New Features and Updates

for ZKBioSecurity V5000_2.0.0_R

Date: March 2020

Doc Version: 1.0

English

Copyright © 2020 ZKTECO CO., LTD. All rights reserved.

Trademark

Disclaimer

interruption, loss of business information or any pecuniary loss, arising out of, in connection with, or relating to the use of the information contained in or referenced by this manual, even if ZKTeco has, of the possibility of such damages.

This manual and the information contained therein may include technical, other inaccuracies or typographical errors. ZKTeco periodically changes the information herein which will be incorporated into new additions/amendments to the manual. ZKTeco reserves the right to add, delete, amend or modify the information contained in the manual from time to time in the form of circulars, letters, notes, etc. for better operation and safety of the machine/unit/equipment. The said additions or amendments are meant for improvement /better operations of the machine/unit/equipment and such amendments shall not give any right to claim any compensation or damages under any circumstances.

ZKTeco shall in no way be responsible (i) in case the machine/unit/equipment malfunctions due to any non-compliance of the instructions contained in this manual (ii) in case of operation of the machine/unit/equipment beyond the rate limits (iii) in case of operation of the machine and equipment in conditions different from the prescribed conditions of the manual.

The product will be updated from time to time without prior notice. The latest operation procedures and relevant documents are available on http://www.zkteco.com.

If there is any issue related to the product, please contact us.

ZKTeco Headquarters

Address   ZKTeco Industrial Park, No. 26, 188 Industrial Road,

Tangxia Town, Dongguan, China.

Phone   +86 769 - 82109991

Fax   +86 755 - 89602394

For business related queries, please write to us at: sales@zkteco.com.

To know more about our global branches, visit www.zkteco.com.

About the Company

ZKTeco is one of the world's largest manufacturer of RFID and Biometric (Fingerprint, Facial, Finger-vein) readers. Product offerings include Access Control readers and panels, Near & Far-range Facial Recognition Cameras, Elevator/floor access controllers, Turnstiles, License Plate Recognition (LPR) gate controllers and Consumer products including battery-operated fingerprint and face-reader Door Locks. Our security solutions are multi-lingual and localized in over 18 different languages. At the ZKTeco state-of-the-art 700,000 square foot ISO9001-certified manufacturing facility, we control manufacturing, product design, component assembly, and logistics/shipping, all under one roof.

The founders of ZKTeco have been determined for independent research and development of biometric verification procedures and the productization of biometric verification SDK, which was initially widely applied in PC security and identity authentication fields. With the continuous enhancement of the development and plenty of market applications, the team has gradually constructed an identity authentication ecosystem and smart security ecosystem, which are based on biometric verification techniques. With years of experience in the industrialization of biometric verifications, ZKTeco was officially established in 2007 and now has been one of the globally leading enterprises in the biometric verification industry owning various patents and being selected as the National High-tech Enterprise for 6 consecutive years. Its products are protected by intellectual property rights.

About the Manual

This manual introduces the New Features and Updates for ZKBioSecurity V5000_2.0.0_R.

All figures displayed are for illustration purposes only. Figures in this manual may not be exactly consistent with the actual products.

Document Conventions

Conventions used in this manual are listed below:

GUI Conventions

For Software	
Convention	**Description**
Bold font	Used to identify software interface names e.g. **OK**, **Confirm**, **Cancel**
>	Multi-level menus are separated by these brackets. For example, File > Create > Folder.
For Device	
Convention	**Description**
< >	Button or key names for devices. For example, press <OK>
[ ]	Window names, menu items, data table, and field names are inside square brackets. For example, pop up the [New User] window
/	Multi-level menus are separated by forwarding slashes. For example, [File/Create/Folder].

Symbols

Convention	Description
	This implies about the notice or pays attention to, in the manual
	The general information which helps in performing the operations faster
	The information which is significant
	Care taken to avoid danger or mistakes
	The statement or event that warns of something or that serves as a cautionary example.

Table of Contents

1   <u>Key Updates</u>

1. Updated 64-bit software package to improve the performance.

2. Modular installation: Supports user secondary installation from Server Controller without requiring re-installation.

3. Quick and easy switching between multiple languages: Newly supports Russian, Korean. It supports 9 languages in total: English, Spanish, Simplified Chinese, Traditional Chinese, Russian, Indonesian, Thai, Vietnamese, and Korean.

4. Security enhancement: Scans the security issues in the application through Openvas to solve the high-risk vulnerabilities. The software passed Apps can security test to ensure database and Redis data security.

5. New user security management function, improving the security of user password and hence avoiding the risk of password cracking.

6. Optimized Visitor Management module supporting Advanced visitor function.

7. New VMS function supports linkage capture and video recording with the access control device. ZKBioSecurity VMS, a video software application, is launched by ZKTeco. It can be used in conjunction with NVR, DVR, IPC, MDI, SDI network storage devices. It supports features such as real-time preview, video playback, linkage alarm, and decoding video, etc. It also provides flexible and diverse solutions to meet the need of small and medium projects. VMS and VMS clients can be widely used in security projects in finance, public security, banking, education, and other fields.

2   Functional Update Details

2.1   Platform

1) The software supports language quick switching function, allowing users to switch between multiple languages. The supported languages are Chinese (Simplified), English, Spanish, Thai, Indonesian, Vietnamese, Chinese (Traditional), Russian, Korean, etc.

2) Users can log in to the system by fingerprint verification after registration and installing the driver. This improves the convenience and security of login.
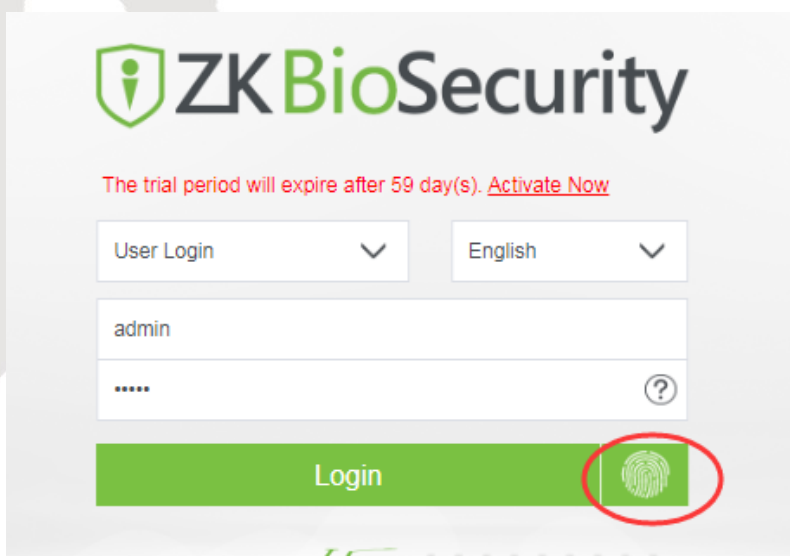
2.2 Personnel Module

1. Optimized Export/Import Personnel Information function.

When exporting the personnel information, the basic information is exported by default. Users can export the custom fields of personnel information such as Country, Street, etc.

Note: When importing the existing personnel, the assigned fields are not updated, only the unassigned fields are updated.

Importing Personnel Photo: Here the users can import photos or the compressed package. The capacity of the user photo import function is improved. The system allows users to import 3,000 photos at a time. The compressed package must be in ZIP format with a size of less than 500MB.

2. **Card Printing function: The software allows access to Fargo DTC1250e, IDP SMART-50S, ZKTeco ZKCP100 card printers to print the cards for personnel and visitors.**

The path is: **Personnel** > **Person** > **Print Card**.
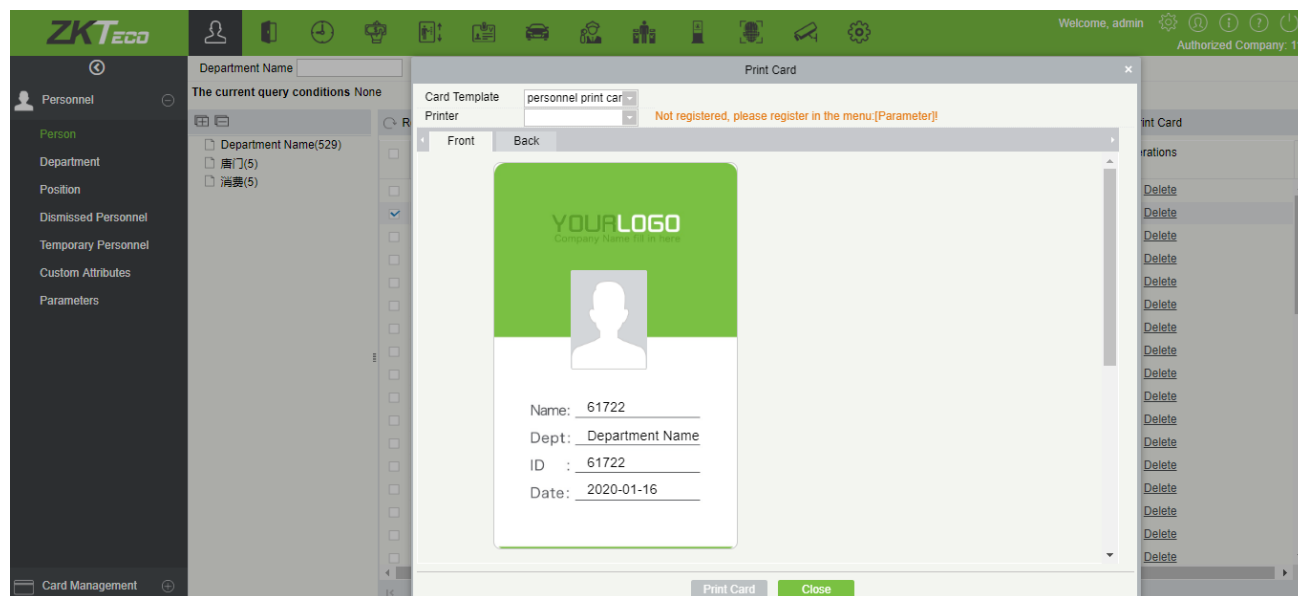
Users can configure the template to print the visitor card through the following path: **Visitor** > **Basic Management** > **Print Settings** > **Card Printer**.
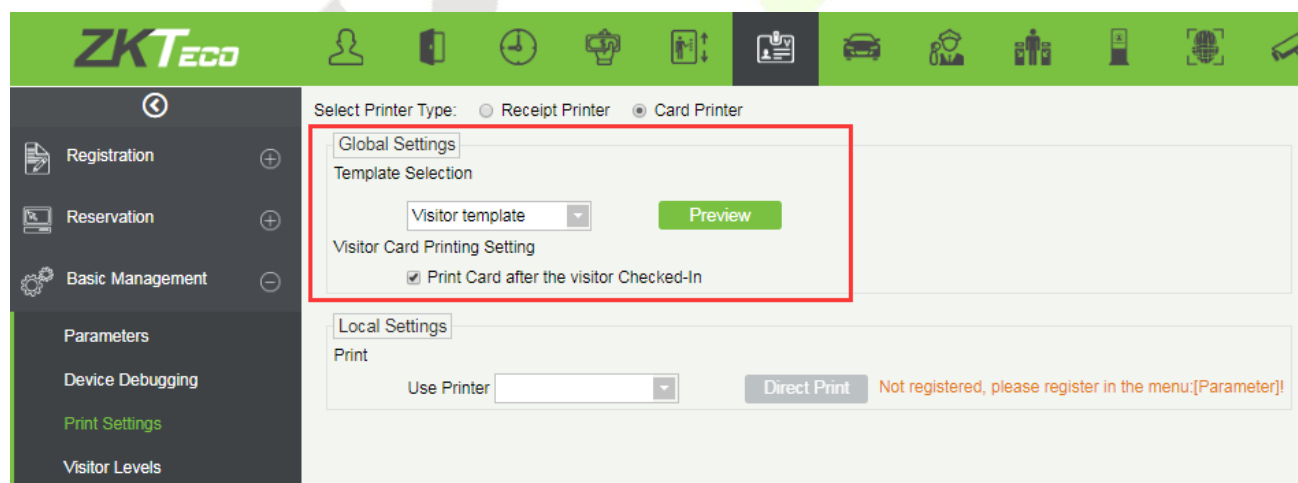
Notes:

1) Template selection: Define the template from **System** > **Basic Management** > **Print Template**.

2) Download the driver before connecting the printer. Download the driver from **Personnel** > **Parameter** > **Registration Client**; add the new registration code through **System** > **Authority Management** > **Client Register**. Card printing can only be used after a successful registration.

3. Card Format Testing

When the card number does not match with the one displayed on the system, the user can use the function to calibrate the Wiegand format. The page is as follows:
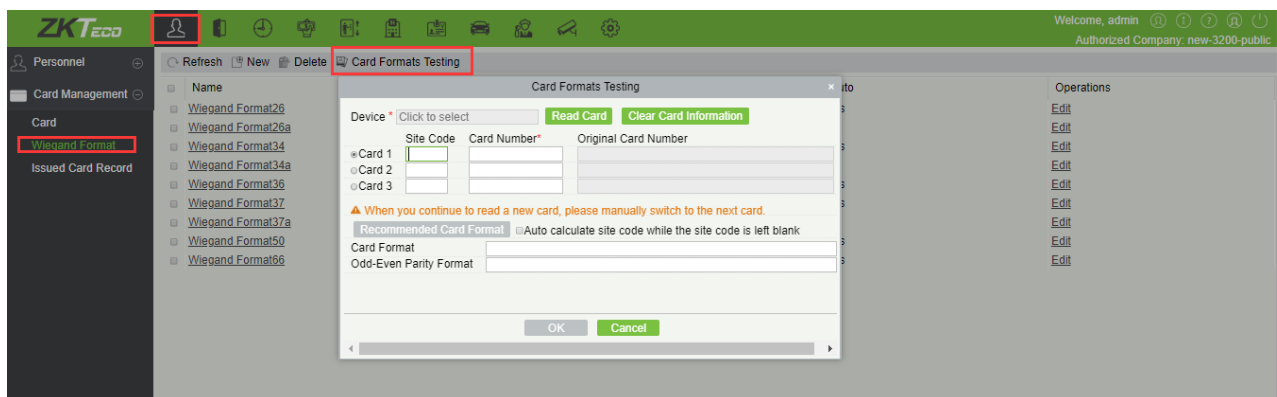
Select the device that supports the card format test function, and fill in the card number and site code(optional):

1) Click [**Read Card**], swipe the card on the reader, and the original card number will be shown on the right text box.

2) Click [**Recommended Card Format**], the recommended Wiegand card format will be displayed below.

3) Click [**Auto calculate site code while the site code is left bank**], the software will calculate the site code according to the card format and card number.

4) Click [**OK**], the page will jump to the Wiegand format page to save the new Wiegand format.

Note: The card format testing function is only supported by some devices.

