STRUCTURED CONNECTION FOR NEW CITY

Al Wahda City 1

Although Dubai may be the poster child for development projects in the UAE, sister emirate and capital Abu Dhabi is almost as busy, with numerous ambitious plans for green-site developments and refurbishment of parts of the capital.

Although new project announcements may have slowed in the current economic conditions, we're now seeing a string of developments announced a few years back at commission and handover stage.

One of these is the Al Wahda City 1 project, due for occupancy in Q1/10 – a purpose-built, multiuse residential and business development centrally located in Abu Dhabi opposite the Abu Dhabi Bus Station. The project is owned by Al Wahda Sports Club and is conveniently located near the Al Wahda Mall.

Main contractor CIVILCO (Civil Engineering & Contracting Company) appointed the contract for MEP on the project back in March 2007 to Thermo LLC, comprising three tower blocks with common basement levels. The multiuse property contains:
– a double hotel block
– a 31-floor residential tower
– a 32-floor office tower

The development has been described by the developer as "modern sophistication offering a full range of amenities and services for the discerning consumer". Consequently the provision of state-of-the-art communications, security and entertainment services was essential to the project's success. And with future flexibility of use a possibility, future-proofing of the network infrastructure and cabling system was essential.

CUSTOMER OVERVIEW
Thermo LLC, founded in 1976, is a leader in MEP (Mechanical, Electrical and Plumbing) engineering and contracting. It offers high-quality, comprehensive services as a single or multiservice engineering contractor for both small and large projects. Headquartered in Dubai, Thermo maintains offices in Abu Dhabi, Sharjah, Al Ain and Doha, Qatar. It has an annual turnover of DHS 3 billion. Other recent projects include Terminal 3 Dubai Airport, Motor City (Dubai), Abu Dhabi Financial Center and Al Masa Tourist Complex (Al Ain)

PROJECT MANAGER overview
With valuable and sensitive information being stored, processed and communicated, and sophisticated software controlling many security systems, information technology is a vital element in any organization's security. The G4S IT division is at the forefront of this field. Since 1994, G4S has been providing its services to the UAE governments, embassies, banks and over 750 companies across the UAE. On a global scale, the company operates in over 110 countries and employs more than 570 000 people. In UAE it has around 10 000 staff and offices in Abu Dhabi, Dubai, Sharjah, Al Ain , Rak Al Khaimah and Fujairah.

ENABLED SERVICES
– IP telephony for hotel rooms, offices and residencies
– Data network in offices
– High-speed Internet access

EQUIPMENT INSTALLED
– 84 km Cat. 6 UTP
– 2615 Cat. 6 connection modules
– 687 16- and 24-port patch panels
– 9120 1.5-meter Cat. 6 patch cords
– Fiber optic solution for the backbone

KEY CUSTOMER BENEFITS
– One-stop supplier
– Future-proof investment
– Reliability of customer-facing solutions
– Easy migration path to 10GB Ethernet
– Full IP support across the network
– Cost efficiency
– Flexibility in delivering future services

(Left to right) Mohamad Jahmi, Projects Engineer, G4S; Ahmad Issa, Operation Manager, G4S; Hassan Alayoud, Senior Electrical Engineer, Thermo L.L.C; Abdul Rahiman Poonathingal, Team Leader, G4S

To design and implement the physical network, Thermo appointed cabling specialists R&M, Dubai-based but with wide experience of major projects across the region and an enviable reputation. Key evaluation criteria were scalability, flexibility, efficiency and long-term reliability. Thermo had worked with R&M before and so knew that the products and support matched these criteria. In fact, as soon as winning the tender, R&M engineers became fully integrated with the design process and became involved in testing other vendors' products to ensure compatibility and efficiency.

R&M had also worked with the project management company G4S a number of times over the previous decade, most notably on the Dubai Palm. In fact, G4S' 14 branches across the UAE all have R&M products installed, so there was familiarity with the R&M product range.

The network had to support both the data center and security systems as well as business systems such as Internet access and multimedia. The backbone consists of Cisco core layer and multilayer switches, with fiber connectivity. R&M delivered multi-service accessibility based on this backbone to 7782 network access points throughout the various towers.

The network roll-out began in November 2008 and lasted 14 months, with no implementation problems. R&M is now moving into the support phase. A 20-year warranty has been offered for all R&M products installed.

"R&M products are easy to use."

Although the design and implementation were not particularly complex, a critical part of the network design was the option of network extension and incorporation of new networks and services in the future. "Important to us was also the ease of use of the R&M product set," explains Gerald Martis, Sr. Project Manager, Thermo. "While some vendors' products are hard to manage, that's not the case with R&M."

Because structured cabling systems lay out a platform that serves as a starting point for information and system building, a flexible interface using standardized elements allows the easy integration of data, audio, video, multimedia or a combination. "In my view, all new businesses should use structured cabling systems to ensure quick and reliable operation that stays on top of the competition," adds Alaa Darwish, Sales Manager, Private Networks, R&M.

However, key to that success is early involvement in the planning and design process. R&M consultants brought their expertise to the project because getting data and voice cabling in before walls are finished is critical to cost efficiency. From initial plans, R&M enabled changes to the installation, including consistency of delivery, support for multivendor equipment, simplified troubleshooting, simplified updating and future-proofing for new application roll-out.

For future upgrades, the standardized components at the heart of the R&M system will be easier as well. Support for any future applications will require at most only minimal updates. Usefully, many G4S team members are QPP certified – R&M's training program that guarantees quality control across the whole installation and maintenance lifecycle.

"R&M deals very professionally with partners and customers."

"R&M deals in a very professional way with partners and customers. We are seeking in the future to deliver the most fascinating technology to the end user," Gerald Martis, Sr. Project Manager, Thermo.

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