Air Liquide Case Study

Inner Range Concept/Insight Platform. Document Updated 18-03-2014

Situation

Founded in 1902, Air Liquide is the world's largest industrial gas company. With over 50,000 employees in 80 countries, Air Liquide specialises in the production of industrial gases such as oxygen, nitrogen, carbon dioxide, argon, hydrogen and various others. Air Liquide service the industrial, healthcare and environmental sectors.

Due to the nature of their business, Air Liquide face very unique security and safety challenges. Immediate situational awareness is critical to the operation of the business. With sites that spread across large areas and include heavy plant machinery and 1000's of gas cylinders, it is imperative that Air Liquide know the exact location of staff and the safety status of the entire site at all times.

Task

Security integrator, Seneschal, were contracted by Air Liquide to provide an audit of one of their sites in Melbourne, Australia. The report highlighted several key areas that needed to be addressed to improve their security and safety. The following strategy was suggested: consolidation of disparate intruder detection systems, extension of the access control system, new mobile duress / man-down / lone-worker / personnel tracking system, installation of a perimeter electric fence, installation of an electric gate, improvement on monitoring plant alarm conditions and all of this needed to be integrated into a single security management system.

Action

Air Liquide accepted the recommendations and Seneschal chose the Inner Range system comprising the Concept 4000, Multipath alarm reporting and Insight system management software. Despite the daunting challenge ahead, Seneschal were confident these proven products from Inner Range could meet the requirements.

Seneschal began by replacing various disparate intruder detection systems with the single Concept 4000 that would monitor the entire site. This alone provided an immediate cost benefit from a facility management perspective but also by reducing alarm monitoring costs; now there was only one source of alarm reporting. As an integrated intruder detection and access control platform, Concept was also extended to provide access control to buildings that never had access control before. A new front gate with access control was installed along with Microlatch RF fobs for remote access, all controlled by Concept. The electric fence was interfaced into Concept so any alarms would be reported through Concept. The same was true for the fixed pull-lever duress system and plant monitoring sensors.

The final piece of the puzzle was the installation of the "Eko Tek" mobile duress system. More than just mobile duress, however, Eko Tek includes man-down, lone-worker alarm and personnel tracking features. Using a wireless mesh network, workers carry Eko Tek pagers that track their physical location and report this location along with any alarms to the Insight system management software via a dedicated TCP/IP high-level interface. Seneschal were able to make use of new and existing cabling infrastructure for the Concept network. Segments of the Concept LAN were run over existing twisted pair RS-485 cabling, newly laid fibre optic and also TCP/IP using the Concept LAN Over Ethernet modules. This resulted in tangible cost-saving for Air Liquide.

Results

The security and safety managers at Air Liquide no longer have the burden of dealing with multiple disparate systems, each system with their own peculiar requirements. Overall security and safety have now been dramatically increased due to the installation of a modern integrated security platform that provides accurate real-time reporting. This project has served as an excellent template that has already been deployed at several of their other sites in Australia, with potential for many more. Seneschal report, "Air Liquide is thrilled with how everything has come together and how easily staff can view its entire security framework from a single graphical user interface using Insight".









