

Complete replacement of original analog system. A leading Taiwanese financial institution implements a fully digitized video surveillance system.



Customer:
Leading financial
institution

Location:
Taipei, Taiwan

Industry segment:
Banking & Finance

Application:
Migration from analog
to network video

Axis partner:
Fortune Information
System Co., Ltd.

Mission

In the original, analog-based surveillance system of the financial institution, the clarity of recorded images was limited and real-time viewing of video was not possible. Operation of the overall surveillance system did not facilitate immediate response to emergencies. Moreover, camera configuration was not flexible enough, resulting in difficulties with system deployment as well as involving high costs for expanding the existing system. Additionally, follow-up, maintenance and technical service of the equipment could not be performed as quickly as needed. In the face of these difficulties, the financial institution decided to replace its existing analog system.

Solution

The new surveillance system based on Axis network cameras provides new advanced functionalities, combined with extreme ease of deployment and intelligence. It comprises the compact-size AXIS 207 Network Cameras which can effectively save network bandwidth, as well as the AXIS 215 PTZ Network Cameras which provide 360-degree monitoring. Moreover, the analog CRT TVs

that had acted as surveillance monitors at the back-end were replaced with digital LCD flat screens, providing image displays with improved sharpness. The analog DVR system was also replaced by a network recording server.

Result

After implementation of the new Axis network video solution, the flexibility of the camera configuration was remarkably improved in terms of the ability to add, remove, and relocate individual units. The quality of surveillance images was greatly improved, and prompt response to possible emergencies was made possible. Additionally, long-term maintenance and support services were set up, and the introduction of new video surveillance software facilitated the installation and management of surveillance equipment.

"The full replacement was completed in only 15 working days, and during that time, the deployment was completed as well as testing, validation, and adjustment. Though some cameras did not work at the time of completion due to insufficient bandwidth, this problem was settled by means of bandwidth control management."

Head of the surveillance system project for the financial institution's credit-card center.

The necessity of a shift from analog to digital surveillance

The client is a financial information institution in Taiwan. In addition to issuance of Taiwanese credit cards, it is responsible for the planning, design, and implementation of corporate information networks between Taiwan's financial institutions. Because its duty is critical to the circulation and distribution of Taiwan's financial information, it was necessary to put special emphasis on information-related security. Therefore, this financial institution had deployed a video surveillance system many years before in order to ensure security at the physical level. However, as time passed, the credit card center increasingly felt that the challenges faced by the system exceeded its capability.

"Image quality was the main problem," said the head of the surveillance system project. "The resolution of the original analog cameras was limited, and they couldn't provide clear monitor pictures. Though the recordings were filed, the help they could provide for future reference was limited. The second problem was that the configuration of cameras wasn't sufficiently flexible. Each analog camera required the wiring and laying of dedicated video transmission cables. That made it difficult to add new cameras when we wanted monitoring at a specific location, while at the same time it was difficult to move the cameras that had already been installed."

Insufficient image resolution and difficulties in the addition or relocation of cameras were persistent problems for this financial institution. However, the most aggravating problem concerned maintenance support. When some cameras began to malfunction after several years of service, the maintenance provider could not be reached, and contact was soon lost. At this point, the financial institution decided to replace the system, hoping that a new digital surveillance system would resolve the problems associated with the original analog system. Another objective was to secure more solid follow-up maintenance support services through the introduction of a new system. Following several rounds of evaluation and contacts, the proposal from Fortune Information System Co., Ltd. ("FIS") was adopted, in which

the Axis IP-Surveillance solution was selected to replace the existing analog system.

Complete replacement with a network video system

Based on FIS's planning, the 64 original analog cameras would be replaced, and 16 additional cameras would be installed. Thus, a total of 80 network cameras would be used, in which 62 were AXIS 207 Network Cameras, and 18 were AXIS 215 PTZ Network Cameras. After the network cameras were deployed, the existing enterprise LAN could be used for image transmission to the back end, and the original analog coaxial cables could be disposed of. Accordingly, when there is need to add or replace cameras in the future, rapid implementation is possible as long as they are within the coverage of the LAN.

What followed was the back-end system, which originally used four 16-channel DVR systems. It also needed to be replaced as a consequence of the full digitalization and networking of the video images. FIS used one IBM System x3650 server to replace existing system, while common x86 units would act as video surveillance recording servers. Upon transition of the back-end system, the video surveillance software was replaced. Logiware's go1984 software was used. Compared to the original surveillance software, this software was easier to install and set up.

Solid after-sales services

The aforementioned problems were effectively resolved with the replacement of the surveillance system. The image resolution was sufficiently high, and the addition and relocation of cameras became easier. Moreover, the maintenance support was strong with FIS's commitment of three-year guarantee and site repairs available within 4 hours. Based on estimates by the client, return on investment would happen within 3 to 5 years after completion. Though the investment on implementation has not yet been fully recovered, the excellent performance of the new system to date has paid off. The system chief is greatly satisfied with the effect of this new deployment, being confident about the fast return on investment.



In addition to replacement of cameras, transmission lines, the back-end system and surveillance software, the monitor screens were replaced. The financial institution's system chief said, "We used the CRT TVs to monitor in the past; upon completion of the system replacement, these monitors were also replaced with flat digital LCD TVs and PDP TVs. Compared to the conventional analog TV, the flat digital TV is lighter and thinner, more energy-efficient and emits zero radiation. While more space was available in the monitor room, the power consumption in surveillance operation was also reduced. Plus, the additional protection of the health and vision of the monitor personnel was ensured due to zero radiation."

