



Building to Building Data/Voice Communications

Case Study – Southern Grampians Shire Council

The Shire

Southern Grampians Shire Council was formed in September 1994 by the amalgamation of the former Shires of Dundas, Mt Rouse, Wannon and the City of Hamilton. It is located in the centre of the Western District of Victoria, 290 kilometres west of Melbourne and 500 kilometres south east of Adelaide.

The Shire has a population of 17,000 and covers an area of 6,807 square kilometres. Hamilton is the main retail and service centre supported by the nine smaller towns of Balmoral, Branxholme, Byaduk, Cavendish, Coleraine, Dunkeld, Glenthompson, Peshurst and Tarrington.

With a landscape dominated by the spectacular Grampians mountain range, ancient volcanoes, tranquil rivers and waterfalls and undulating pastoral land dotted with majestic red gums, the Southern Grampians spans the heart of Victoria's renowned 'Western District'.

WAN Upgrade Project

Prior to the most recent WAN upgrade, the Shire was utilising a mix of technologies ranging from aDSL private IP networks, to SOHO style 802.11 radio and laser links.

In February 2006 the Shire replaced some of its aging infrastructure and also implemented links to two new sites, based on Wave1 1000 Series class licence point to point QOS capable equipment. Due to geographical terrain challenges, multiple hops were required to get connectivity between the Business Centre where the servers are housed and some of the remote sites. Wave1 performed all of the line of sight surveys and designed the microwave WAN in such a way that connectivity was achieved using only the Council's own sites and negligible size antenna masts. This resulted in cost savings to the Shire and substantially shortened the time required to complete the project.

At this time, the Shire also implemented a new PABX system which communicated to the remote sites via VOIP using the new WAN. This system worked flawlessly over the new microwave infrastructure.

In October 2006, the Shire implemented two more WAN links based on the same Wave1 platform, thus completing the upgrade of its WAN to the latest technology.

The total cost of the two projects was approximately \$60,000 and has increased the Shire's usable WAN throughput allowing the IT team to implement new online systems in a low latency environment.

Benefits

The new microwave WAN provides the following benefits to the Shire:

Data Network:

- Uniform high speed network access, login scripts, access to applications and data, regardless of location, resulting in an improved utilisation of available resources
- Consolidated IT infrastructure and support services, consolidated backup of distributed information back to Business Centre, resulting in reduced operating costs
- Network performance sufficient to run response sensitive applications such as Aussoft's Community regardless of location
- Efficiency gains through utilization of corporate applications at remote locations
- Single Internet access to the entire network resulting in better internet bandwidth utilisation and reduced operating costs

Telephone Network:

- Free internal telephone calls between Shire's sites resulting in reduction in operating costs
- Integrated "virtual" PABX features, ability to dial extensions at different sites as if they were local, flexibility in call handling and other PABX features such as voicemail and direct dial

Contact Details

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Southern Grampians Shire WAN

