The data center of China Telecom Shenzhen Branch.
IDC data center implements highly-efficient Axis video surveillance system.

Mission
Shenzhen Information Hub Tower in Central District of Shenzhen, is the site where the office building and value-added business, IDC, data center of China Telecom Shenzhen Branch, is located. The actual IDC data center and server rooms are situated in the building next to the tower, which is capable of resisting an earthquake as strong as Magnitude 12. The data center hosts key assets and equipments from major large companies, such as the database of the Bank of East Asia, the database of the Agricultural Bank of China, and servers of Shenzhen Stock Exchange.

IDC data center is the core of information exchange for the whole city, so it was of great importance to ensure security of the data center and monitor its access. IDC set the requirement for 24x7 video monitoring, with video recording and storage, as well as intelligent alarm management.

Solution
During the selection process China Telecom Shenzhen Branch took into consideration the use of a system based on open industry standards, in order to ensure full system interoperability and take advantage of existing network infrastructure and IT resources. China Telecom inevitably turned to an IP-based solution to meet these requirements. After assessing and investigating various available cameras, the company recognized Axis network cameras, already used for similar data security applications around the world, as the perfect fit. The company also selected EVIP network video monitoring platform of Jiana Communications, an Axis partner, and tasked Jiana to complete system deployment within one month.

280 Axis network cameras (AXIS 207 and AXIS 221 Network Cameras) were installed across the site. Video can be displayed in 16 split views in sequence on monitors through EVIP network video monitoring platform. Operators can zoom in on any part of the image by just clicking, modify the number of windows, and change the way information is displayed, simplifying the operation greatly, and making the system as easy to operate as a PC.
"Customers using our data center require that we provide reliable monitoring means to control the status of their servers in the data center. In the future, we will measure customer satisfaction to further improve our service level."

Director of China Telecom Shenzhen Branch.

Result
The entire system resulted in a wealth of benefits:

- **Lower total cost compared with an analog system**
  With full utilization of existing network resources and without the need of re-cabling, the IP surveillance system cost far less than an analog monitoring system; in contrast, an analog system would have required to lay video cables, control cables, power cables, etc.

- **Simple installation and quick deployment**
  Network cameras can receive power via the Ethernet cable (PoE) or via the local power supply. It took only two weeks to complete the installation.

- **Real remote monitoring**
  In the management center, user can remotely monitor, record and manage IDC's main and distributed data centers.

- **Integration with the detection, access control and alarm systems of the data center**
  With fully open SDK and API interfaces, the Axis IP-based solution could be integrated with the other access and security systems in the data center.

- **More scalability**
  When the system was designed, expansion capacity and backward compatibility were thoroughly considered. The result is that new monitoring points can be easily added, including existing and new cameras, making for an excellent return on investment.

Development trend
The director of China Telecom said, "We will use the integrated network video system to conduct centralized surveillance on the network of the data center. We wish to install network cameras in all data centers across China in the same way and establish a centralized monitoring system center to check the condition of servers in server rooms at any time."

At present, camera systems used in data centers are different from each other. Because the Axis network video system provides a stable and highly reliable solution, and has already proved instrumental in improving customer service, China Telecom plans to migrate and unify all installations using Axis network cameras. The company also plans to integrate the network video system with the access control system that uses face identification and RFID technologies.