2.3 Access Control

1. Multi-Door Operations Function.

Click a certain door icon to select a single door or multiple doors to perform operations such as remote opening, remote closing, locking, unlocking and remote normally opening.
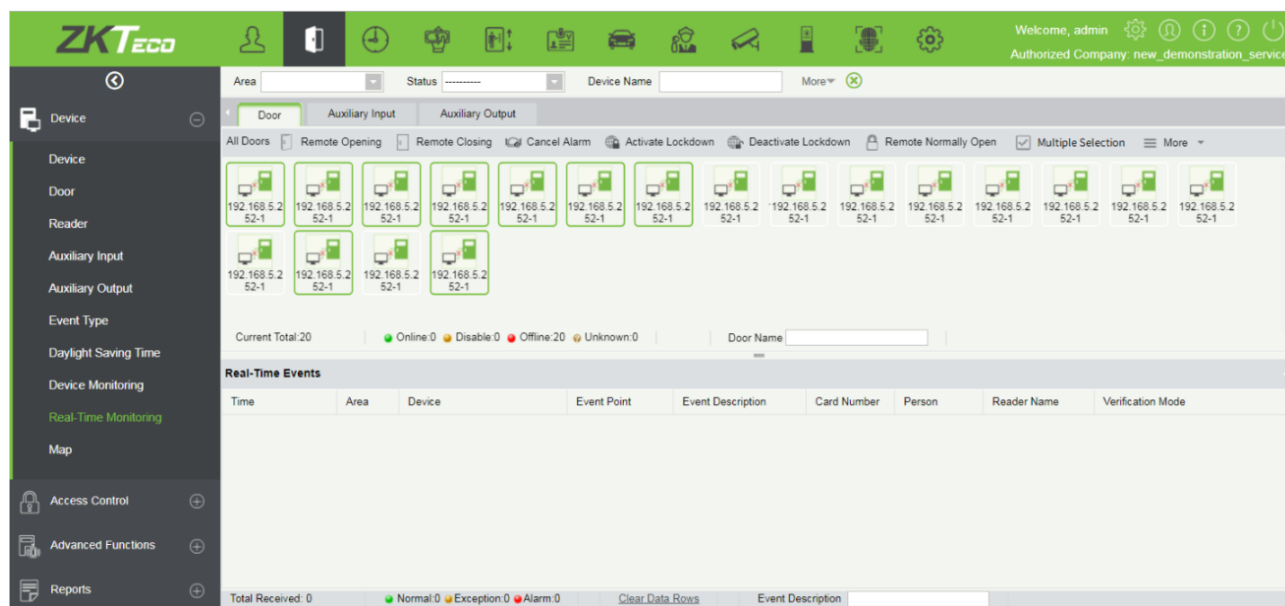
2. **Auto-Export Transaction**

Users can choose the export frequency and the data to be exported. If the export frequency is daily export, the user can choose all the records of a particular day; If the export frequency is monthly, the user can choose all records during the month, and send it to the recipient's mailbox.
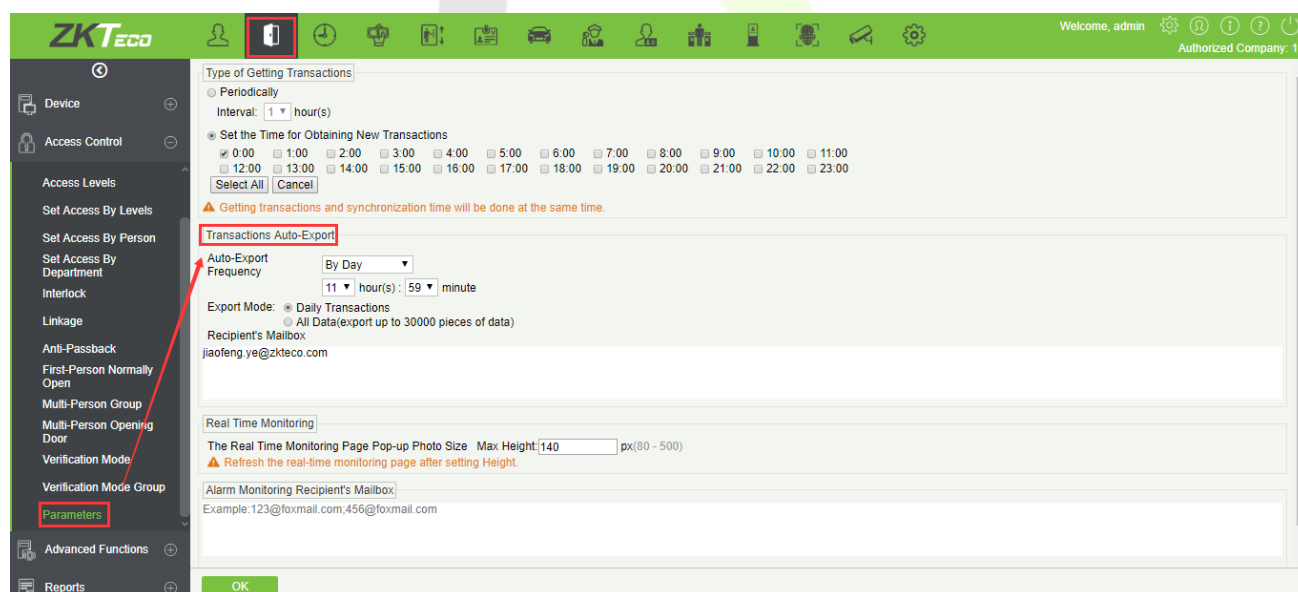
2.4 Time Attendance

1. **Set Attendance by Area & Set Attendance by Person**

The personnel Area Setting function is divided into Set Attendance by Area and Set Attendance by Person. The area setting displays the personnel and the area, and the personnel setting displays the attendance area to which the personnel belongs.

1) Set Attendance by Area.
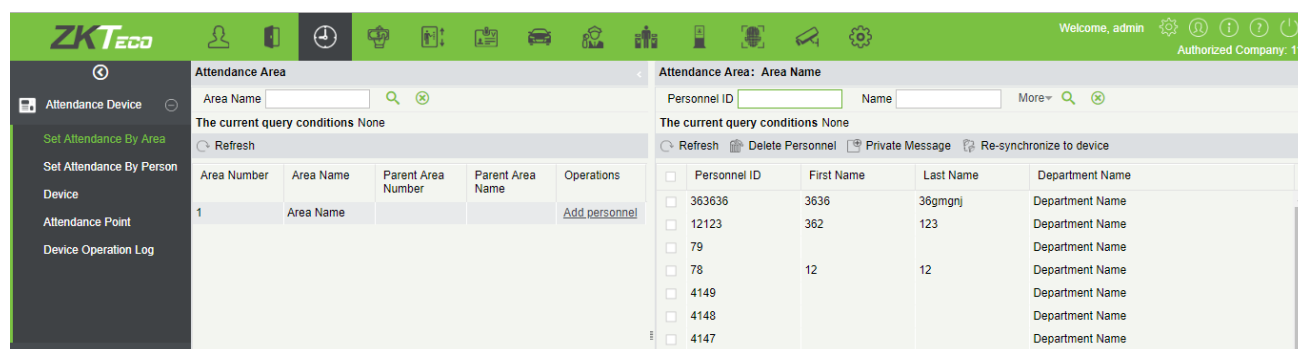
2) Set Attendance by Person.
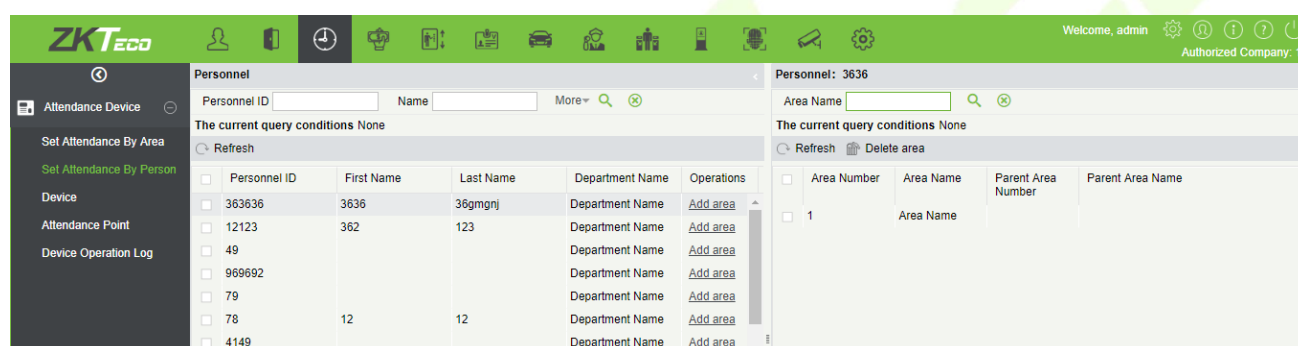
2. Device Operation Log

Users can view the operation logs of the attendance device in a certain area.
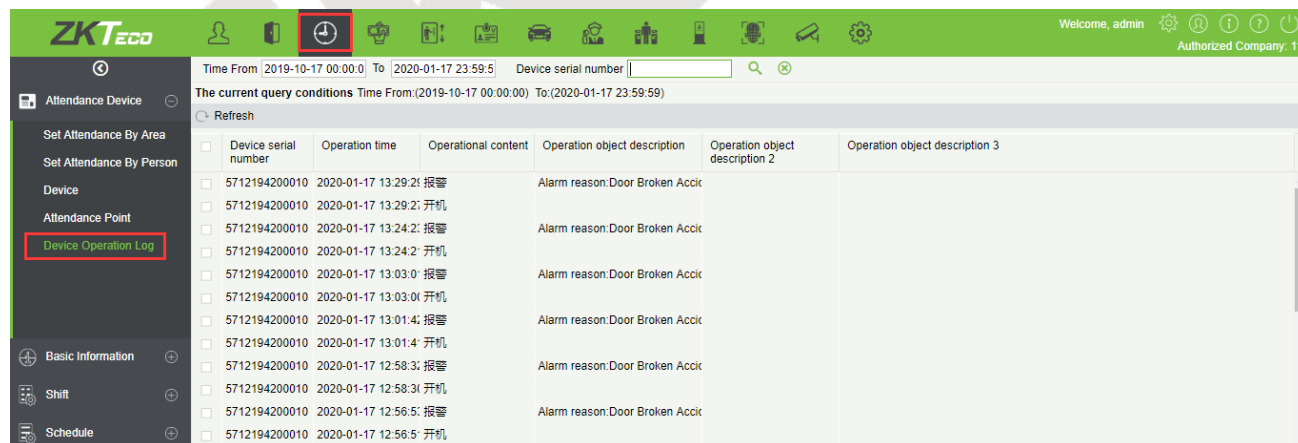
3. **Basic Rule and Parameter**

1) Maximum over time (minutes), which can be selected from No limit, this week and this month.

2) Flexible Duration Calculation is moved to **Shift** > **Timetable** > **New**> **Timetable Type**.

3) New attendance calculation rules:

Missing Check-In will be counted as Absent/Late/Incomplete.

Missing Check-Out will be counted as Absent/Early late/Incomplete.
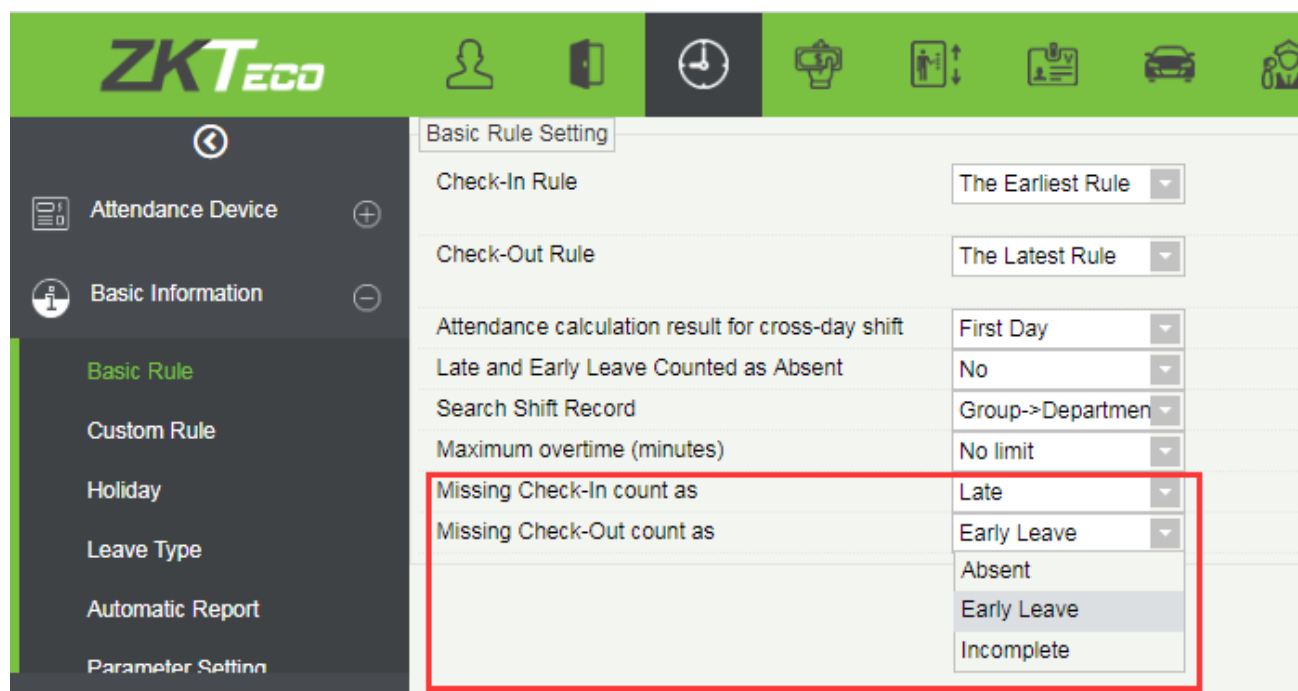
4. **Timed Calculation**

Users can add the timing calculation and enable the employee self-service login from the following Path: **Basic Information** > **Parameter Setting**.
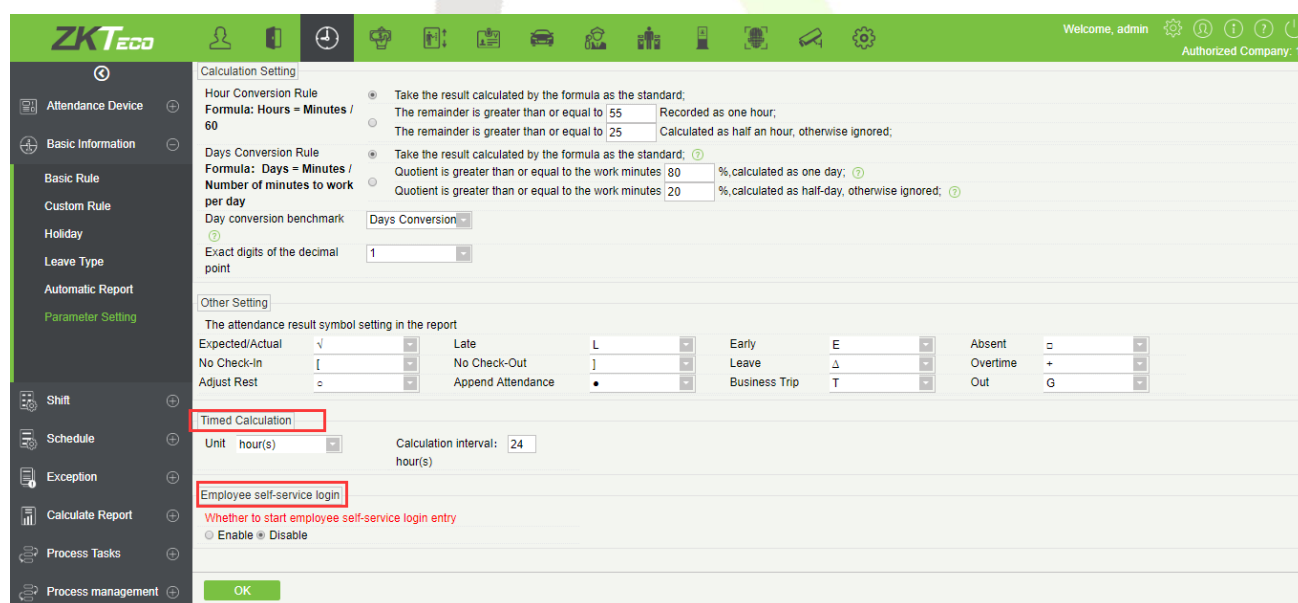
Note:

1) Timed calculation: Users can set the frequency of timed calculation which can be minutes/hours.

