
Access Control Software

Instruction



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About Software

Fingerprint Access Control, Access Control based on biometric solution from ZKSoftware is designed to help you with all solution which can be use with access control system to limit the areas where each person is authorized to go, it might every be good to know where an individual has been.

Who is still doubt, among various biometric systems, the fingerprint recognition system takes up most of the market, because it is easy to use as well as economical and capable of developing various types of applications. The current software version is Version 2.0 and its main functions are as follows:

- **Multi-terminal networking, real-time monitoring**

No matter Ethernet connection or 485 connections, fingerprint machine can be added into management software. After all fingerprint machines are added, click Start Monitoring and the system will start relative monitoring from the first unit to the last unit.

- **Real-time record download**

Fingerprint records on each fingerprint machine can be downloaded in real time. After download, these records will be stored in database automatically. If there is a attendance software, you can set database directory of attendance software as directory of the database to store these records. Then you can check attendance records at any time.

- **Search records and output records in various formats**

When there are many fingerprint records, you can search records. During search, various condition search functions are defined, such as ID of fingerprint machine, time period, department, etc. Also records can be outputted in various formats.

- **Upload Access control setting**

This function is to upload basic Access control setting and user Access control setting.

- **Department management**

After created department, in User Management you can assign employees to corresponding department.

- **User management**

This function mainly includes downloading user and fingerprint, editing user's information and privilege, creating password for user, using "U are U fingerprint sensor" to add new user, uploading user and fingerprint.

- **Remote open door**

In program, you can click Open Door button to remote unlock the selected door

- **Synchronizing time**

Synchronize time of fingerprint machines.

- **Upgrading firmware**

Upgrade the firmware of fingerprint machine.

- **Initialize fingerprint machine**

In device management, you can initialize fingerprint machine.

- **Operation procedure steps as follow:**

- **Hardware connection**

This is the first step. Connect all fingerprint machines and PC together. Use RS232 cable to connect when distance doesn't exceed 15 meters. Under the condition of distance over 15 meters, it is recommended to use Ethernet connection. RS485 cable can be used for connection when distance exceeds 80 meters and can connect for 1000 meters maximally.

- **User management**

This step is mainly to register each fingerprint machine or upload users. When there are many fingerprint records, it is recommended to use "U are U" Fingerprint Sensor to register users first. Then upload users to each fingerprint machine respectively. In user management, you can edit employee's information, create password for employee and set corresponding privilege.

- **Access control management**

For Access control, we define that all users are initialized as invalid user. User can become valid user in effective time period only after user is assigned privilege. So we need to upload Access control setting after we finish uploading users

1. Installation and Uninstall

1.1 Installs software

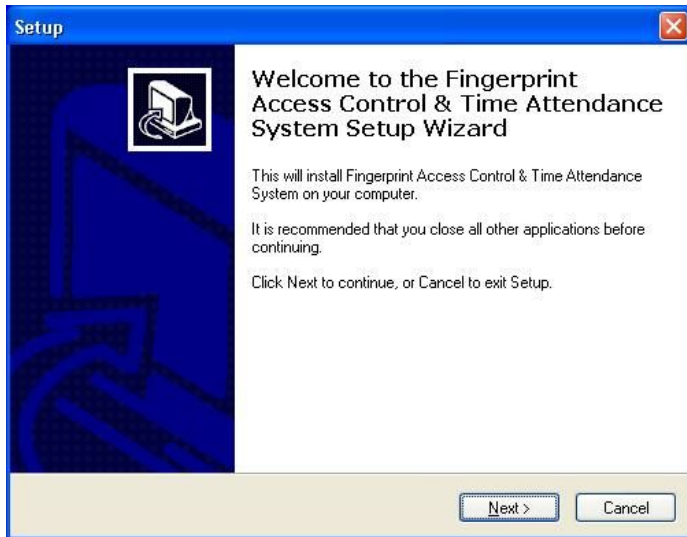
Before installing your software, it is better to shutdown other running application programs, in order to keep away conflict in installing process.

Note: Maybe some displaying figure does not tally with real contents please subject with CD you install

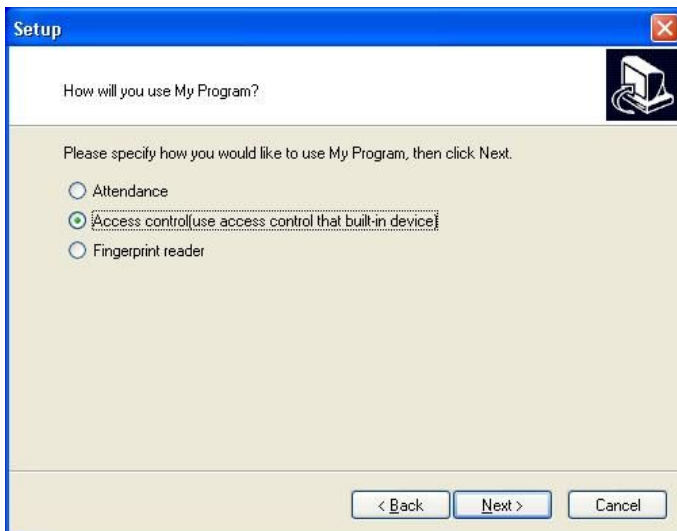
Please put the CD with software into CD-ROM, it will be running automatically and pop-up following interface.



