



## <<< Real-Time Snow Making Control System

Snow making in Australia's Alpine Resorts presents yearly challenges in maintaining an attractive snow base for a short and climatically unpredictable ski season. In order to prolong operational cycle, Australian Resorts utilise significant resources in snow making and grooming activities.

The management of snow making equipment is a complex challenge, with approximately 80 snow guns in operation at any one time, and all controlled by a single snow making technician. Each gun requires constant tuning of water and air flow to make the ideal snow mix, dependent on prevalent weather conditions.

VPAC was commissioned by Falls Creek Resort Management to develop a Real Time decision support system to support operations management in snow making and real-time information display. The application is based on the resort's pre-existing enterprise database platform. Information from snow making equipment and weather sensors is collected and processed in real time using SQL queries. Resultant metrics relevant to snow making process are presented to the operator in real time, providing information to refine the SCADA control water /air mix for each snow gun.

VPAC were contracted to develop this application due to expertise in Real-Time application development using SCADA, RDBMS and GIS technologies.

The application successfully collects, processes and visualises large volumes of complex information, allowing for better and more timely decision making. This ultimately yields an optimised system with lower net power and water consumption.

The use of the corporate RDBMS for storage and processing yielded cost savings in application development and storage, and, delivered the benefit of a stable platform with regular archival.

For further information regarding the Falls Creek Snow Making Control System or to learn more about VPAC's expertise in Spatial Information applications development, please contact Suda Ramachandran at [sram@vpac.org](mailto:sram@vpac.org) or 9647 5435.

The project objective focused on developing a software application that integrated a real time spatial database for monitoring and controlling snow making systems at Falls Creek Ski resort, Victoria, Australia.

The project leveraged the Company's enterprise Relational Database (RDBMS) platform to collate and store snow making and weather data, and interfaced it with real-time data analytics and thematic display developed using the popular GIS package MapInfo.

The application environment delivers an intuitive real-time interface to allow snow making staff to optimise the use of power and water dependent on weather conditions.

