

CurrentAffairs

News and views from Ergo Consulting Ltd

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The changing face of SCADA



We are in a connected world where people expect instant information; this has changed the face of SCADA systems. These systems started out as simple human-machine interfaces to monitor equipment from local or remote control rooms. This evolved to remote access via laptops, and now via mobile phones and tablets. With minimal

effort, today's user can quickly monitor multiple sites over large geographical areas from virtually anywhere.

Ergo recently completed an upgrade for a council in the Waikato using the latest SCADA technology. This delivered remote access via mobile phones and iPads; virtual machines with hot-standby redundancy; a standardised look-and-feel; the ability to monitor any treatment plant from each of the other plants; redundant alarm systems; and centralised third party data collection/integration for compliance reporting.

In our experience, the following are some key considerations in SCADA system design:

1. Data – defining what is actually required. While the need for centralised data is increasing (due to statutory compliance, network modelling and process reviews), data overload causes information to lose meaning and value.
2. System architecture – planning the structure from field to screen. This needs to consider quick access for users, ease of modification and system scalability.
3. Clear displays – ensure operators focus on the important data.
4. Cyber security – protect against external attack. This is a by-product of SCADA's connectivity to the "world".



Nigel Stevenson

Director - Control systems

SCADA - Supervisory Control And Data Acquisition

Union Square

Ergo has recently implemented Union Square, an integrated information management system specifically designed for professional services businesses. This has been a significant but necessary investment for a company very much in growth mode.

Modular system

Used by over four hundred companies in 15 countries, Union Square improves the management of business data in a secure environment and automates previously manual processes. The modular system incorporates document management, resource planning, customer relation management, invoicing, project accounting and project management. Together these modules create a platform for knowledge and information, readily accessible and easily shared across a business.

Best fit

Ergo adopted Union Square after identifying that our existing systems lacked sufficient integration. The ongoing growth of the company meant some systems were near capacity or no longer the best fit.

Implementation

Sarah Montford, newly promoted to the IT & Quality Systems Administrator role, received extra training in Union Square to take on the responsibility of Senior Implementer. She is very happy with the product and process of implementation. Sharing her enthusiasm, director Chris Turney comments "we've implemented many software packages in the past but rarely found the promise matched the cost. Union Square has been fantastic. Because I see the benefit, I want to use it. The training I've received along with the engagement of the implementation team means I know how."

Benefits

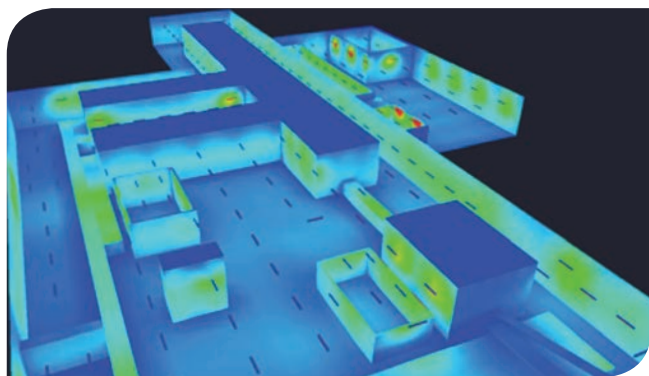
Ergo's clients will benefit from more accurate time frames, better project transparency and more rigorous quality assurance. "The system is intuitive and has the capacity to support Ergo's future growth," says Sarah. "It's user-friendly and well supported. Union Square will definitely enhance our quality systems and efficiencies."

Industrial Lighting

The lighting system is a key part of industrial installations. Overlooking its importance or failing to comply with relevant standards and regulations represents a risk to health and safety and can make the work environment less efficient.

Regulatory environment

Lighting systems are covered by Australian and New Zealand Standards (AS/NZS) and the New Zealand Building Code (NZBC). AS/NZS 1680 recommends interior light levels, and provides the basis for a safe and healthy workplace. Emergency lighting is essential for new or refurbished buildings, and NZBC Clause F6 mandates minimum light levels for escape routes during a main lighting system failure.



Lighting model using AGI32 software

Good design

Good lighting design will use appropriate technology, ensure suitable light levels and control for spill light and glare. The benefits are improved workplace safety, reduced capital and operating costs and reduced impact on the general public.

Ergo's role

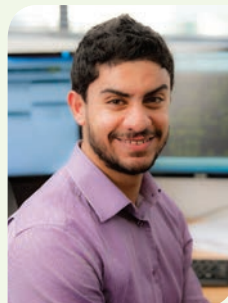
Ergo has recently provided lighting solutions for clients Red Stag Timber and Hauraki District Council. We use specialist modelling software AGI32 to ensure compliance with standards and cost effective outcomes.

New @ Ergo



Alan Barrow

Alan joined Ergo in August in the role of Technical Specialist – Protection. Alan enjoys a collaborative work environment, and will be working closely with Steve Timmins (Power Systems' existing protection specialist) and Maria Kobe. Alan has almost forty years' experience in protection, mostly in South Africa. Since moving to New Zealand in 2006 he has quickly made a name for himself. Before joining Ergo he worked for Vector Auckland in various roles - as a protection engineer, team leader and secondary asset development manager.



Peter Ataallah

Peter joined Ergo in July as an engineer in Control Systems. Since he graduated from Massey University (BHons Mechatronics) he has worked mostly in the Oil & Gas sector for multidiscipline engineering consultancies WorleyParsons and ITL Engineering. Peter has worked on large projects such as New Zealand's first underground gas storage facility. He is experienced in hazardous area electrical design and classification, instrumentation specification, control valve specification and sizing, PLC/DCS design and low voltage electrical design.

Email option. Some clients have told us they prefer an email newsletter over a printed one. If this is you, simply send an email to enquiries@ergo.co.nz with 'Please Email Newsletter' in the subject line.

Ergo News

www.ergo.co.nz is currently undergoing a transformation. Watch this space as we overhaul our current website – including new photos of all our photogenic staff.

Resident extreme sportsperson, Richard Charles, is planning his next big adventure for 2017. Watch this space for what might be one of the craziest ideas you may have ever heard of.

Congratulations to Power Systems Engineer Soumya Sridhara on her engagement to partner Liam. The tentative wedding date is early 2016.