Select an installation Language, Click **Next**, enter follow interface



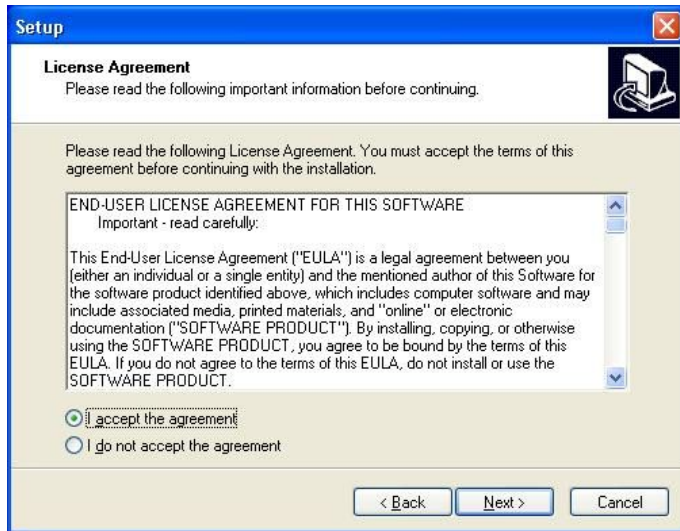
Click **Next**, enter follow interface:



This interface fully provide with three way the software apply to, there use method ability to be shifted by the setting, this software mainly apply to the access control, so select the a **Access**

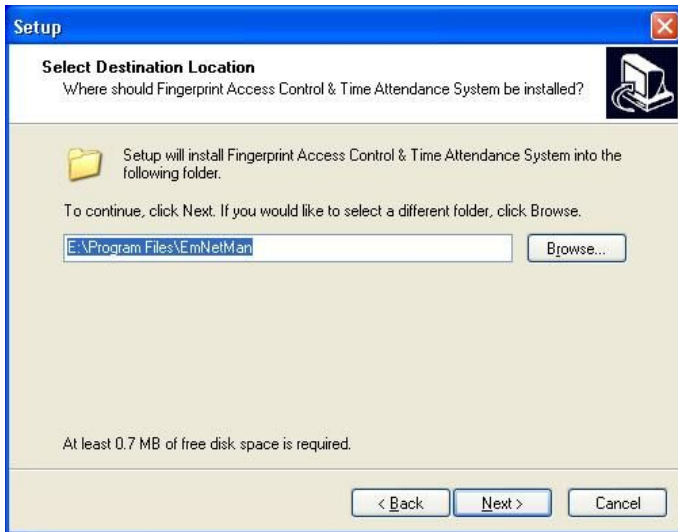
Control Device as example, Choose **Access Control Device** .

Click **Next**, enter follow interface:

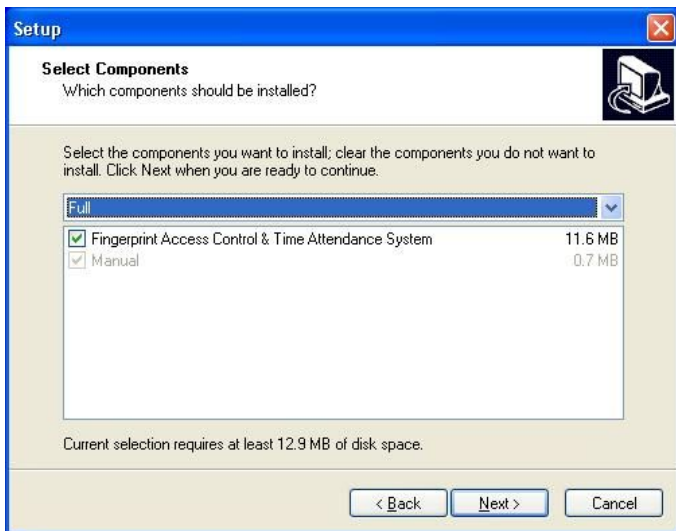


Please read this license Agreement carefully, if you agree to the terms, select the **I accept...** button and click **Next**.

