Case Study

Terminals Pty. Ltd.

One of Australia’s largest independent bulk liquid terminalling company opts for an advanced access control solution to protect hazardous petrochemical site

Located in Melbourne, Australia, Coode Island is one of Victoria’s major bulk liquid storage facilities. Supplying over 400,000 tons of hazardous and non-hazardous chemicals yearly, Terminals Pty. Ltd. (Terminals) is Australia’s largest independent bulk liquid terminalling company, receiving liquid products by pipeline from ships, and storing them in the approximately 70 tanks throughout the premises. Terminals shares Coode Island with other bulk liquid storage facilities.

Business challenge

With a total capacity of almost 27,000 m³ of hazardous liquid storage space, Terminals wants to always ensure the most effective security solutions are used. As a well-established and highly respected hazardous chemical storage and distribution facility, Terminals took on the challenge to ensure the highest level of security was maintained for the safety of all employees and nearby residents. The bulk chemical storage company insisted on having the premises manned with security personnel 24 hours a day and hired security staff to stand guard on the facility grounds and to monitor the alarms which were automated in case of fire, intrusion, plant or process malfunctions by local systems. In the event that an alarm did go off, security guards would react as required, alerting Terminals management who would take the appropriate action. Although it ensured that action would be taken immediately, this vague and old fashioned process was costly since guards were being paid around the clock; not to mention it also opened the door to one inevitable possibility: human error.

Additionally, through the use of a standard access control system, Terminals facility operators monitored movement through the site by those with access to the perimeter such as staff, contractors, and visitors. Although this solution was put in place to secure the premises, the system itself was as basic as the manned surveillance solution which they utilized. This localized system did not have high-end administrative capabilities, which could provide authorities with consolidated security information from the various systems and alarm processes in place. With users having to manage many different system functions independently, operational efficiency was not being maximized.

Thus, to ensure the safety of residents and employees, protect all assets, and potentially decrease operational costs, Terminals authorities knew that a more forward-thinking security solution

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Although Terminals initiated the project with a well-known IP-based security system, it wasn’t long before it failed the acceptance test. Due to limitations in the existing solution for unifying video, access control, and input monitoring, it was simply not reliable enough for the government to approve the switch from a manned to electronic system. At this point, Terminals officials were recommended to use Genetec’s IP-based access control solution, Synergis. Since they were replacing another head-end interface and wanted the pre-installed hardware to remain in the field, scalability and open architecture were very important when considering Synergis as a replacement.

Stressing high-end administrative functionality, and advanced system integration, this IP-based access control solution passed government regulations without difficulty and Terminals security officials were pleased to know they had found a solution to meet their stringent demands in Synergis.

The perfect solution
Not only did Synergis outperform the previous system, with seamless integration capabilities, it acted as a unified security interface for all other systems including Genetec’s IP video surveillance solution, Omnicast. Reacting to breaches throughout the premises through microphonic detection, 16 pan-tilt zoom cameras were originally installed, which are now all controlled by Synergis’ event/alarm management feature. Thus, Synergis’ Security Desk application consolidated video, audio, access control, secondary fire annunciation and process detection information to generate intelligent alarms which security personnel at Terminals could immediately act upon. To date, there are approximately 180 types of alarm inputs that function through Synergis, giving Coode Island officials the advanced surveillance capabilities they requested originally for overall increased operational efficiency.

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would be extremely beneficial. It was at this point in time that Terminal Pty officials were referred to Integrators Australia.

**Terminals Security needs**
With other similar bulk liquid storage facilities around Australia, Terminals authorities wanted to be able to grow the system with their expanding infrastructure.

More than an electronic solution, Terminals was in need of a system which would allow security operators to effectively manage the many different independent systems which were currently deployed on site. Thus, they were in search of a system which could provide complete integration of their various systems. Also, with other similar bulk liquid storage facilities around Australia, Terminals authorities wanted to be able to grow the system with their expanding infrastructure. Similarly, they wanted to leverage this new technology for remote operations such as receiving remote access and remote notifications and alarms. Once these goals were understood, an electronic system with IP capabilities was recognized as the best fit in this application.

With years of experience in managing the design and construction of security systems, Dean Monaghan, Managing Director at Integrators Australia, was confident in his team’s ability to satisfy all of Coode Islands’ needs. “Their objectives were clear from the beginning,” claimed Mr. Monaghan. “It was saving costs by employing an automated solution that would function around the clock and receiving some additional functionality out of a technologically advanced security solution.”

Nevertheless, there was one small detail which made this project very different than others. In order to ensure that the newly adopted technology would be equally reliable as manned guards, Terminals Pty needed to pro-actively engage the government in the decision-making process before they were granted permission to convert from manned surveillance to a purely electronic-based security system. In other words, the security solution which was proposed needed to first undergo a series of strict tests by government officials to make sure that their standards for security of the site were being upheld.
Similarly, Terminals authorities are also very pleased with the remote access capabilities since now the system is completely being monitored through a remote central station. In the evenings, when there are no guards on site, Synergis continues to automatically manage critical information, alerting the central station of any malfunction or breach in security. From there, remote agents can recognize alarms, pull-up live video stream, and dispatch patrols to respond to events.

Finally, Synergis’ and Omnicast’s open architecture supported the legacy hardware integration requirements for more than just the 16 cameras. Synergis’ true integration capabilities were put to the test as it allowed Terminals security officials to incorporate their existing fire panels, flame detection, fire pump and valve monitors, flow measures, pressure switches and many more hardware devices which were unique to the bulk liquid facility.

At this point, not only were Terminal’s management convinced that they had found the perfect solution, but Integrators Australia were also confident that the right system was in place since according to Mr. Monaghan “Genetec has the most forward-thinking access control and video surveillance solution that I know of.”

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The benefits

Already, Terminals officials have experienced the benefits of switching to the most advanced IP-based security solutions on the market.

“What’s great about Omnicast and Synergis, is their true seamless integration, their hardware compatibility and the fact that they are very intuitive for the user,” claims Mr. Monaghan.

Also, the automation of Synergis’ event/alarm procedures has allowed Terminals authorities to cut down their guard staff but still keep maximum security effectiveness in place to protect local residents from harm. Additionally, Synergis’ remote accessibility is the feature that is most appreciated by operators since it has contributed to the greatest increase in efficiency. Today, management staff can log in remotely to view the security desk application, verify the source of alarms and even use video verification where required. Also, Omnicast is one of the only systems where users can effectively utilize low bandwidth connections which is another great advantage.

It is clear at this point that Genetec has helped Terminals meet their challenging requirements. Terminals Pty officials are saving significant amounts of money and time by using advanced functionalities of both Synergis and Omnicast. Terminals now also has one of the most sophisticated security solutions in their industry and is clearly reaping its many benefits. Moreover, their choice of scalable IP-based solutions ensures that their investment is flexible in the long term, giving the authorities peace of mind for years to come.

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