2) Employee self-login: Enable or disable the web self-login function.

5. **Custom Rule**

Users can define the group or department rules, and apply them to the group or department schedule. If there is no custom rule, the group or department schedule will adopt the basic rule.
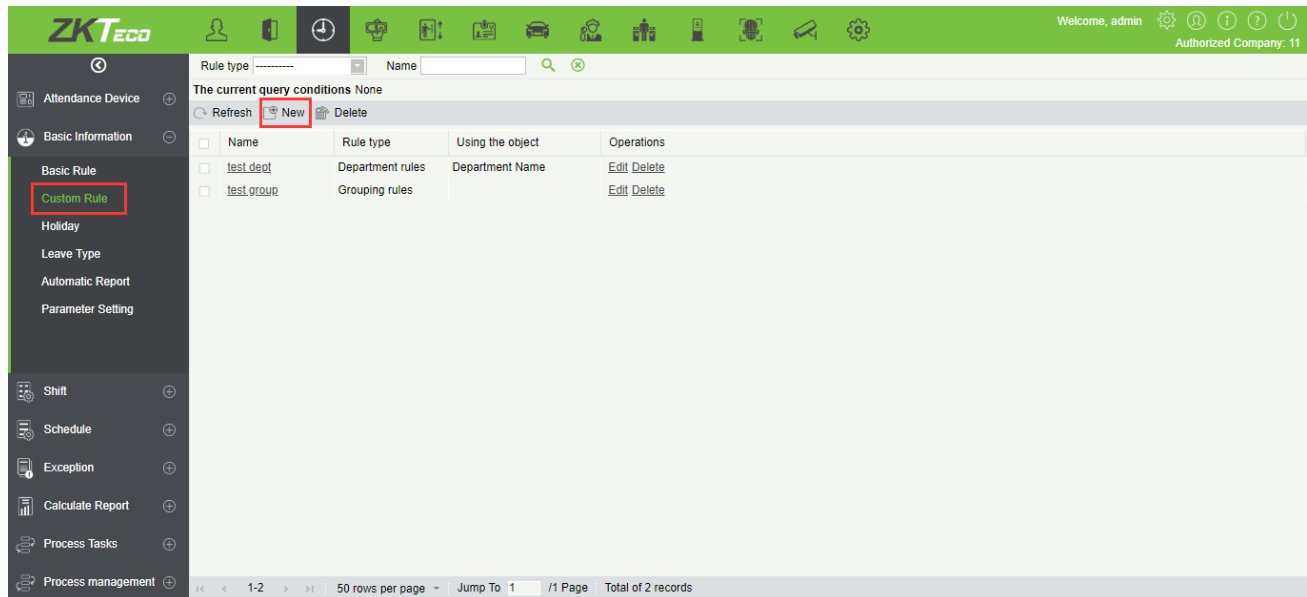
6. **Automatic Report**

The software supports the automatic report feature, which allows the users to customize the attendance reports and send them to the designated areas or departments regularly.

1) When exporting "Transactions", there are more field options that can be exported: Department number, and last name, and device name/attendance point name. The supported file formats are TXT and EXCEL.
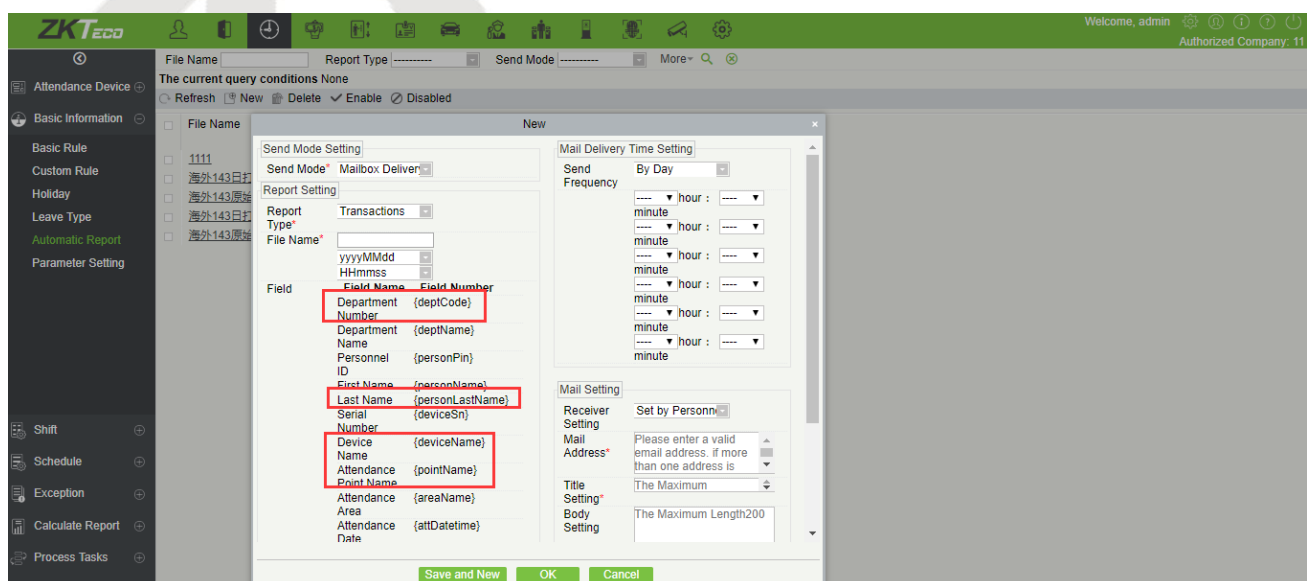
2) When exporting "Daily Attendance", there are more field options that can be exported: Department number, and last name. The supported file formats are TXT and EXCEL..
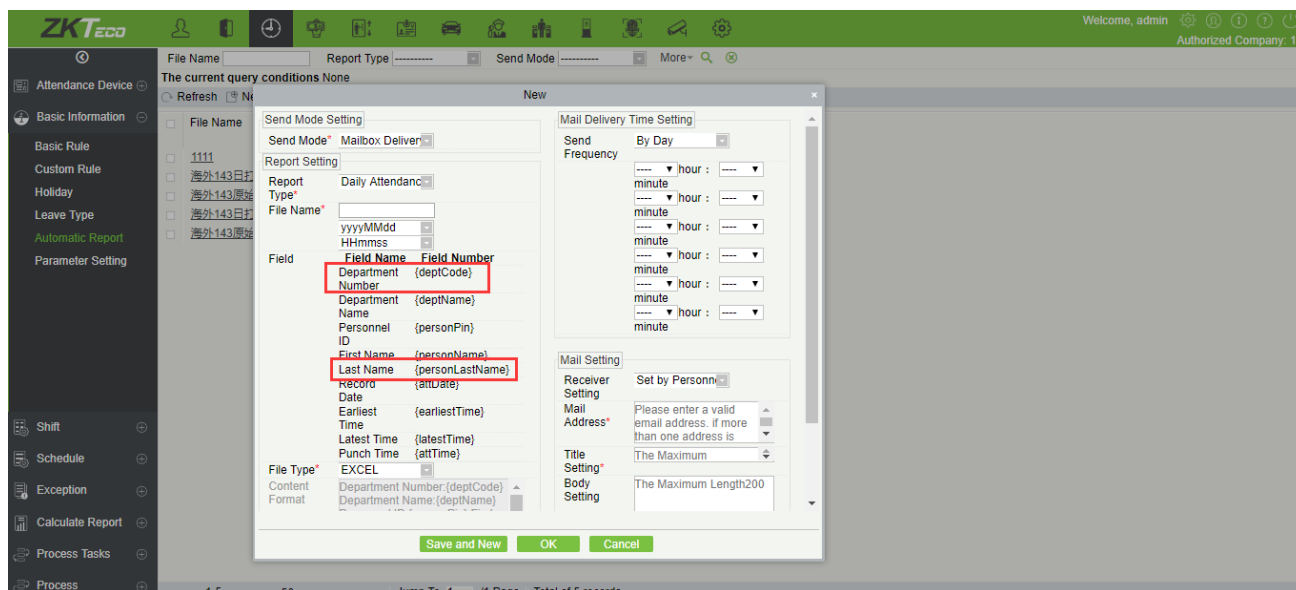
3) Supported FTP sending method: Users can configure the FTP server address, port, username, password to send the transactions and daily attendance records.
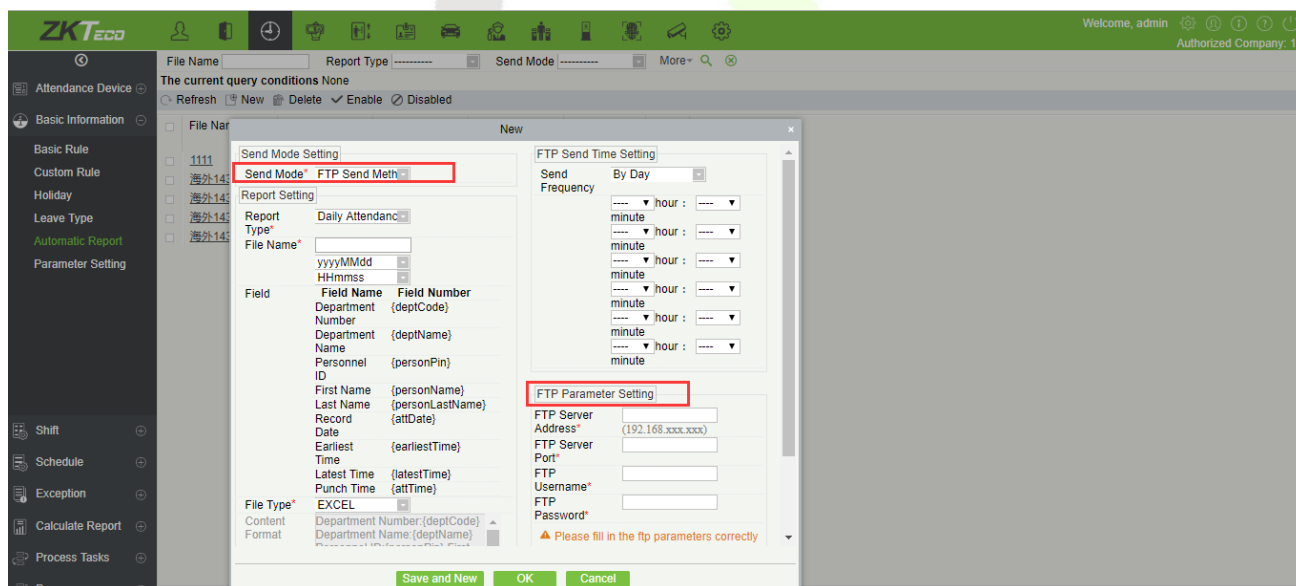
7. **Transactions**

1) New search filter conditions "attendance area" and "device name" are added on the transaction table.

2) "Import U disk record" imports the device data to the transaction table.

8. Process Tasks & Setting

Approval Flow Management features: Users can flexibly configure the approval processes for employee attendance exceptions, and employees can submit the exception approval requests through "the employee self-service login ", and approving exception requests submitted by the subordinates.
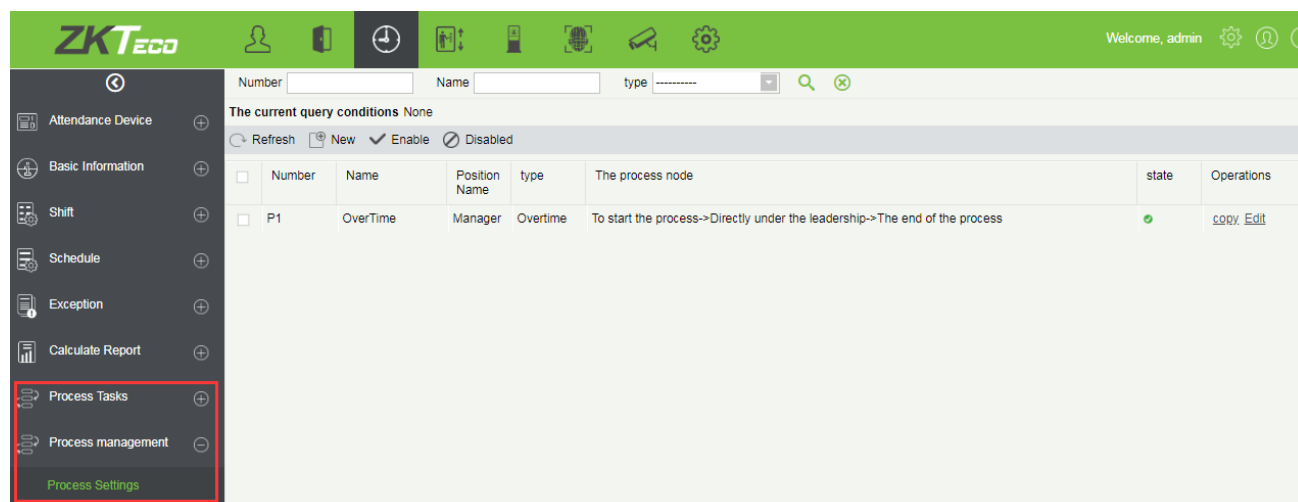
By selecting the type of process, position, requester, the application will be approved through Web or Self-service login to complete the approval flow process.

Note: For each type of exception (Append list/Leave/Business Trip/Out/Overtime), a process must be created for each position.