If you do not agree above terms, select **I don't accept....**, the step will exit the installing program and return, enter following interface

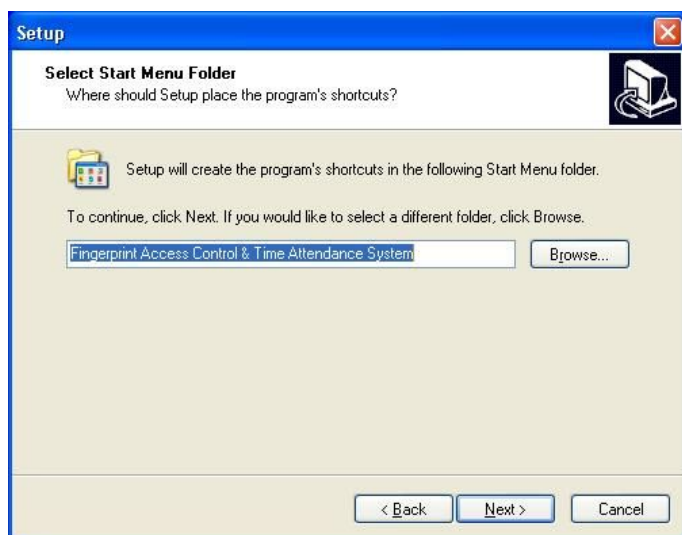


This interface applies to locate the folder of the fingerprint access control software, you may use the default folder, also can create or select a folder, and Click **Next** enters following interface:

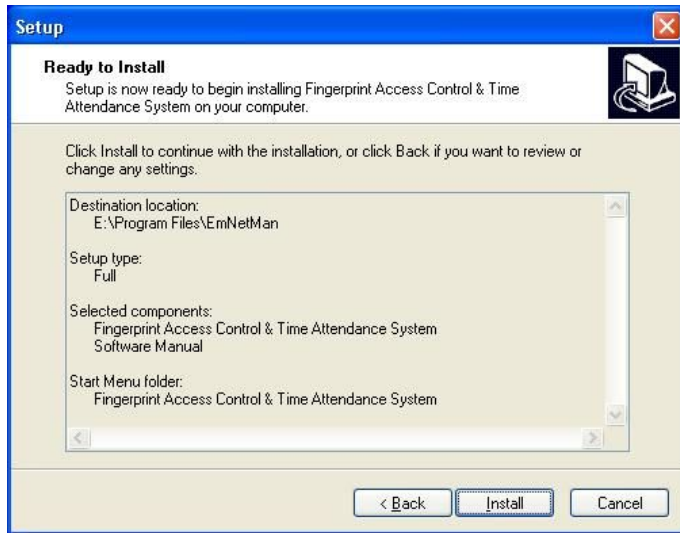


After select installing component. Click **Next**, Enter following

interface



This window is to confirm the folder which is created in **Start/Program** item. Click **Next**, display following Interface



After enter into this interface, it is show that you have finish all configured to setup, if want to modify it, Click **Back** to return, Otherwise click **Install**, the installing program will copy and write corresponding information into hard disk, After finish installation, click **Finish** to complete the process.

1.2 Uninstall software

If you will not use the software and want to delete it from the computer, may perform following operation:

Exit from all ZK software Access Control management software, enter Start-> Setting-> Control Panel-> Adding/ Cancel to select ZK software and click Cancel to delete it, may be there are some files which is not to be all deleted, you ability to entry the installing directory to cancel the folder of zkemnetman

In the Starting /Program to run the access control system, in this portion of the Base Setup, you will review 6 module of the base

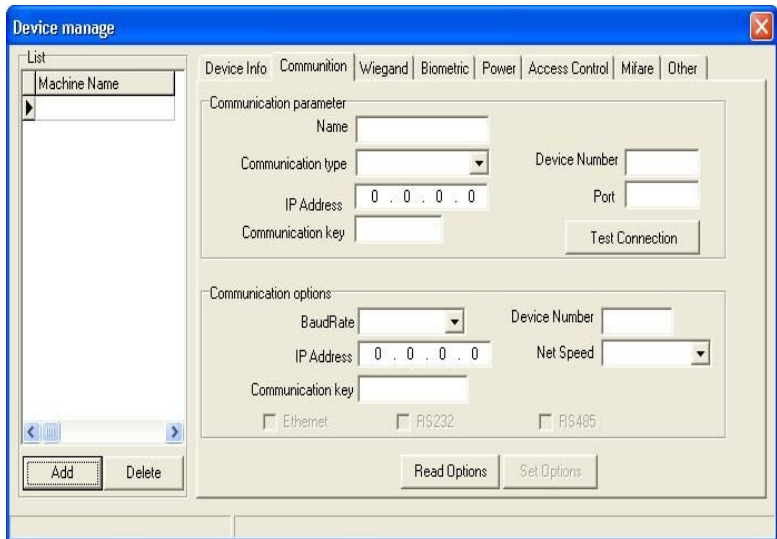
setup, Access Control, Base Operation, Query, Help. The equipment must be added before using it.

