

**China Everbright Bank
Hong Kong Branch Data Centre
Security Management Solution**



Project Description

Project Site: Hong Kong SAR

China Everbright Bank is one of twelve Chinese joint-stock commercial banks. It was ranked in 139th in 2016 Forbes Global 2000 publicly held companies. Sister company Everbright Securities was ranked 862th.

ZKTeco is honoured to be selected as their security solution provider of the data centre and cabinet lock security management system of their Hong Kong branch.

Solution Details

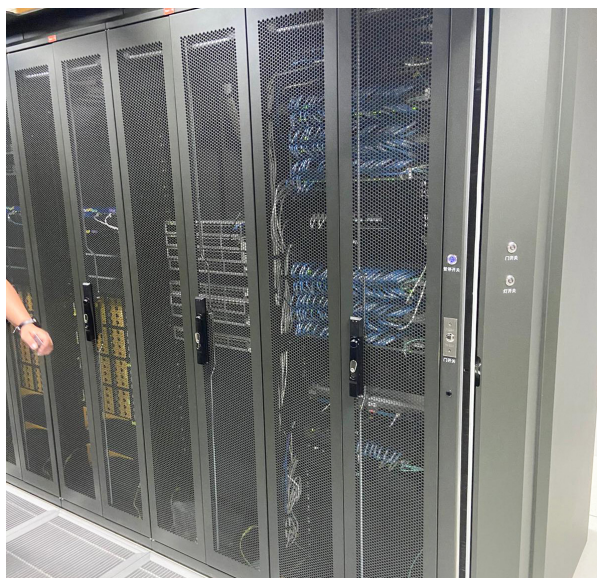
With rapid technical development, digitalization has brought us great convenience and efficiency in different aspects of our lives. Commercially, the digital transformation has been the prevailing trend in different industries, not excluding banking. Needless to say, every operation mode has its risks, apart from network security, we also cannot afford to ignore the physical threats of the digitalized data storage, as leakage of corporates' confidential information or their clients' privacies may cause significant commercial losses and even disasters to banks' reputations. Seeing the possible threat, Everbright Bank expected to strengthen the security level of their data centre to prevent data servers from stealing, damaging or leakage.

A. Integration with Existing Devices for Better Cost Effectiveness

There are altogether 34 sets of server racks and 68 sets of locks, each rack is equipped with two doors, each door with one set of locks. The existing locks only offers fundamental lock and unlock functions, and Everbright Bank expected more comprehensive security and surveillance functions. However, as the daily operation of the Bank has already been highly digital, and the servers are operating anytime, large-scale door lock replacement would inevitably interfere the operation of the servers and relevant staffs' duties. Also, the existing locks are in good condition and performing their functions well. Thus, ZKTeco decided to remain them and integrate them with the new security system in order to minimize the inconvenience against the operation of the Bank and maximize the cost effectiveness of the project.

Solution

ZKTeco has deployed 17 units of InBioPro 460 Access Controllers, which are able to seamlessly integrate with 3rd party locks. By connecting the door locks they are able to control the locks to save time and cost for server rack lock replacement. Each InBioPro 460 Access Controller is able to control up to 4 door locks, which significantly saves the cost of installing a large number of controllers and also space for deployment. Everbright Bank has chosen ZKBioSecurity Software Platform, which is specially designed for access control and security by ZKTeco, as the main central management system of the solution. As the servers store corporate's highly important and confidential information, and are easily affected by external environmental factors, the Bank has a data centre management system for the control of the internal environment of the data centre, including temperature, humidity, air flow, power supply and dust removal systems etc. ZKTeco is also capable to offer integration of devices, software and the system by connecting the locks and access controllers via Aux. output, which further refine the entire system's functions, in case entry or exit is detected, the data centre management system will be informed to adjust the environment of the data centre to more effectively protect the devices.





B. Real-time and Remote Monitoring for Security Everywhere

Although the existing locks are in good condition, they only offer fundamental functions of locking and unlocking cabinets. In fact, most of the existing data centre management systems do not offer effective real-time monitoring and remote surveillance. To ensure a lock is intact, staffs can only check in real person. In order to effectively enhance security level, it is required to have full understanding and information of every lock's status, to prevent potential loss caused by lack of information of security status.

Solution

ZKTeco connects the locks to the InBioPro 460 Access Controllers and connects them to ZKBioSecurity, which is specially developed for access control and security management. After connection it is realized to real-time monitor all locks' status

ZKTeco also enables Global Linkage, in case any lock is abnormally open or opened, apart from real-time monitoring, the system's global linkage function will also be triggered to deliver instant notification to staffs to ensure that timely processing of any abnormality to prevent potential loss.