2.5 Consumption Module

1. **Card Sector Modification**

Offline consumption: Allows the user to configure the MF card sector while writing the consumption data to the MF card. Master and Sub card issuing sector: The master sector can be selected from 1 to 14th; the sub-sector cannot be edited, the default is the main sector +1.
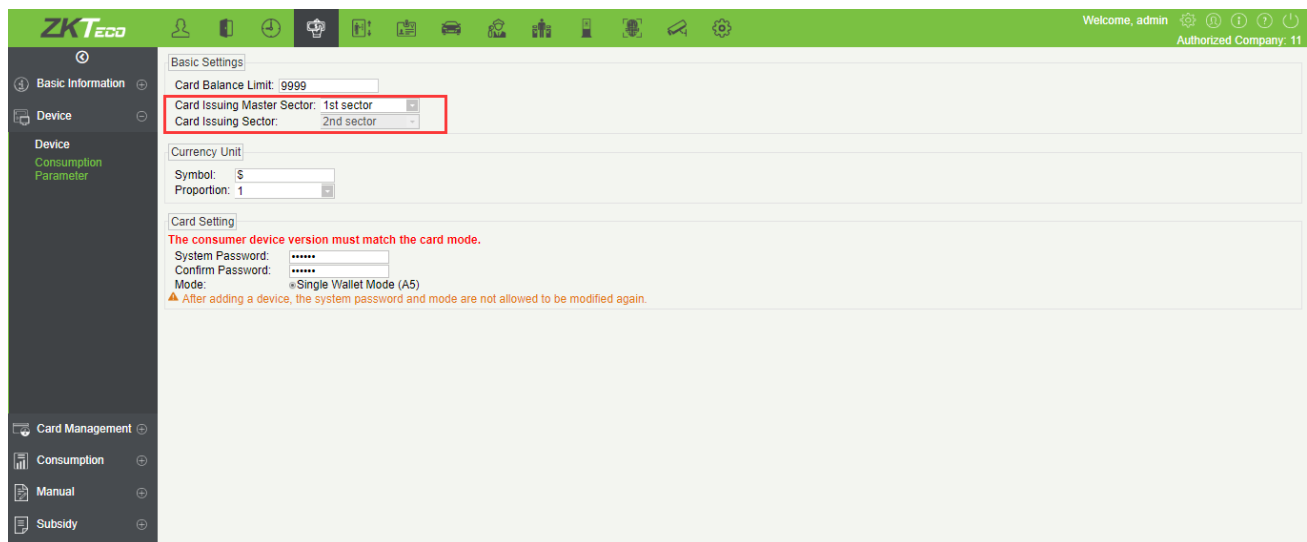
2. Offline Consumption Details Can be Imported with U Disk Records

If the device consumption records are inconsistent with the software, users can export the consumption records of the consumer device **U disk management** > **Download consumption records** to the U disk, and then go to the software **Consumption** > **Consumption** > **Consumption Detail report** and then import the consumption records into the software through USB.
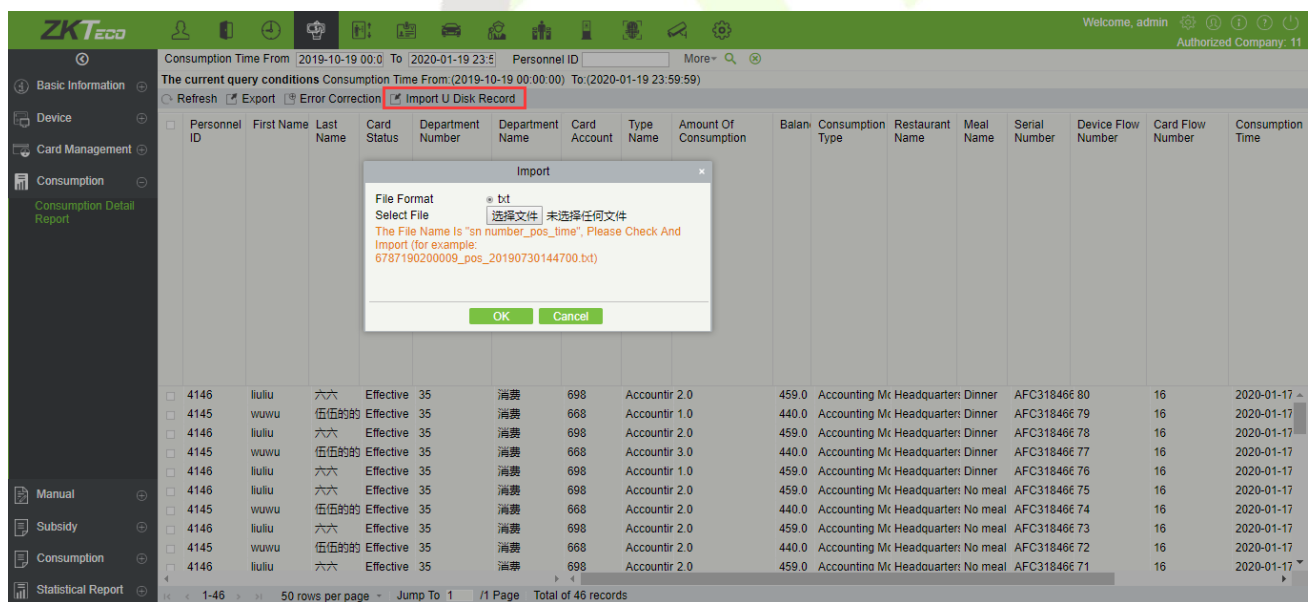
2.6 Visitor Module

Optimized visitor management function: Enhanced the professionalism of the enrollment process and visitor check-in. Streamlined the enrollment process with pre-registration or self-registration options, allowing users to create watch lists and screen against unwanted visitors.

1. Signature

On the user registration page, a tab is added for adding signature which will be dynamically updated. The Software supports Topaz Signature Capture Pad T-S460.

2. Clone Visitor Function

The administrator can clone the following visitor's attributes including the interviewee, department, the reason for the visit, registration place, company name, country name, authority group, start time, end time to make the enrollment more efficient.

3. **Maximum Visitor Visit Reminder**

   1) Parameter setting interface.

   2) When the number of visitors on the day reaches the default maximum limit, a prompt will pop up when opening the registration page.
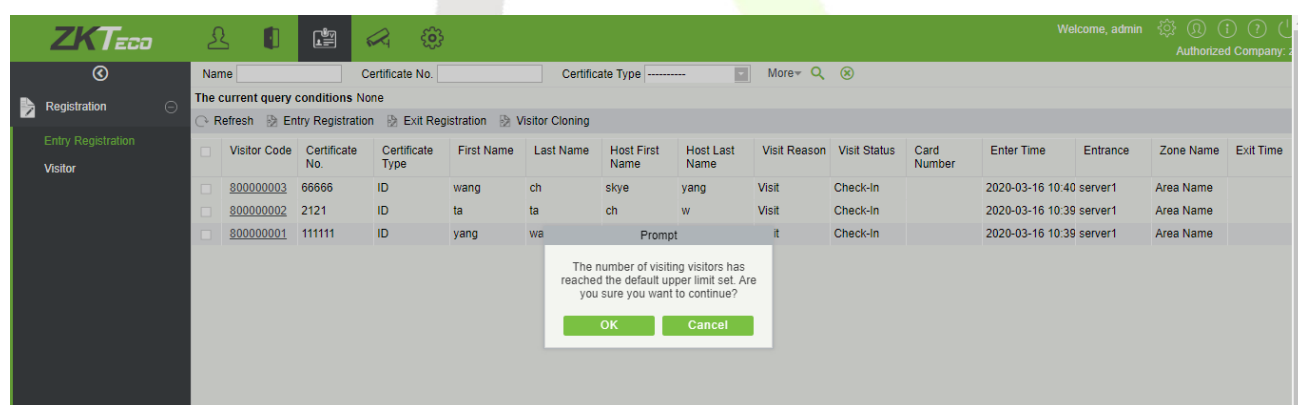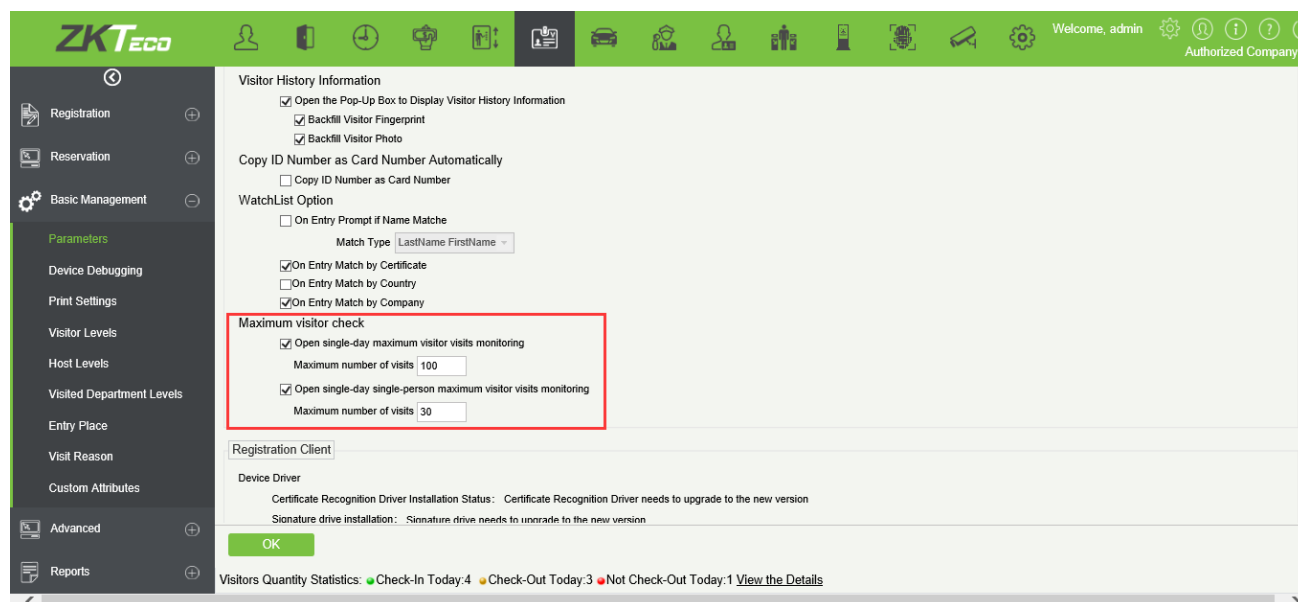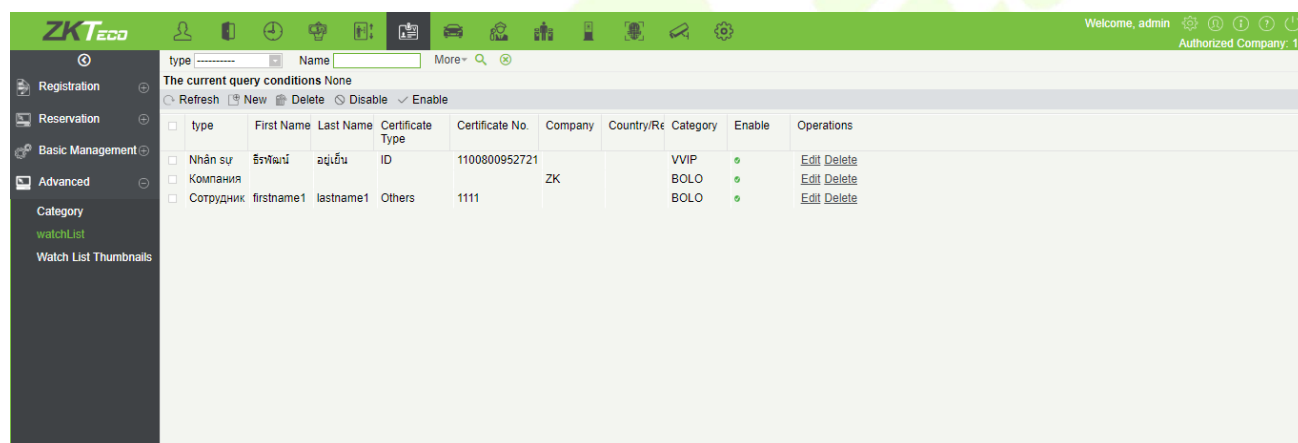

4. **Watch List**

This allows users to create watch lists and screen against unwanted visitors.

   1) Set parameters to filter out specific characters of visitors when monitoring.
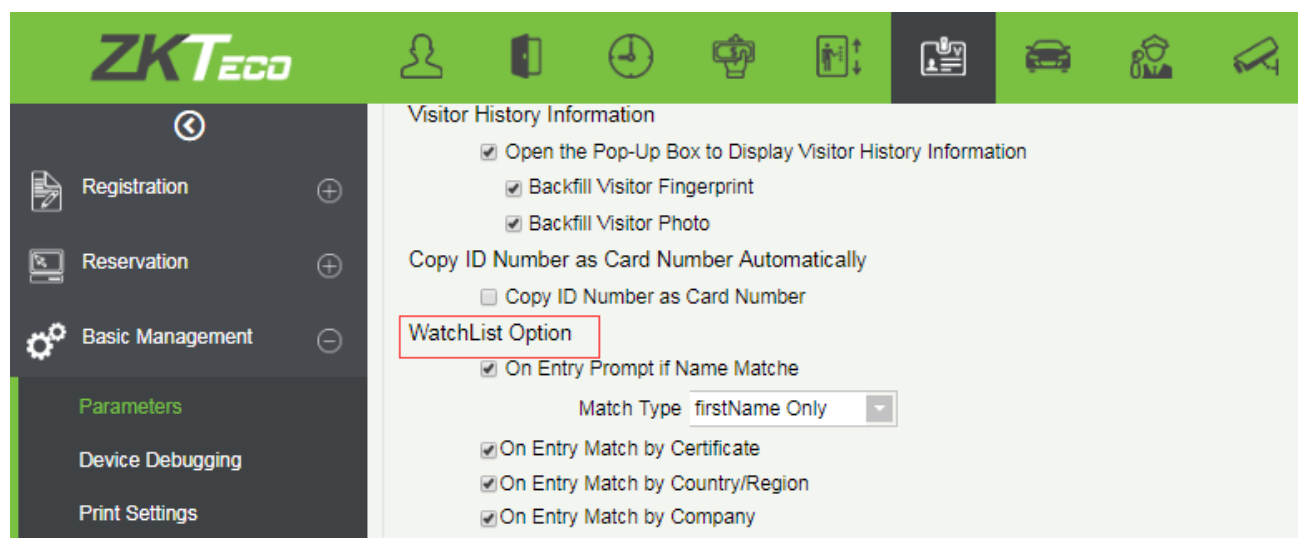
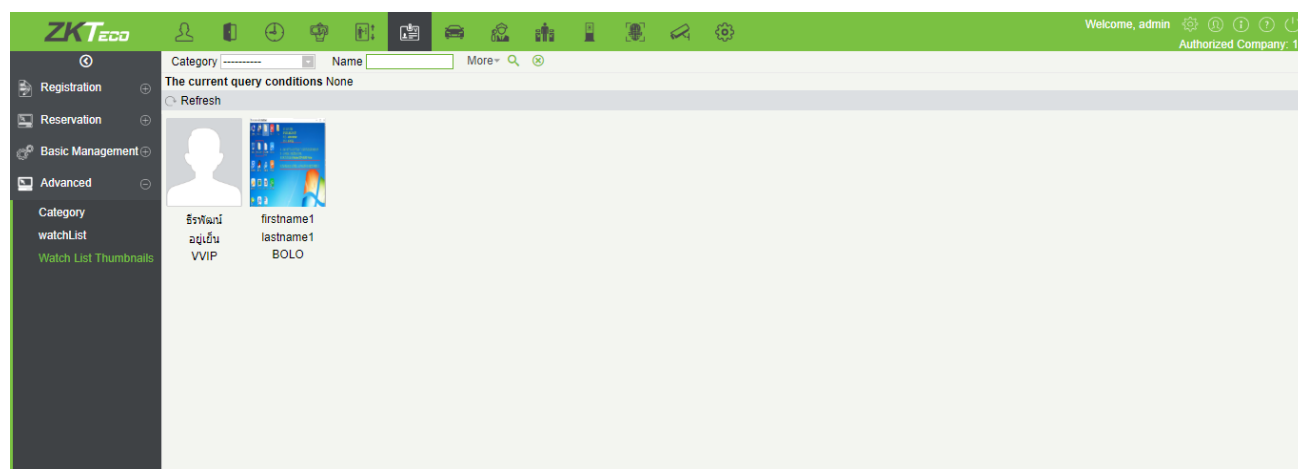2) Create watch lists as required. There are three types of watch lists available: 'Person', 'Company', 'Country/Region'.

5. **Watch List Thumbnails**

This lists all individuals that need to be specifically monitored. There are mainly three types of lists: VIP, BOLO, and BLACKLIST. Customized individual types will also be listed here.