2. Base Setup

In the portion of the Base Setup, include Department Management, User Management, Equipment Management, and Load from USB flash disk, System Setup and Exit

2.1 Equipment Management

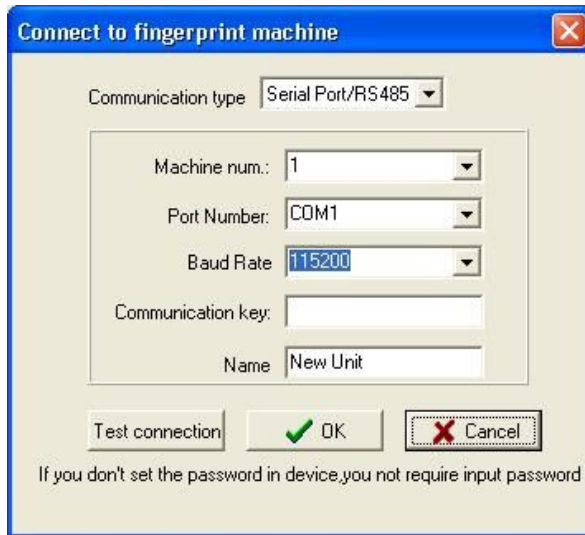
First add equipment, open **Equipment** in the **Base setup** menu, the display interface is following



Click **Add** button underside of the list, display interface is following

2.1.1 Communication Setup

Communication Setup: Click **Read Option**; it can show communication setup of all equipment to be connected. Like as following figure



Communication type: Change to Serial Port/RS485

Machine num: Input number of fingerprint machine according to the own requirement. For example, number of fingerprint machine is set to 1, and its identify ID is set to Machine 1.

Communication Key: it is not required to set under default condition. If communication password is set in fingerprint machine, then it is required to enter communication password correctly.

Port Number: Select communication port number that connects PC and fingerprint machine. Default value is COM1.

Baud Rate: Select 9600 (recommended)

Note: Above settings are used for RS485 connection. If RS232 connection is used, then Baud Rate should be changed to 115200, which will increase communication speed greatly.

Ethernet

(2) If the Ethernet communication mode is selected, shown as following :

Connect to fingerprint machine

Communication type: Ethernet

IP address: 192.168.1.201

Port: 4370

Communication key:

Name: New Unit

Test connection OK Cancel

If you don't set the password in device, you not require input password

Name: Enter name according to the own requirement. For example, name is set to Machine 1.

Communication key: it is not required to set under default condition. If communication password is set in fingerprint machine, then it is required to enter communication password correctly.

IP address: Default value is 192.168.1.201. IP address can be changed according the network segment of local area network, but IP address cannot conflict with other IP address of any machine in the same local area network. Please notice that to fill IP address of fingerprint machine should remain the same IP address as that is edit in fingerprint machine.

Port: Default value is 4370 (no change)

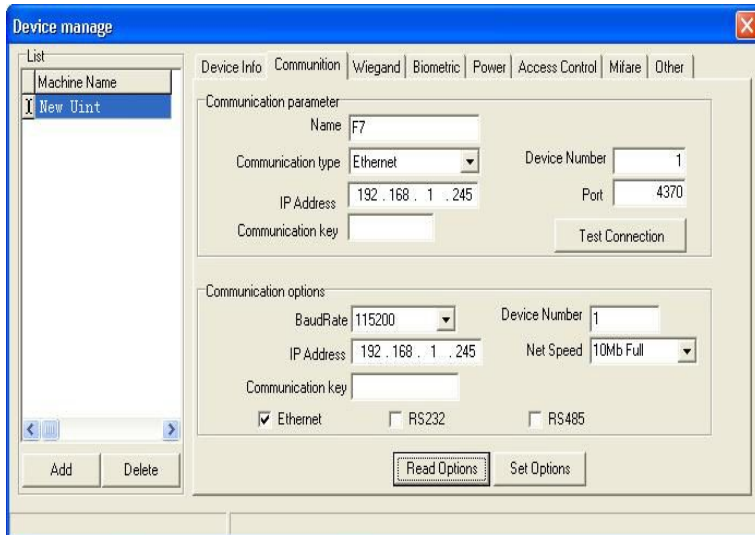
There are two connection modes that have been described above. You can select different modes to connect devices as requirement by yourself. After finishing setting, click **Test Connection** button on the bottom to test connection . After **Connection Success** appears, click **Save** button to save the setting of this fingerprint machine. If **Connection Failure**, please check the setting both fingerprint machine and communication setting. You can use the

same method to add next fingerprint machine to system.