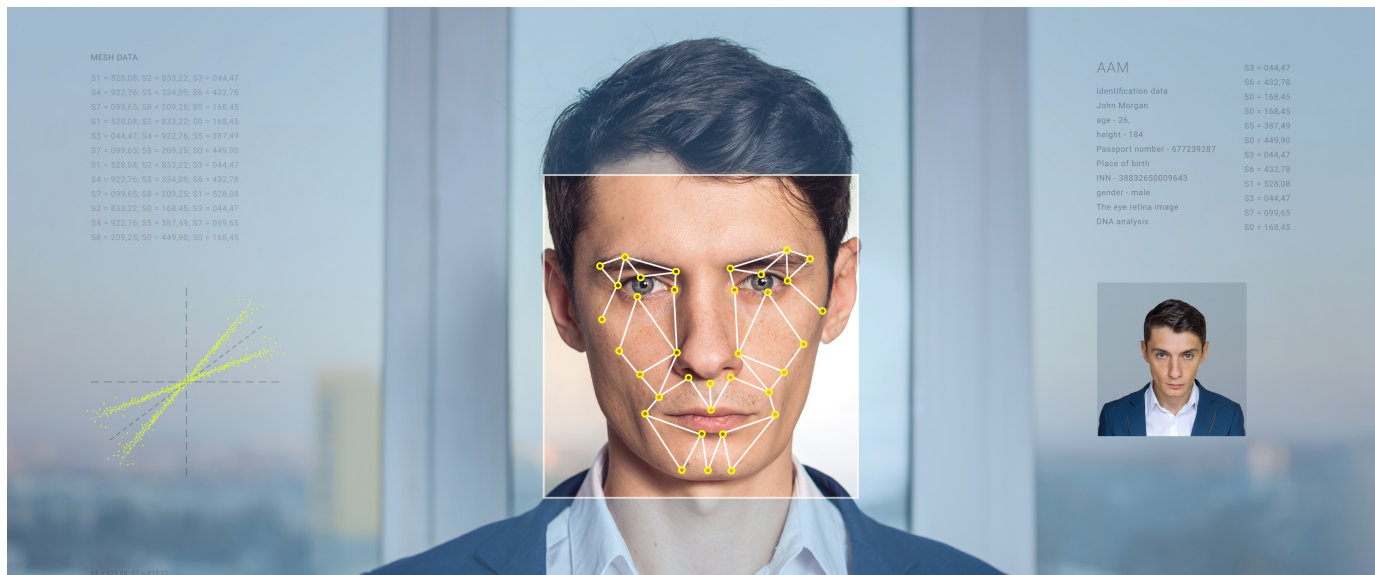


C. Easy Visitor Management for Enhanced Work Efficiency

Apart from the Bank's staffs, external personnel are also authorized for IT and engineering duties. Upon each time entry of external personnel to the data centre, the Bank's staffs are required to register their identities and information and unlock the cabinets for them. As there are various devices in the data centre including 34 server racks, external personnel are normally only allowed to have entry to specific servers in designated timeslot, thus the Bank's staffs must also be present to ensure that the external personnel do not enter the incorrect server racks and in the incorrect timeslot, thus adding extra workload to the Bank's staffs.

Solution

ZKTeco enables Visitor Management function for quick and simple identity registration for external personnel, it is also able to set access rights for different persons, including access rights to only specific cabinets and timeslots. Thus, the Bank's staffs are no longer required to monitor external personnel in real person and in the entire process, significantly reducing their workload, and preventing illegal access to the data centre or corporate's information caused by manual mistakes.



D. Biometric Verification to Ensure Real Identity

Although the system is already able to monitor all locks' status and ensure external personnel are only allowed in their authorized cabinets and timeslots, the locks are only able to identify keys, not the persons. To achieve real security, it is required to ensure that the entering persons are the real authorized persons.

Solution

Apart from the locks on the server cabinets, ZKTeco has deployed a SpeedFaceV5L Facial Recognition Terminal at the entrance of the data centre, all persons entering or exiting must be facially recognized and verified with their real identities to prevent all illegal access.

ZKTeco also offers installation of RFID card readers on cabinet for better access convenience, and even biometric verification devices like fingerprint readers for truly precise of identity verification in every access points. ZKTeco also offer alternatives like QR code verification etc.

End User: Hong Kong Branch of China Everbright Bank

Configurations

System	Device Name	Device Model	Quantity
	Access Controller	InBio 460	17
	Access Control Terminal	SpeedFace V5L	1
	Access Control Software	ZKBioSecurity	

Function Description

- InBio Pro Series is a project oriented high-end product line with unique features such as embedded fingerprint verification and advanced access control functions, which can be managed by TCP/IP communication thru LAN or WAN networks. The InBio Pro Series are the perfect match for ZKBioSecurity web based software platform to provide a full featured biometric security solution. In combination with the FR1300 RS485 reader, the panels can authenticate users under multiple verification modes such as fingerprint, card and password for a higher security level.
- ZKBioSecurity is the ultimate "All-in-One" web based security platform developed by ZKTeco. It contains multiple integrated modules: access control, time & attendance, consumption management, elevator control (online/offline), hotel module, visitor management, parking, guard patrol and video linkage. With an optimized system architecture designed for high level biometric identification and a modern-user friendly UI, ZKBioSecurity provides the most advanced solution for a whole new user experience.

Photo Gallery