6. **Alert Template/Linkage**

Users can create a new email template or edit the existing template. Different events may have different template types. When the visitors make appointments, Check-in, check-out, stays overtime, the system will remind visitors and interviewees via email.
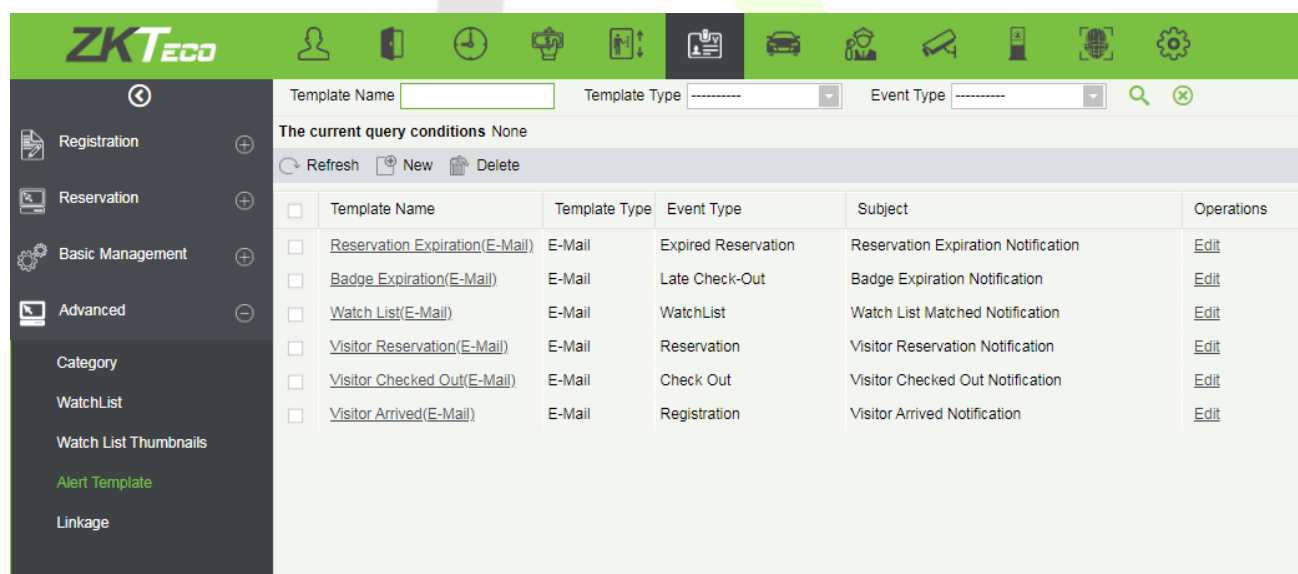
7. **Visitor Card printing**

On the parameter setting interface, the users can set the parameters of the Card. They can define the template (refer to personnel card printing) and then set the card printing function. If automatic card printing is selected, the printer is required. After the visitor registration is completed, the user can print the card directly.
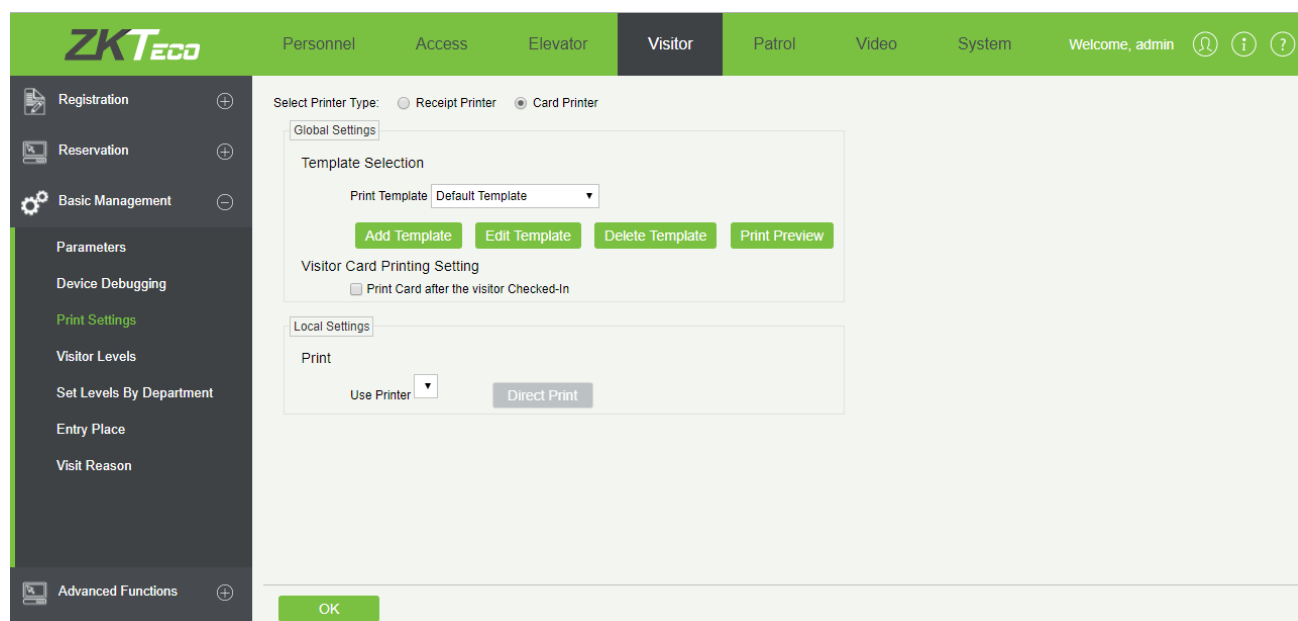
2.7 Parking Module

Supports Four-line screen LPR device

LPRS2000: The LPR device has a four-line which can display the Company, Date, remaining parking spaces and other information at the entrance and exit of the parking lot.

The path is: **Parking** > **Basic Management** > **Parking Lot Settings** > **Voice and Display Settings**. Users can set the three- and four-line display color and only the four-line screen devices support it.
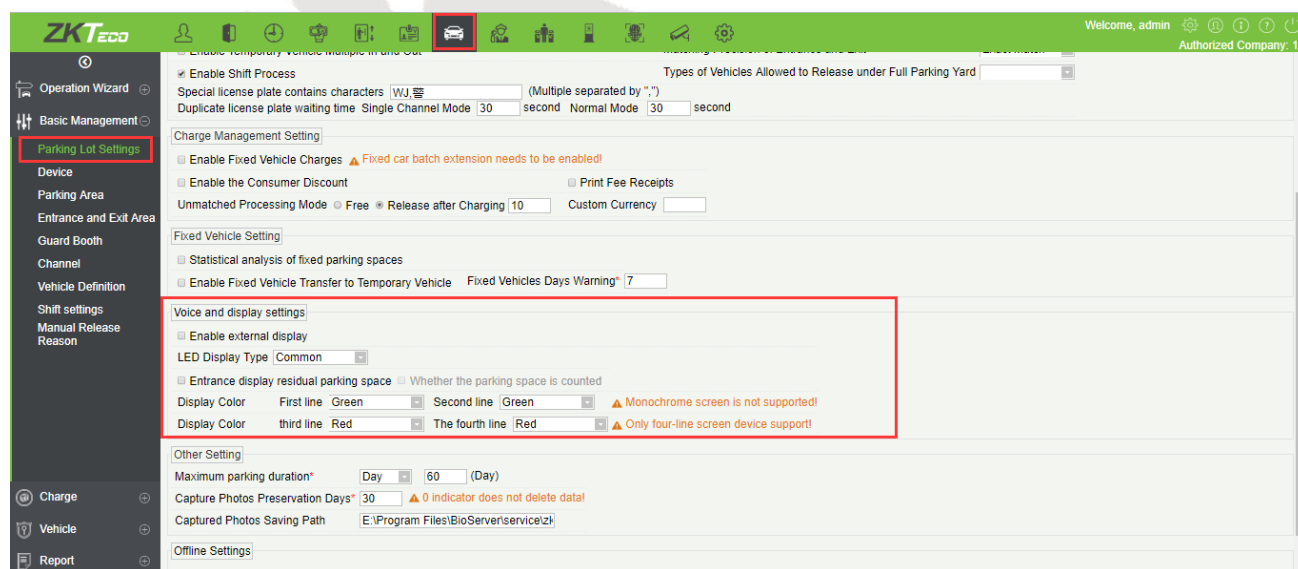
2.8 VMS Module

Newly added VMS module: It can be used in conjunction with NVR, DVR, IPC, MDI, SDI network storage devices. It supports features such as real-time preview, video playback, record, linkage alarm, facial recognition, and decoding video, etc. It also provides flexible and diverse solutions to meet the need of small and medium projects. The VMS module can work with VMS Client, which can be widely used in various security projects in finance, public security, banking, education, and other fields.
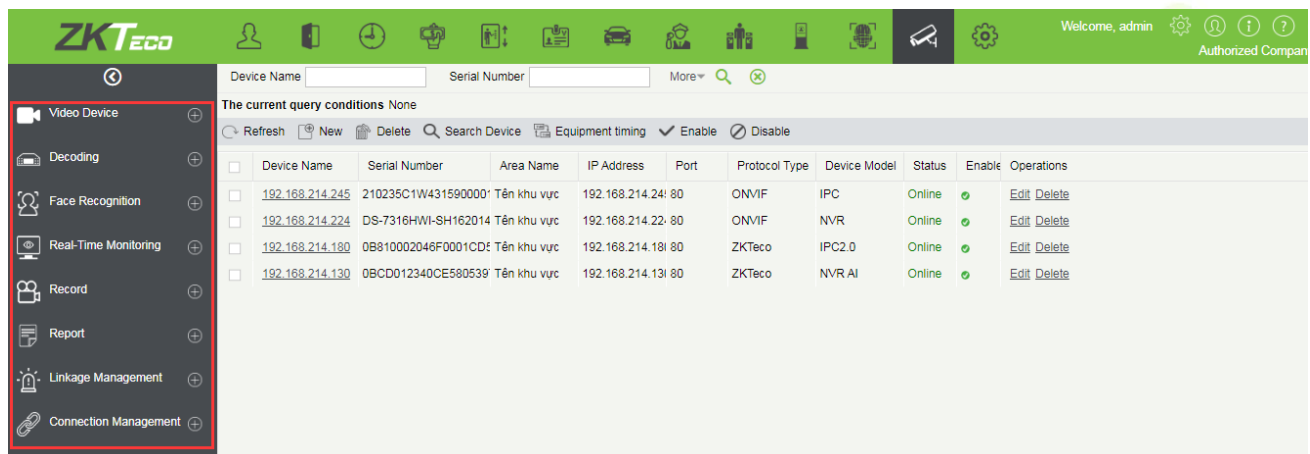
VMS Client:

1. **Video Preview**

Users can preview the video in real-time in several ways, including by device, group or layout which have been set already. Currently, 64 channels can be previewed at most in the ZKBioSecurity and VMS Client.
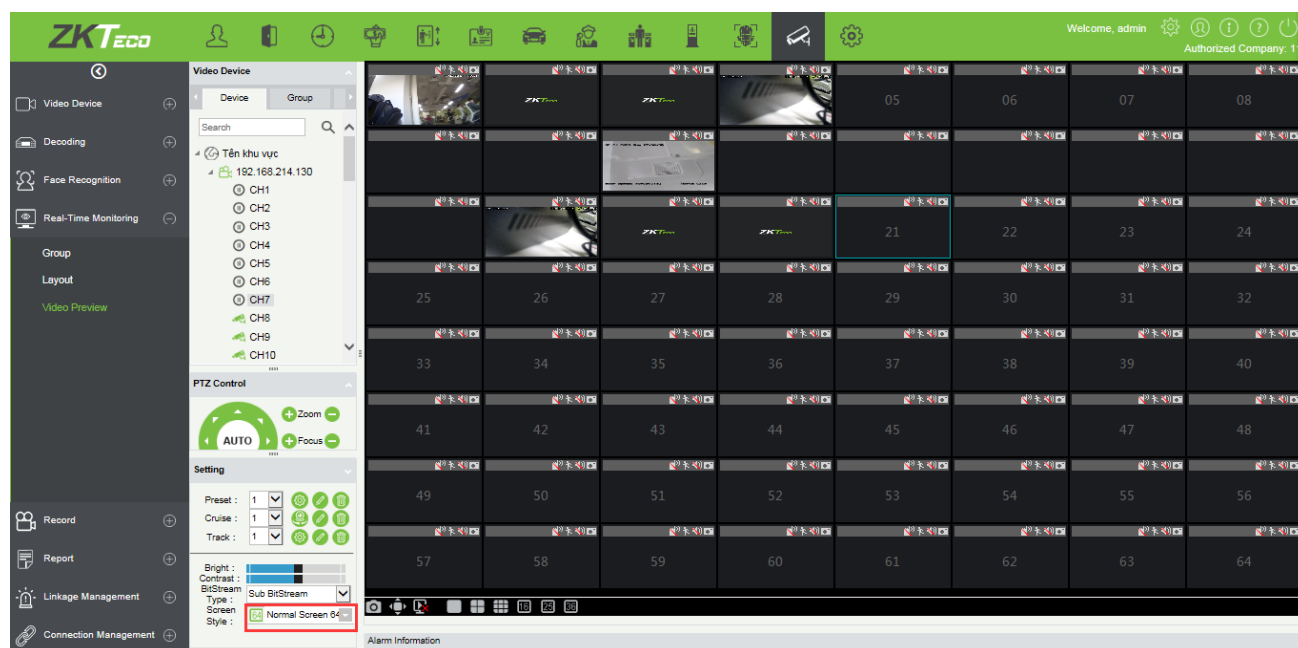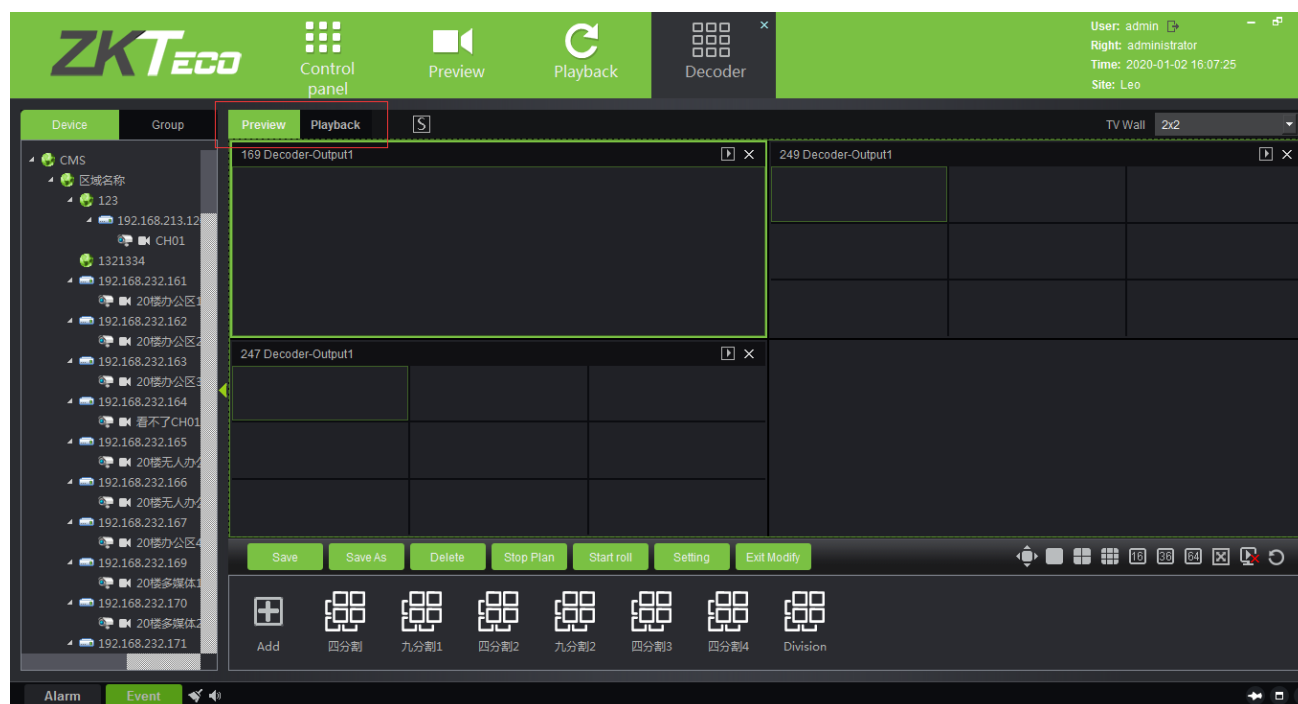
VMS Client:
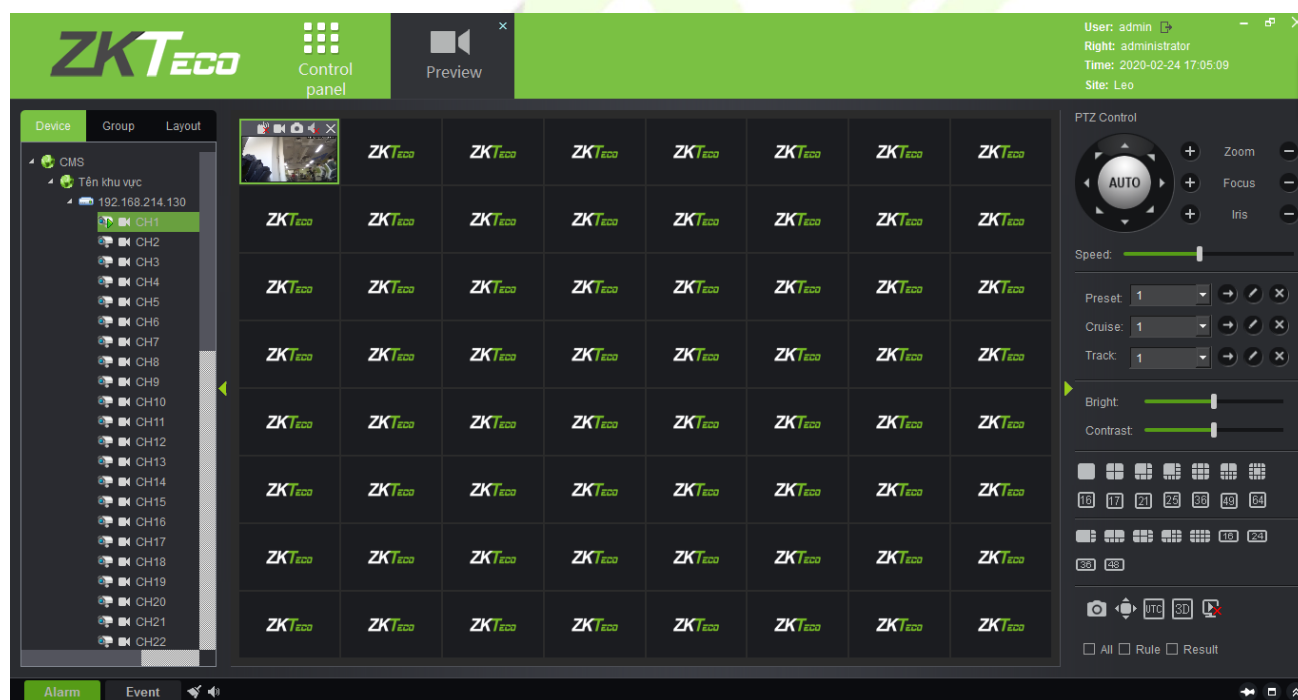
2. **Supports decoder setting, decoder preview, decoder plan tour, decoder playback, TV wall splicing function**