After all fingerprint machines are added, an icon of fingerprint machine that has been added will appear in **List** on the left of **Device Manager**. If you want to edit the information of fingerprint machine, ability to read the setup of fingerprint machine firstly, then you can directly modify it, click **Apply Setup** button below to complete modifying. If you want to delete one fingerprint machine, select the fingerprint machine and click **Delete** button below.

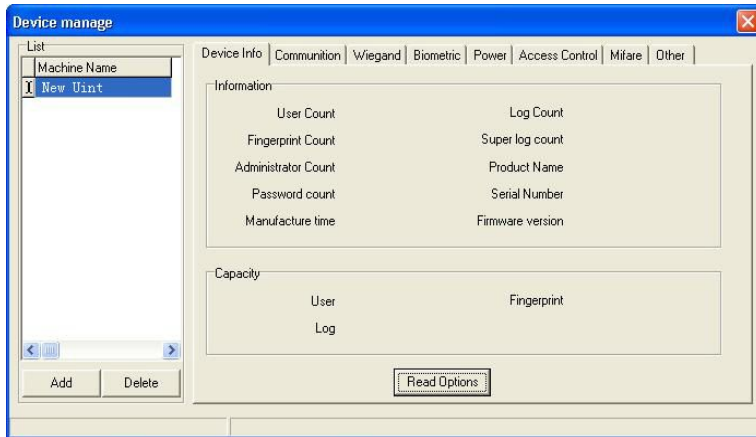
Read Option

If you want to check connection information of one fingerprint machine, click **Read Option** to get connection information of that fingerprint machine.

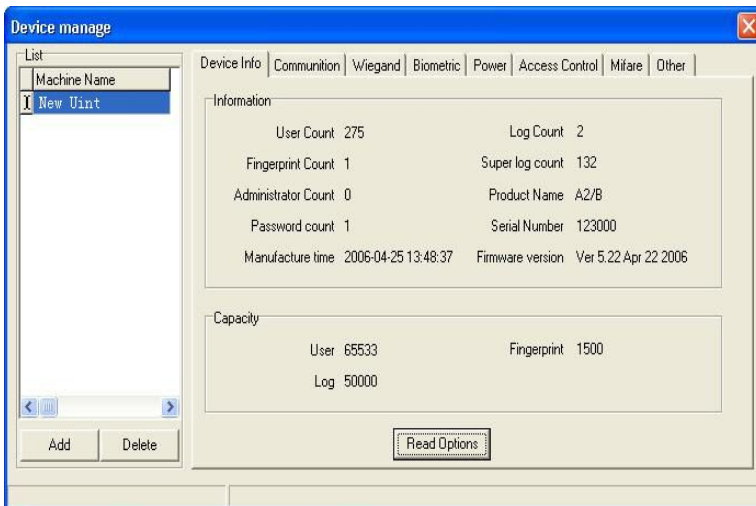


2.1.2 Fingerprint Machine Information

Click **Fingerprint Machine info** in the **Equipment Management** item, display interface following.

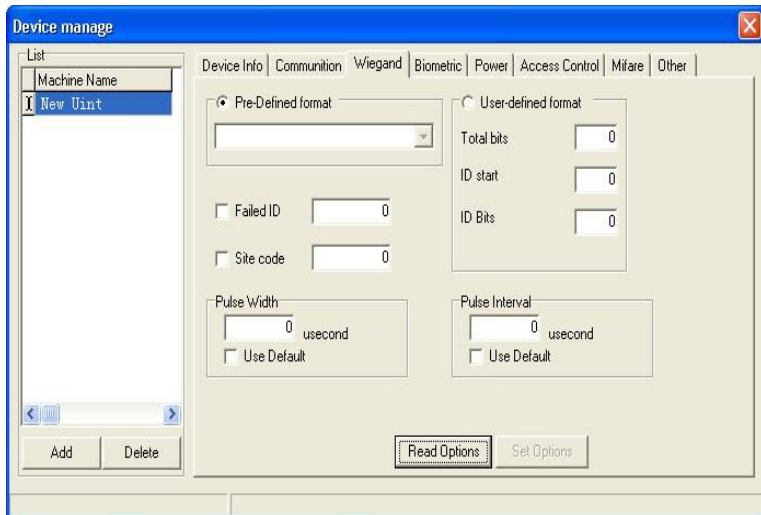


Click **Read Option**, the base information of fingerprint machine will be list. Like following Figure:



2.1.3 Wiegand

Click **Wiegand** in the **Equipment Management**, display interface is following:



Click **Read Option** to obtain all kinds of wiegand parameter which store in the fingerprint machine; there are four **Defined Formats** in the drag –down volume to select. to choose a wiegand 26 or 44444444444444444444wiegand 34 is available.

