

Axis helps Ethekewini Hospital & Heart Centre deliver on their promise of providing their patients with the highest standard of care.

IP video surveillance provides central security control and management support.



Organization:
Ethekewini Hospital and
Heart Centre

Location:
Durban, South Africa

Industry segment:
Healthcare

Application:
Hospital security

Axis partner:
Intelligent Building,
Milestone Systems

Mission

Durban-based Ethekewini Hospital & Heart Centre is a state-of-the-art facility committed to taking customer service to new heights. Born from the dreams of businessman and surgeon, Dr Diliza Mji, it truly transforms private medical care in South Africa.

Tragically, hospitals are no longer unaffected by the wide-spread crime affecting other businesses in South Africa. True to their calling to provide exceptional standards of service to their patients, Ethekewini Hospital has identified the safety and security of its staff, patients, visitors and property as a priority. The hospital is a huge complex, housing highly sophisticated and expensive equipment and systems in various locations and wards on four floors and offering its visitors 420 parking bays.

Solution

After considering several tenders, Intelligent Building (Pty) Ltd, a division of the First Technology Group, was mandated to run the project. They are known for their

innovative approach by taking advantage of converged technologies. Intelligent Building went on to design a video camera system over IP networks using Axis network cameras, linked to an operational room from where security officials can effectively control the building, parking area and all entrances. An unobtrusive yet functional security system ensures the safety and security of its patients and visitors without the intimation of 'big brother' surveillance.

Result

A comprehensive network of Axis network cameras was installed. Five AXIS 221 Network Cameras cover the entrances to the premises. The cameras provide high quality images under all lighting conditions, capturing images at gate control points, using Power over Ethernet (PoE). Not only do they record activity at the gates, but they also capture crystal clear images of all registration plates.

"The ease of integration of the Axis network cameras into the Hospital's newly designed IP network, made Axis Communications our first choice as a partner to deliver on this installation."

Vernon Harripersadh, systems design and software infrastructure consultant at Intelligent Building.

Forty-six AXIS 207 Network Cameras throughout the building cover entrances to wards and elevator areas. The cameras give excellent low light performance and are equipped with built-in microphones for synchronized audio to enable remote users to not only view, but also listen in on an area to increase effectiveness. AXIS 207 offers the best image quality in its class, linked to outstanding bandwidth efficiency.

Two AXIS 233D Network Dome Cameras cover the parking area. Designed for challenging surveillance applications, they can follow moving objects at long distances. Through their 35x optical and 12x digital zoom lenses and Electronic Image Stabilizers (EIS) controllers can clearly see license plates from a distance of 160m. AXIS 233D can follow a person walking at a distance of 400m and pan or tilt to any preset location in less than 1.5 seconds.

Monitoring and control

In the security operations room Milestone XProtect® Smart Client has been installed on one monitor, providing 64 views. A click of a button shifts the view to selected floors and can also provide full screen views. The second monitor is directly linked to the cameras, giving more clarity as the software talks directly to the camera in real time. The system switches cameras at 3 second intervals. A button allows users to see the view of any chosen camera on the system. An Impro access control transaction viewer provides images of people clocking in and out. As the system was introduced at the hospital's planning stage, no history of activity is available to monitor the efficiency of the system. The cameras also serve as management tools allowing them to investigate incidents or monitor the activities of contractors on site.

Storage of footage

Images are recorded at 4CIF resolution at 8 frames per second and footage is retained for 30 days. This places huge demands on storage, but a 4TB storage system copes adequately.

Why network video?

Only IP technology can support megapixel cameras. Furthermore, analog cabling would have been much more expensive and given substantially poorer image quality. Considering that the systems serves 53 cameras on four floors including exterior units, running cables would have been a daunting task. Analog cabling would also have picked up a lot of interference from the fluorescent lighting and power cables.

Future perspective

Additional cameras have already been ordered and an expansion to 64 channels is imminent. This will add considerable capacity to the system and improved video surveillance coverage. Storage capacity will be increased by installing an extra SAN/NAS as the hospital plans to archive footage for 6 months.

The IP solution offers great versatility and image quality at reasonable costs. The system allows for unlimited expansion and it integrates seamlessly with other systems such as Access Control and Time & Attendance.

About Ethekwini

The R340 million (USD40 million*) center, owned and managed by Capensis Management (Pty) Ltd, is 100% black-owned. At the core of the hospital is its Cardiac Centre staffed by a world class team of cardiologists, cardio-thoracic surgeons and experienced nursing and support personnel. The emphasis is on lifestyle diseases such as obesity, hypertension and Type 2 diabetes, all of which raise the risk of heart disease. The center provides care for cardiac patients in a purpose-built environment. The 250-bed hospital also features maternity, pediatric and general wards, 30 consulting rooms, seven operating theaters and a 24-hour emergency unit.



Intelligent Building
(a division of First Technology)
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*Exchange rate quoted at USD1=R8.50