection offered by using a licensed frequency. The distance between the sites is about 40km and fibre-optic would be prohibitively expensive. Also, the area between the sites is largely rural and it is poorly serviced by most telecommunications companies.

Solution

The decision was made to use microwave radio links. SAF CFQ links were used to provide connectivity between Agfirst's main laboratory in Katikati and an internet data centre in the neighbouring city of Tauranga. Agfirst BOP runs a sophisticated network of databases and online applications which are key to the company's operations. The Tauranga based data centre holds off-site backups, as well as replicated databases and servers which are designed to operate the critical aspects of Agfirst's business in the case of disaster at the Katikati site. SAF links also provide primary internet feed for the web server farm located in Katikati. SAF Tehnika has provided the complete package through its local partner Fast Data Solutions Ltd which is a specialist wide area networking company in New Zealand. The provided full service package included license acquisition, engineering, installation and after sales support.

Katikati - Tauranga network topology



Katikati - Tauranga network

- Link distances: up to 25 km
- Previous radio system: half-duplex 5.8GHz solution using Public Park spectrum
- Capacity of previous link: 10Mbps
- Reasons for replacement: capacity limitation, frequency used was in the unlicensed band
- Services provided by SAF CFQ system: internet access and off-site disaster recovery
- Quantity of CFQ links: 3
- SAF equipment used: CFQ-IDU & CFQ-ODU
- Link Bandwidth: 13GHz
- Capacity: 155 Mbps

Fast Data Solutions Ltd.
Level 2, 1 Elizabeth Street,
Tauranga, New Zealand
Phone: +64 7 9289100
E-mail: shane@fastdata.co.nz

■ SAF Tehnika AS
24a Ganību dambis, Rīga, LV-1005, Latvia
Phone: +371 67046840
Fax: +371 67046809
E-mail: info@saftehnika.com
www.saftehnika.com