Defined Format: this format has been defined and built in the system; User doesn't need to define the length of Bit and the location of information. There are four default defined format: wiegand26 with device ID、wiegand34 with device ID、wiegand26 without device ID、wiegand34 without device ID. The wiegand 26 with device ID means that the W26 output format along with equipment ID and the wiegand26 without device ID point that the W26 output format doesn't own the unit ID, Here the equipment ID is defined by following condition: if there is no set of the site code, then it will output machine code. And if the site code has been set, it will output the defined site code (which is similar the machine code, there different is that this code is defined by user and can recycle to use, range is 0-255)

Fail ID: Export Fail ID after verified is failure, if it has been selected; its output range is 0-65534.

Site Code: similar the machine code, which different is that this

code is defined by user and it can be recycled in different unit, range is 0-255)

Self-define Format: User define Wiegand output format by herself

Total Bit: the length of output format

ID begin: The start location of the ID code in the total bit

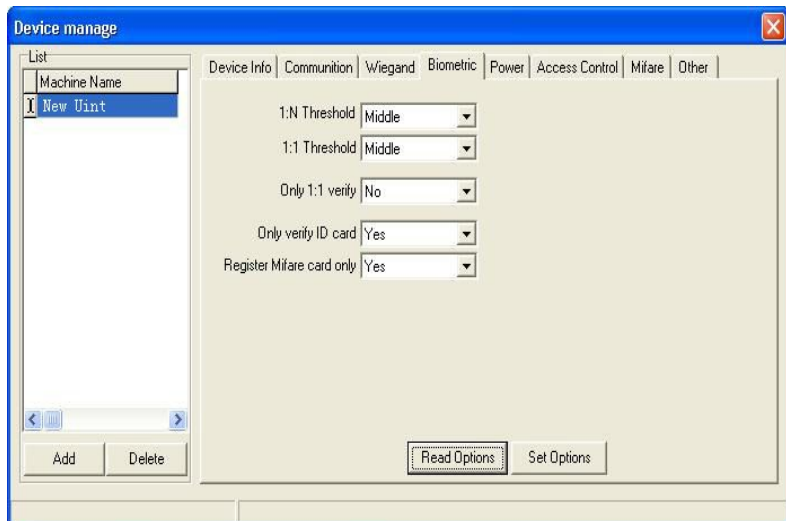
ID Bit: The length of ID code

Pulse Width: the default value of to send pulse width time is 100 μ s, if the controller isn't able to receive the Weigand signal, can adjust value from 20 to 800

Pulse Interval: the default value is 900 μ s, ability to adjust it from 200 to 20000.

2.1.4 Verification

Click **Verification** in the **Equipment** item to read setting, following interface display



1: N Match Threshold: A predefined number, often controlled by a

biometric system administrator, which establishes the degree of correlation necessary for a comparison to be deemed a match. If the score resulting from template comparison exceeds the threshold, the templates are a **match** (though the templates themselves are not identical).the default value is **high**, you can modify it

1:1 Match Threshold: It mean that match fingerprint threshold after presenting the Card, the default value is **high**.

Only Verification No. Card: It is mainly designed for ID card, if the item is choused as **Yes**, a user directly use ID card to verify enough, to verify procedure doesn't need to press fingerprint. If the item is choused as **NO**, you must verify fingerprint after present the card until pass

Only 1:1 Match: This feature is only available to that an user own fingerprint, ID card or Mifare card for verification, can configure **Only 1:1 Match**, if the item is choused as **Yes** to this setup, to verify must first present a card, and then press fingerprint. If doesn't slide a card, there is no response to fingerprint in the unit.

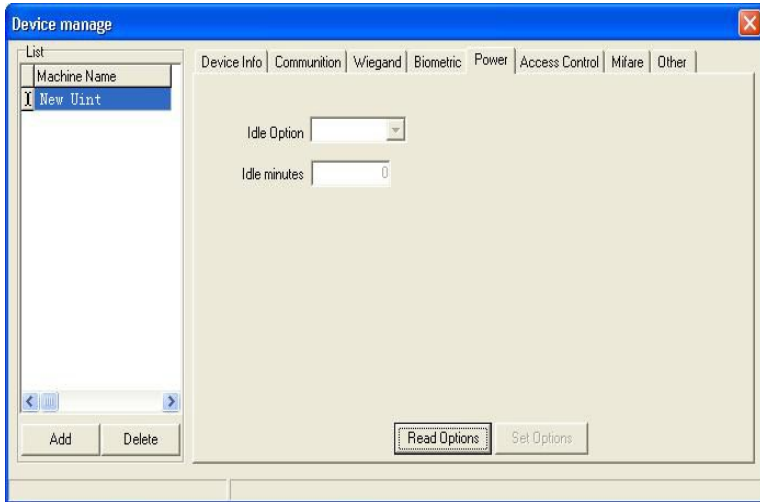
Must Register Mifare Card: there are two statuses to register a Mifare card, if the card was configured to **Must Register**, it is only to verify the user who's ID has stored in the fingerprint machine. The user No. to be store will not be verifying.