The software allows the user to view the video real-time preview, playback, record video on the TV wall. This function is widely used in Factories, Schools, Traffic junctions, Commercial buildings, etc.
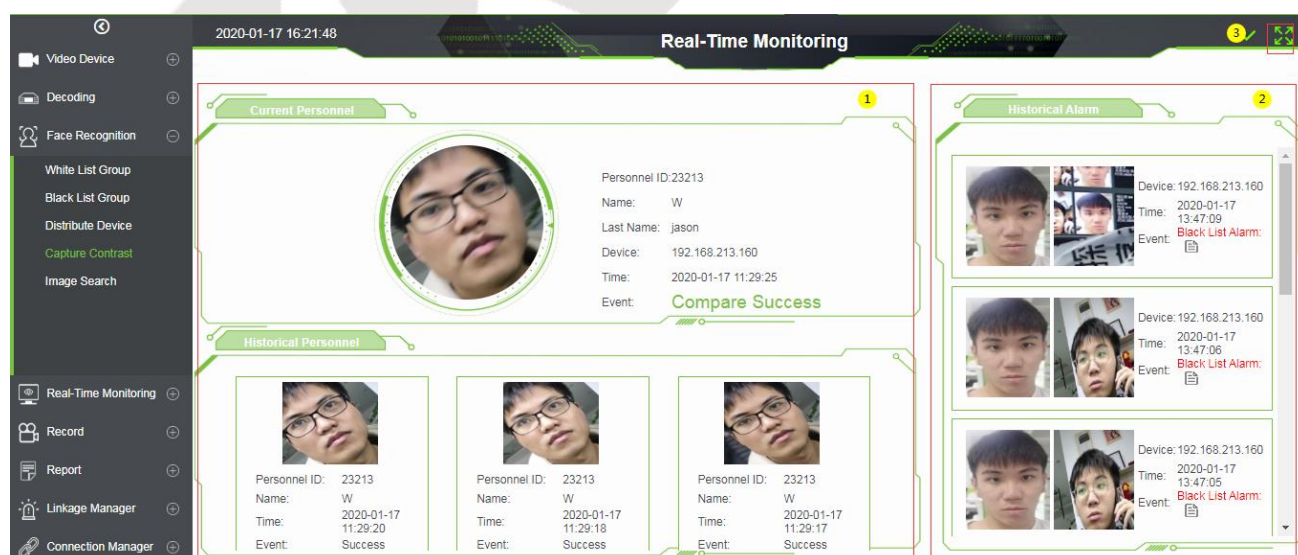
3. **Facial Recognition Function**

The software works with the latest ZKTeco facial recognition NVR, the new ZKBioSecurity provides facial verification, whitelist & blacklist control, search for specific users by photo.

Whitelist and Blacklist real-time monitoring:

The users can check the real-time capture, record the video of blacklisted personnel.

Black List Alarm:

It also supports to search the specific personnel photo by uploading the personnel photo.
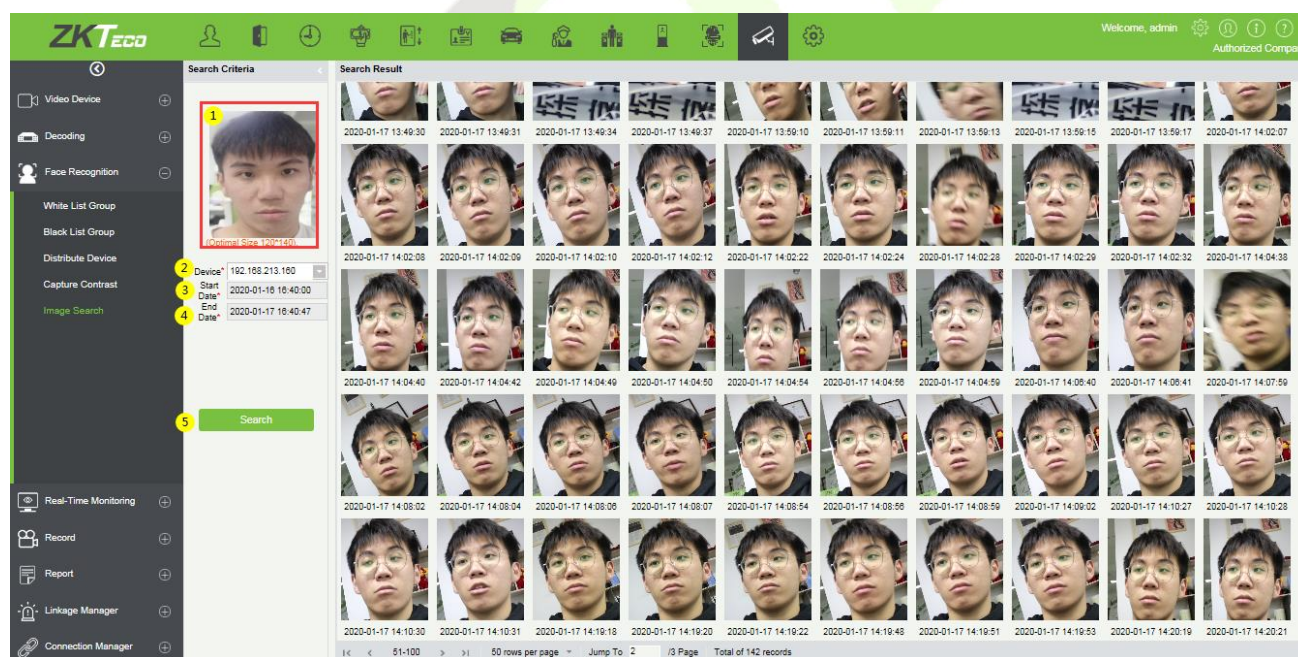
4. **Video Record**

Users can configure the record plan of devices, check the related video record based on the record plan.

There are several record type can be set, such as "Timing Video", "Alarm Video", "Timing Video+Alarm Video".

It also allows users to search, view and download the video record.
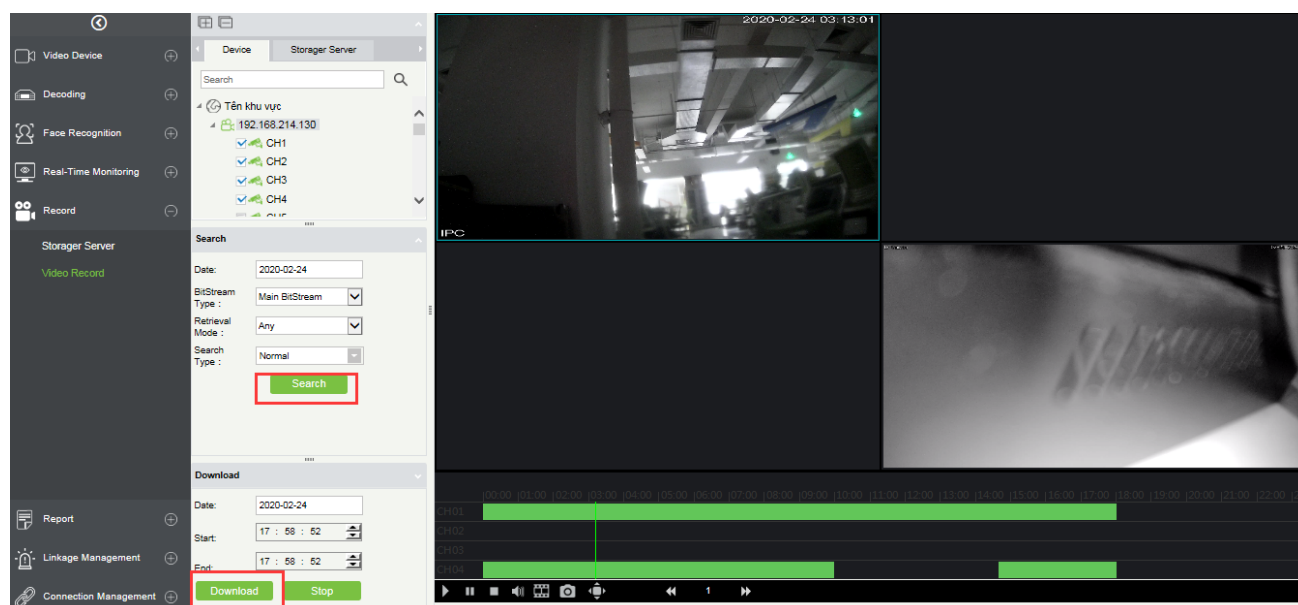
5. **Linkage Management**

Linkage Management is used to configure the Video device alarm linkage.

There are eight alarm trigger conditions that can be chosen, such as Motion Detection, Video Loss, Tampering, Alarm in, Counting Alarm, Area Alarm, Object Detection, Cross Line Alarm, and Human Detection.
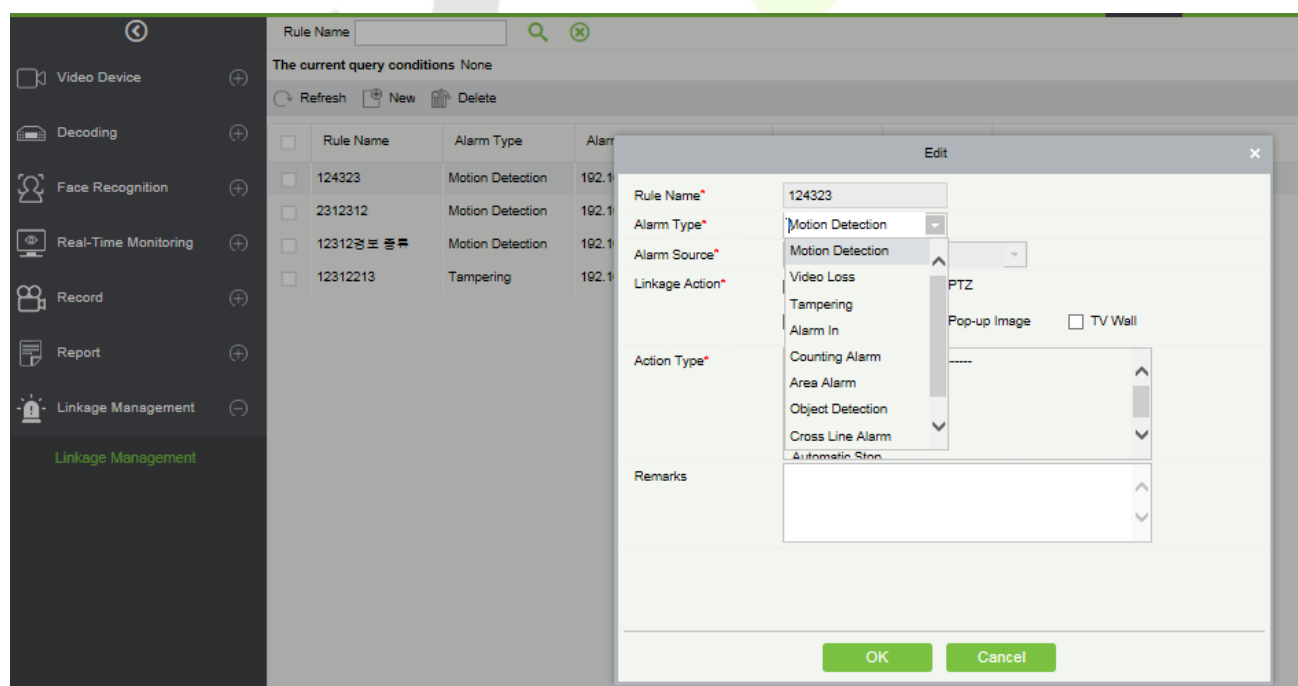
6. **Video Report**

ZKBioSecurity VMS provide several kinds of reports for user, such as administrator can view all the facial recognition alarm reports and allows to check the captured image and video files.

1) Blacklist Alarm as an example:

2) Linkage Alarm Report:

Lists all the alarm reports after setting the Linkage alarm in "Linkage Management". Users can also view recorded videos.

