

Digital surveillance solution for Guiyang Tobacco Factory. Axis interpretation includes HD, intelligence and integration.



Organization:
Guiyang Tobacco
Factory

Location:
Guiyang, China

Industry segment:
Industrial/
Manufacturing

Application:
Safety and security,
remote monitoring

Axis partner:
Guangzhou Ragile
Corporation

Mission

Guiyang Tobacco Factory has a long history. In 2006, Guizhou Tobacco industry gathered 6 companies from the province, including Guiyang Tobacco Factory, and founded the China National Tobacco GuiZhou Industrial Corporation. As the pace of IT infrastructure and modern technology continues to accelerate, the IT needs of Guiyang Tobacco Factory have also increased. To achieve a unified and highly efficient management, Guiyang Tobacco Factory had to realize a truly digital video surveillance system and improve their employee productivity.

Solution

In order to establish a comprehensive video monitoring and management system and to integrate the management of other operations of the factory, it was required that all sub-systems included a complete set of functionalities and that they should also provide standard API to facilitate the integration and extension of their applications. Therefore, the video surveillance system of the factory would become an entirely IP-based network video surveillance solution.

Based on internal work requirements, 300 Axis network cameras were chosen for the system, which included fixed network cameras, PTZ network cameras and HDTV network cameras.

The structure of the entire network video monitoring system used a redundant star topology, which included access switches, aggregation switches and core switches, making it a three-tiered star architecture.

Result

The installation of a network video monitoring system ensures the timely and accurate access of video data for personnel of all departments, according to their job requirements. This monitoring system has achieved a unified management system that is systematic, scientific, and modern, providing monitoring and control of main areas and important sections. This allows for an intuitive grasp of on-site video information, thus further improving the technology of public security management, management efficiency, and emergency response time.

"Axis network video surveillance solutions have fully met our demand for information technology security, and the results of the video surveillance and integrated management applications have greatly exceeded our expectations. The system deployment and applications are also very simple, which not only greatly reduced our installation and maintenance costs, but also allowed for the possibility of future system expansions and upgrades."

Mr. Zheng, Guiyang Tobacco Factory IT Department.

Digital video surveillance system

Front-end equipment selection

Axis network cameras are the world's top brand. The equipment has high image quality, high performance, high stability and high security. It fits very well with large-scale monitoring which has stringent requirements for image quality, stability and security.

Networking

The digital video surveillance system was built upon the newly planned production and office IT network of the Guiyang Tobacco Factory, with a 10 Gbps backbone and 1 Gbps to desktop computers. The network can simultaneously support the transmission of data, video and other advanced high-speed integrated services.

Video surveillance bandwidth requirement

Axis network video products are based on the broadband network environment, and the bandwidth used is closely related to the use of image compression format, image resolution, image compression and image content. This particular system is also based on a broadband network architecture. From the needs analysis, it could be seen that the available network bandwidth resources were 100 Mbps access (camera side), 1 Gbps to desktops, and 10 Gbps for the core.

Security monitoring center

The Guiyang Tobacco Factory monitoring center is the core of its alarm and monitoring system, which aggregates all of the monitoring resources, encodes and archives the video, audio and data. It also provides real-time playback, search, and browsing functionalities according to authorization level. This shared platform has realized the objectives of interconnection, exchange and mutual control; satisfied the requirements of Security Department applications; and provides timely and reliable alarm and monitoring information for the decision making, dispatching and evidence collection for all levels of public security and the different departments.

The Axis IP-surveillance advantage

This project was based on the optical network environment. The digital video surveillance system constructed using Axis network video products can directly connect to the network and achieve plug-and-play functionality, which eliminated the need for a variety of cumbersome cables. It is also easy to install (only requires the setup for a single IP address). Users need not install any hardware, and they can access the cameras through a PC browser, thus resolving many drawbacks of systems from previous generations.