When you choose the item as **NO**, no matter there are user's ID information in the unit or not, it will export as the user and fingerprint template which is store in the card are verified successfully.

You can change the option according you actual statue to achieve the best result.

2.1.5 Power Management

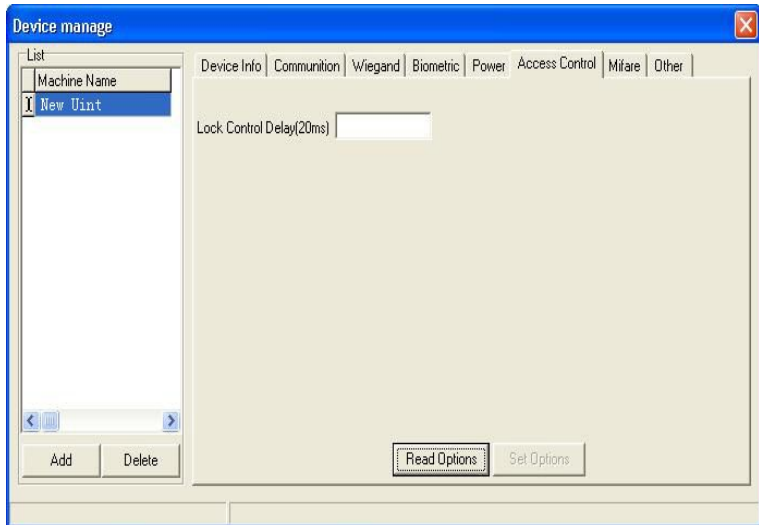
Click **Power Management** to read setup. The following is display interface:



Firstly read the parameter of **Power Management**, modify the state of **Idle Setup** and minutes of **Idle Time**, then click the **Application Option** to complete set. When the idle time is 0, then the idle setup function is invalid. When the value more than 0, the machine will enter into idle state after arrives at define time.

2.1.6 Access Control

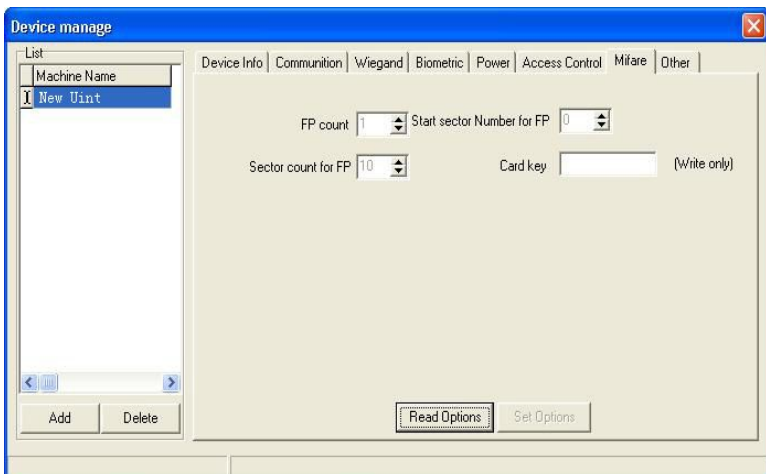
Click **Access Control** to obtain Setup, display interface as follow:



Delay time of lock control apply to determine unlock hour, the min measured unit is 20ms, in the normal condition is 100—200ms.

2.1.7 Mifare Card

Click **Mifare** , display follow interface:



Fingerprint Amount: How many fingerprints are stored up in the

Mifare card

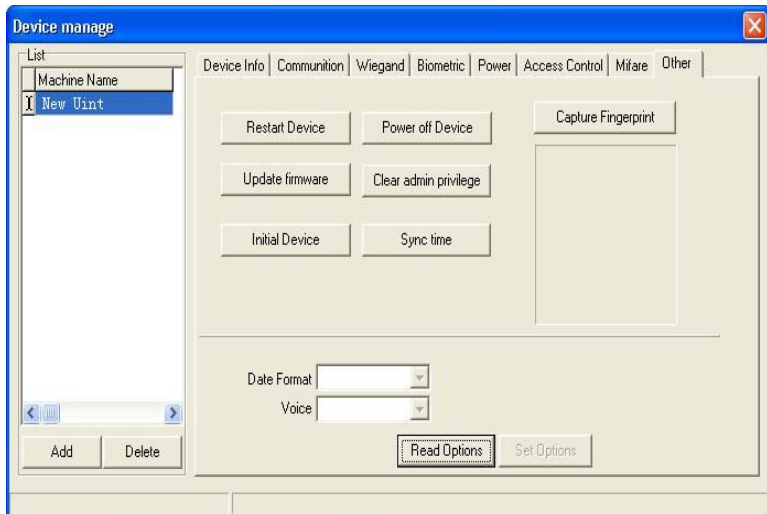
Fingerprint First Sector: the first sector of Mifare card to store fingerprint

Fingerprint Total Sector: fingerprint hold total sector.