3) Video Event Records

This report records all the captured and linkage video which is generated from the access control device linkage with video device.
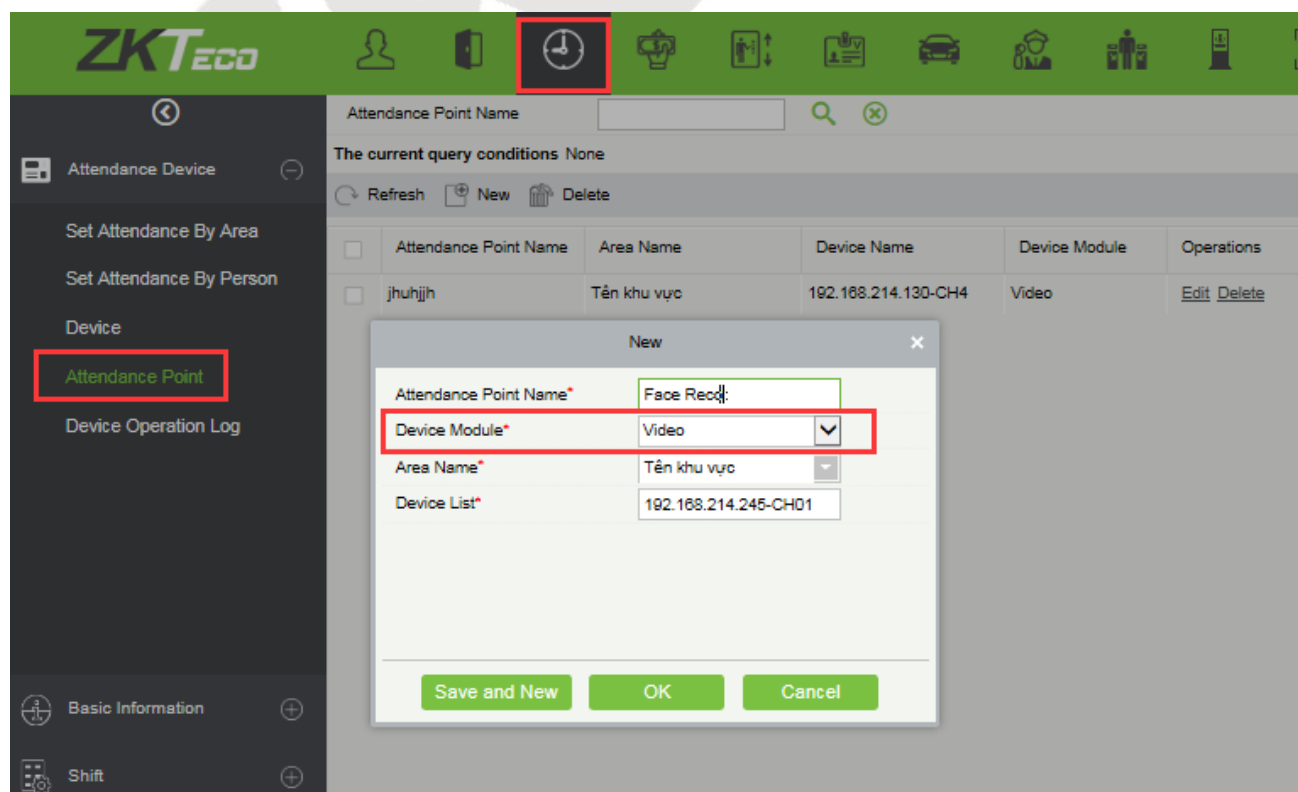
It also allows the users to check the linkage capture and video.
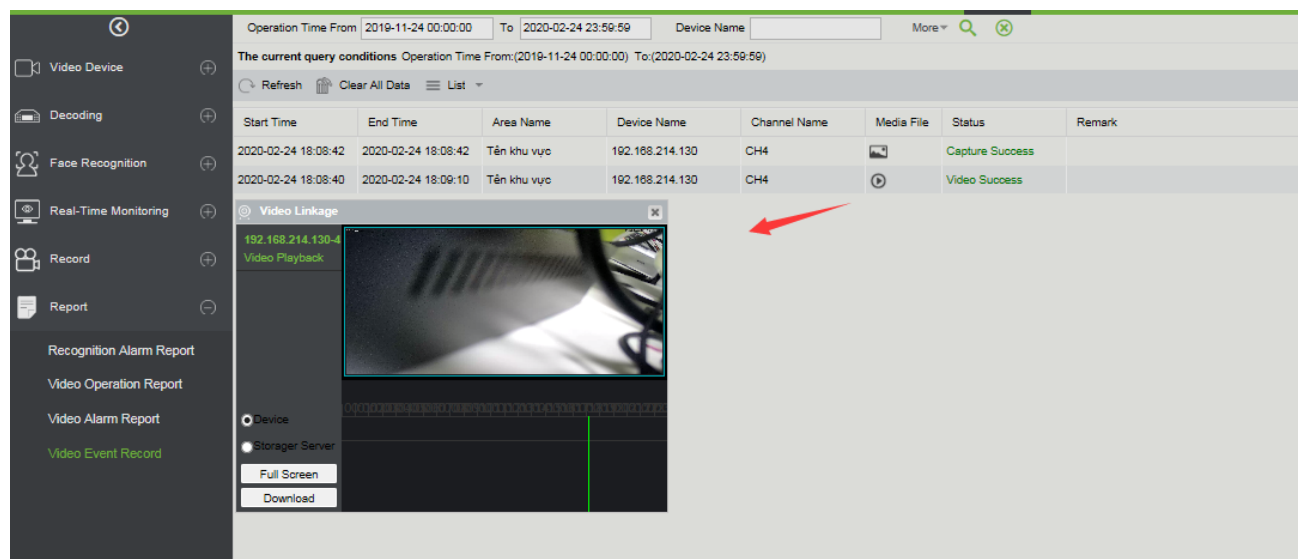
7. Facial Recognition Record as Attendance Data

The system supports importing the personnel facial recognition records to the attendance module as the original attendance transaction.
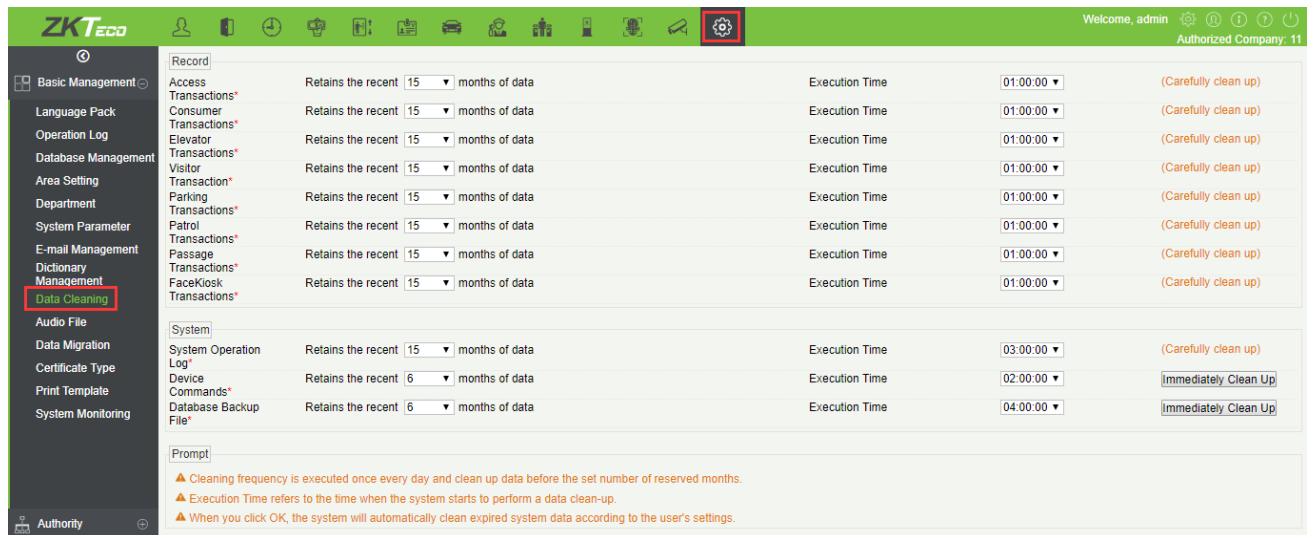
A single data can be reused multiple times.

2.9   System Module

1.   Data Cleaning

The path is: **System**> **Basic Management**> **Data Cleaning** - To save the disk storage space, the expired data generated by the system must be cleaned up regularly.


2.   Data Migration

The path is: **System Management** > **Basic Management** > **Data migration** – The Software can be migrated from 3200 Version to V5000, including various modules and events (except the patrol module). The users can configure the database type, IP address, database port, database name, database user name, database password, and software version. Uses can select the modules to be migrated for automatic migration.
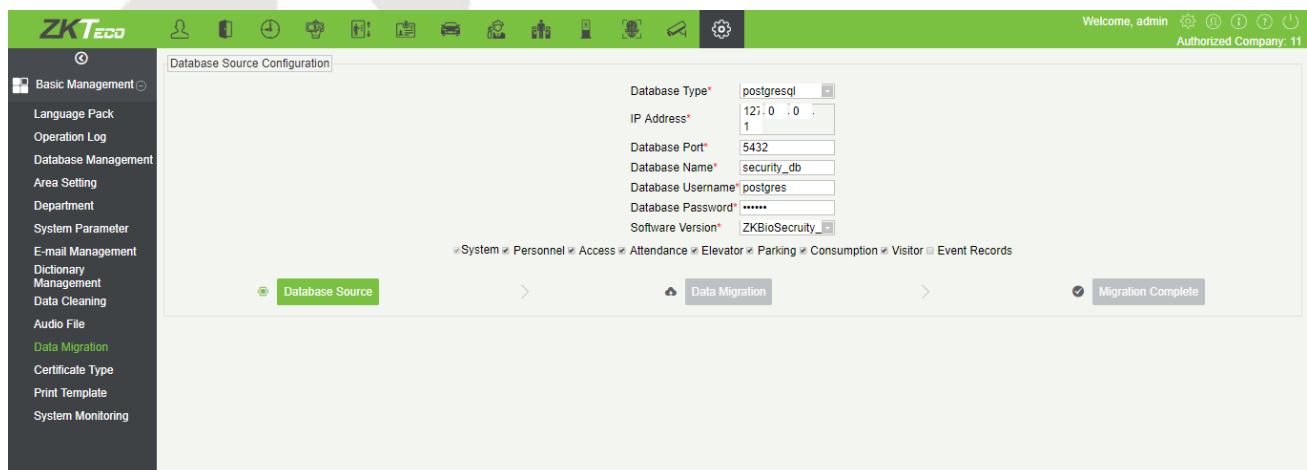

3.   Print Template

The path is: **System** > **Basic Management** > **Print template** - New print template management functions are added, including Personnel card template, visitor receipt template/card template are all configured here. The system initializes 5 types of personnel and visitor print templates.
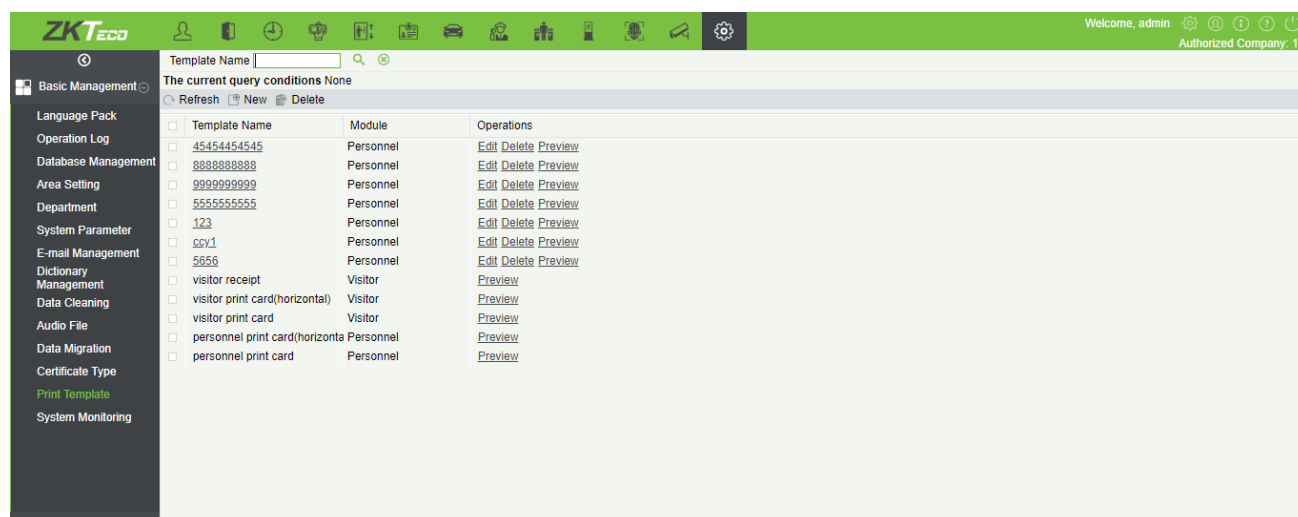
4. System Monitoring

The path is: **System** > **Basic Management** > **System Monitoring** - The system monitoring function displays the server processor usage, host memory usage, processor information, memory information, java virtual machine memory usage and other information.
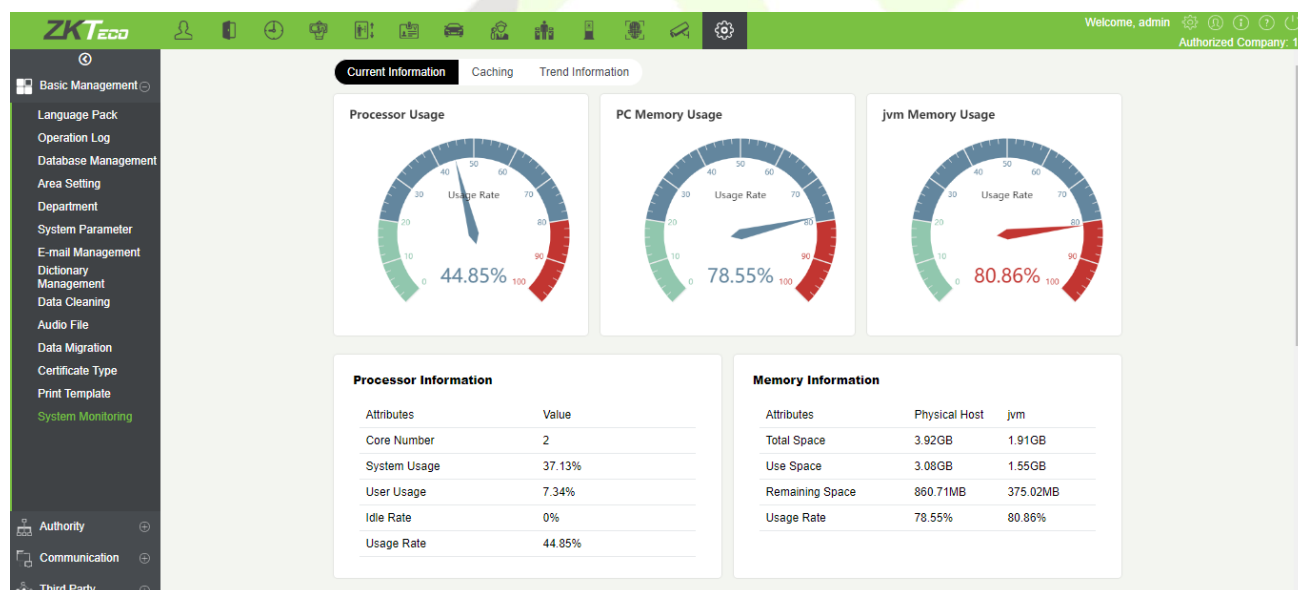
5. Limitation of Maximum Number of User login

