

All-IP System Selected for \$100 Million Apartment Complex and Marina

Cutting-Edge Video Surveillance Secures New Zealand Waterfront Project



When Chaffers Marina in the heart of downtown Wellington, New Zealand, went out to tender for a video surveillance system in April 2011, Tony Phillips of Nedax Systems (NZ) Ltd. was a few knots ahead of the competition.

A March Networks® Certified Solution Provider and ardent yachtsman, Phillips had first-hand knowledge of the howling southerlies that batter the southern tip of New Zealand's North Island and knew that a video surveillance system exposed to such a hostile environment required more than the usual attention to detail.

Superior technology with a track record for reliability was critical, but equally important was the meticulous planning required to weatherproof the cameras and cabling.

Phillips selected the March Networks 720p MegaPX MiniDome because of its excellent resolution and optics, its IP 66 environmental rating and built-in redundancy. In the event of a network outage, up to 48 hours of video can be stored on an internal 32 GB SDHC card and automatically uploaded to the central repository with the aid of March Networks' innovative Shadow Archiving™ feature, once the network connection is restored.

The all-IP system deployed at Chaffers Marina includes March Networks' award-winning Command software installed on an HP ProLiant server. The new browser-based video management system can be accessed by any authorized user from any computer on the network without the need for client software, making it easier to access video and more cost-effective for the end user, said Phillips.

A wireless system would have circumvented the problems associated with weatherproofing and concealing the cabling to the March Networks cameras on the five floating piers, but interference from the forest of aluminum masts forced Nedax to opt for a wired solution.

"Being a sailor and looking at the tides, I realized we could run a two inch, fully sealed conduit under the walkway and tee off at each of the five piers," said Phillips. Installation of the conduit was subcontracted to a local marine engineering company and required use of a low-sided punt underneath the walkway during low

tide windows. On one occasion, said Phillips, workers installing the conduit were trapped by the rising tide and had to swim out from underneath the walkway.

The joints were glued to prevent the ingress of water, a flexible IP67 rated conduit was used to connect to the cameras on each floating pier and saddles and fasteners were made of 316 stainless steel.

Twin 720p MegaPX MiniDomes were installed in custom designed weatherproof camera housings mounted on two-meter high aluminum poles on each pier, which were, in turn, bolted onto existing timber piles. One camera faced outward along the pier, while the other faced the gate. On top of the cameras, Nedax installed infrared illuminators to ensure quality video capture at night. An epoxy resin was used to seal the base of the poles and a clear polymer resin was applied to prevent oxidation of the aluminum surface.

The planned demolition of the historic Overseas Passenger Terminal alongside the marina and the construction of a new \$100 million Clyde Quay Wharf luxury apartment complex on the same site presented Nedax with another challenge. Marina offices, including the server room and monitoring stations, were located on the ground floor of the Overseas Passenger Terminal when the system was installed in June and July of 2011, but were due to be relocated in November when demolition was scheduled to begin.

“That meant we had to future-proof the installation,” said Phillips. “We didn’t want to have all those wires home run back to the management office in the Overseas Passenger Terminal, so we used a gigabit 16-channel switch and concealed it in a weatherproof cabinet built into the wall alongside the walkway.

“When the time came to make the move, all we had to do was disconnect one CAT-5 cable and move the hardware to the new location. It took no more than a few hours and with redundancy made possible by the cameras’ onboard SDHC cards and Shadow Archiving, recording continued while the network was down.”

The 720p MegaPX MiniDomes are Power Over Ethernet-compliant, but Nedax opted instead to power the cameras separately with 12 volt DC at each pier with battery backup.

The Wellington-based systems integrator offered the marina an extended warranty on the system because, said Phillips, “I felt so comfortable with the product and its reliability.” ▶

CHAFFERS MARINA

Chaffers Marina is a 167-berth internationally classed floating marina located in Wellington, New Zealand’s inner harbor. The deep water site offers large berths and a comprehensive range of facilities and amenities to visiting vessels and private berth owners.

www.chaffersmarina.co.nz



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Artist’s rendering of \$100-million Clyde Quay Wharf luxury apartment complex in downtown Wellington. Construction of the oceanfront apartment complex began in January 2012 with project completion slated for mid-2014.



The March Networks Certified Solution Provider competed against several other security systems integrators through the bid process and won the business proposing a quality solution with a track record for reliability, a detailed system design and installation plan and a healthy respect for the 120 kilometer an hour breezes that vent their fury through Cook Strait.

The video surveillance system installed by Nedax was Chaffers Marina's first. According to Phillips, the customer held out for a state-of-the-art solution, deciding to act when it did because it felt the technology was in a sweet spot.

The system provides security for the site, which contains 167 berths and many millions of dollars worth of watercraft.

The Wellington-based security systems integrator has also been awarded a contract to supply a March Networks video surveillance system for the adjacent \$100 million Clyde Quay Wharf luxury apartment complex.

The system will include 50 March Networks MegaPX NanoDomes and WDR cameras, March Networks Command Enterprise software running on an HP Proliant server and a 48 TB RAID storage array.

Construction of the oceanfront apartment complex began in January 2012, with project completion slated for mid-2014.

"We won the contract for the apartment complex based on the March Networks feature set and our experience with the Chaffers Marina deployment," said Phillips. ▼

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NEDAX SYSTEMS (NZ) LTD.

Nedax Systems (NZ) Ltd. is a security systems integrator based in Wellington, New Zealand. Founded in 1987, Nedax New Zealand provides a broad range of security systems for private and public sector organizations in the Wellington region.