The path is: **System** > **Authority** > **User** > **New** > **Maximum Number** - The Default is that multiple logins are not allowed. If the administrator clicks Multiple Login and fills in the maximum number of the user(example:1-10), it means the system allows 10 users to login.
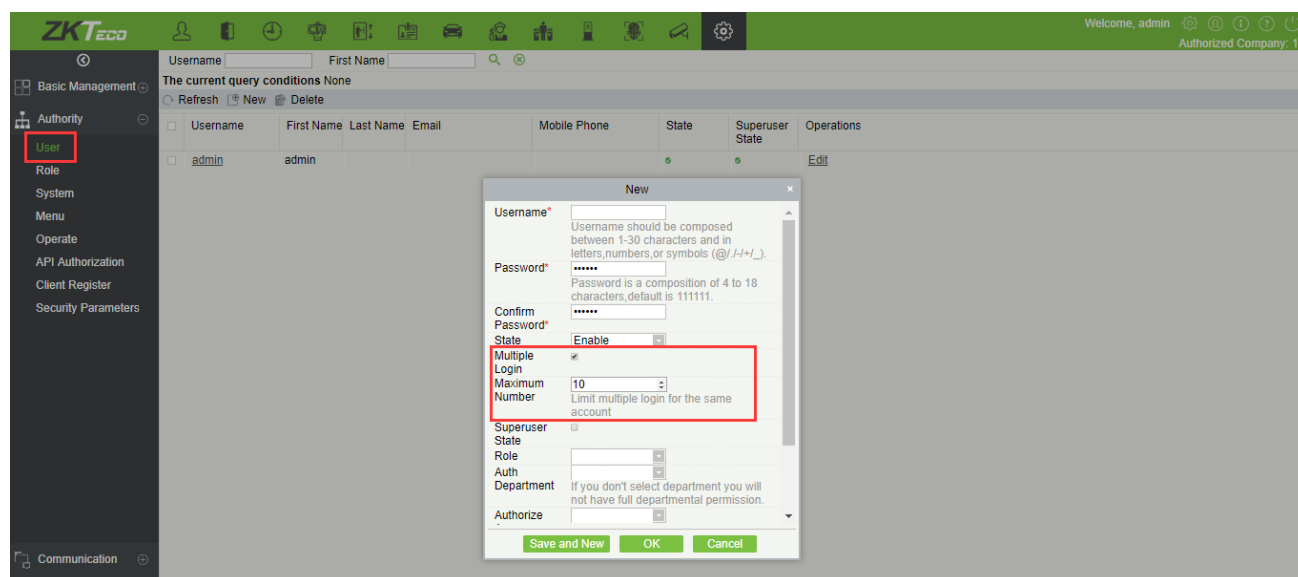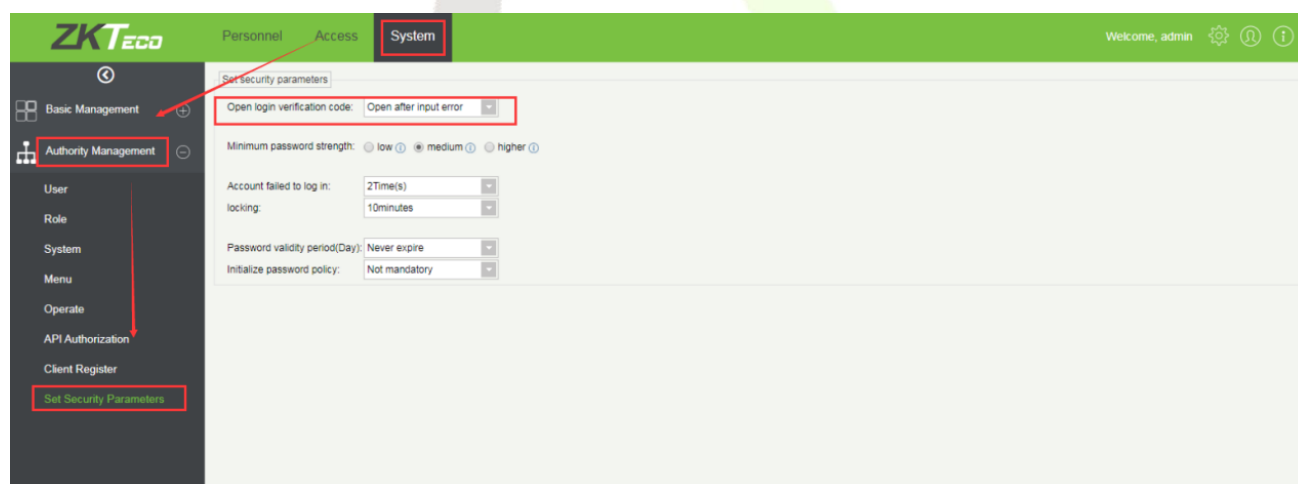
6. Security Parameters

The newly added Security Setting options, keep the balance between Security and Convenience. It improves the security of the system, avoids the risk of password cracking by force.

Features:

1) Three login verification modes can be selected.

Do not open verification code: The system allows no verification code

Open verification code: User must fill in the verification code when logging in to the software.

Open after input error: The system will pop-up a verification box after filling in the wrong user name and password.

2) Password Strength Setting: The path is **System** > **Authority Management** > **Set Security Parameter.**
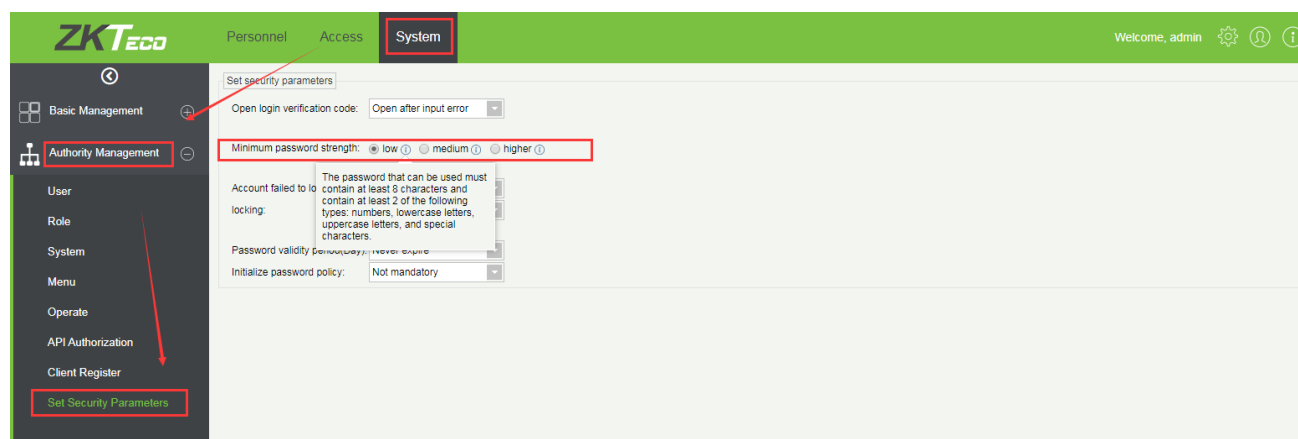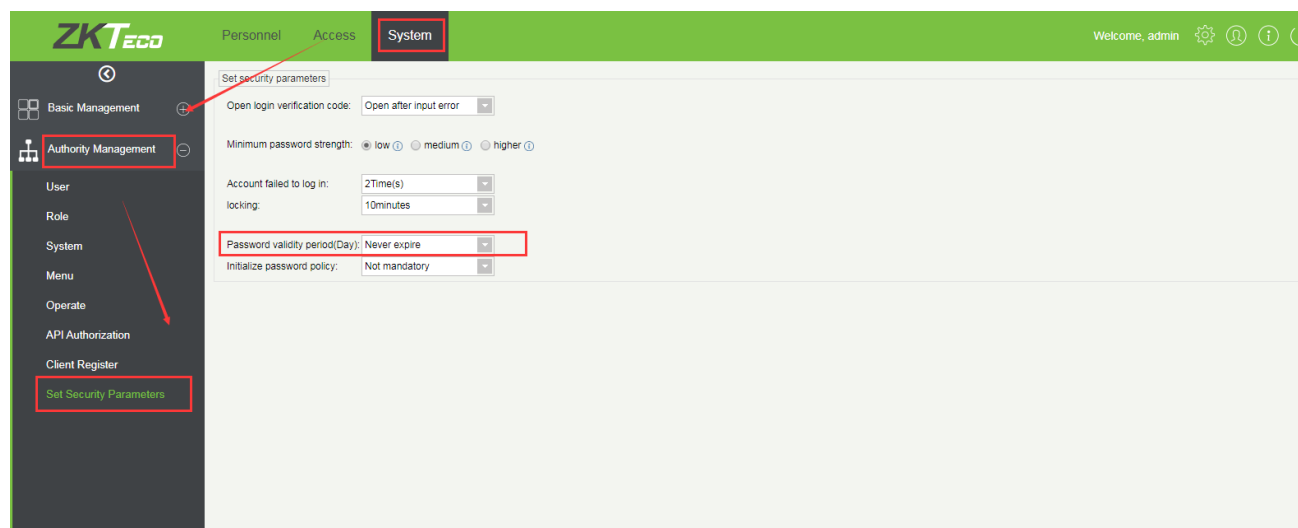
3) Lock account: The path is **System** > **Authority Management** > **Set Security Parameter**.

The account will be locked if the user fails to log in to the system as per the software setting. For example, if the system allows the user to fill in the wrong username and password 2 times. The system will be locked 10 minutes after exceeding 2 times.
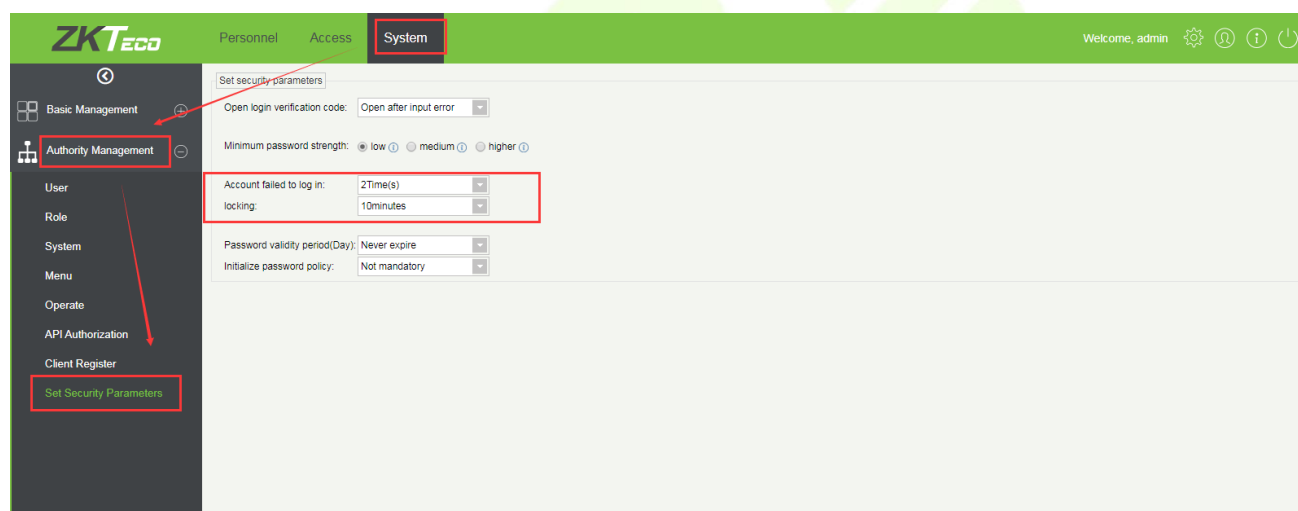
4) Password validity day(s): Find the path **System** > **Authority Management** > **Set Security Parameter**.

The system supports password validity setting, user can set 30-day, 60-day validity period, or permanently. If the password is expired, the user cannot log in to the system.

5) Password Modification: The path is **System** > **Authority Management** > **Set Security Parameter**.

There are 2 options that the user can set: Not mandatory and forced to modify the next time you log in.

Not mandatory: The system does not need to modify the initial password.

Forced to modify the next time you log in: It is compulsory to modify the initial password after the second login.
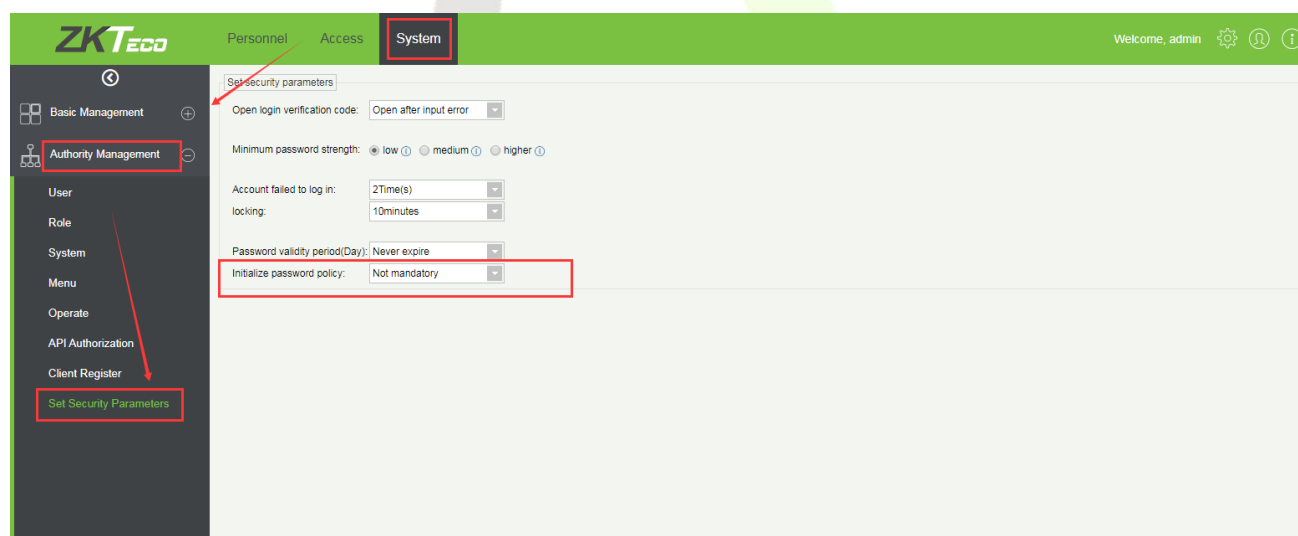
7. AD Management

The software is integrated with 3rd party AD Server to get the Personnel/Department information to our software directly. It makes integration easier.

The path is **System Module** > **The Third Party Expansion** > **AD Management**.

8. Line Notification

Integration with Line APP, allows the user to subscribe to the important events in the chat group Line APP.

Path: **System Module** > **Third Party Expansion** > **Line Notification**

License control: Access control/attendance records and photos will be pushed to the Line APP in real-time. Users can set the valid time for sending events, for example, if the user sets the time from 0:00 to 16:00, then the system will push all events to Line through the token during the time zone.

ZKTeco Industrial Park, No. 26, 188 Industrial Road,

Tangxia Town, Dongguan, China.

Phone　: +86 769 - 82109991

Fax　　: +86 755 - 89602394

www.zkteco.com