Password of card: Read and write password of card, you only can set it, can't obtain it.

2.1.8 Other Setup

Click **Other Setup** the following appear:



This module provide with mainly convenience to configure equipment.

Restart Unit: in the list, select a device and Click the name of the device to restart fingerprint machine.

Clear Administer Privilege: this function can clear all administer privilege which has registered in the fingerprint machine. Firstly choose the name of the device from the list, then to do it

Upgrade Firmware: We remind that user doesn't use the function random, except user receive the manufactory notice, according to the guide which factory offer to do.

Initialize Equipment: This function is mainly used to clear all data in the reader.

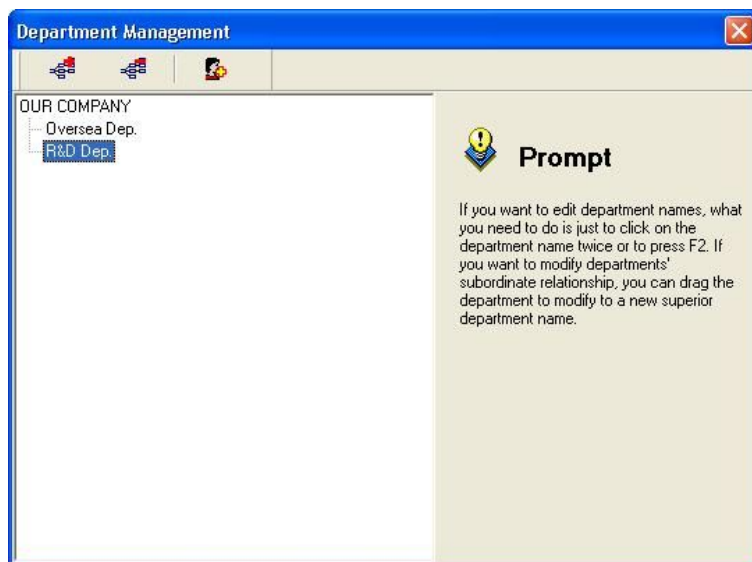
Seize Fingerprint Image: This function can be used to view fingerprint image, if want to inspect fingerprint image, please place finger on the sensor window, don't move, and then click the button, and will see the fingerprint

Date formats: Select the date formats from drag- down box, this data formats appear on the starting interface of fingerprint machine.

Voice function: Utilize this function to determine the prompt voice of the fingerprint device on or off.

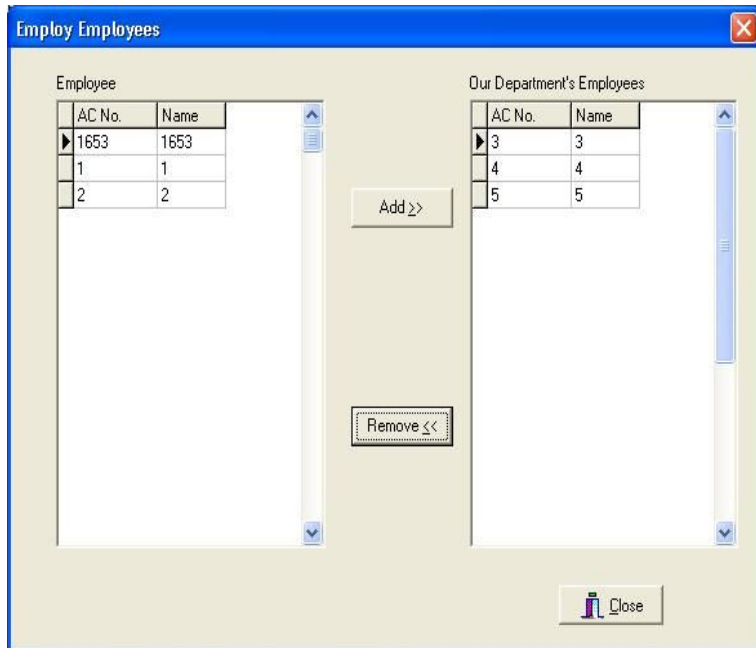
2.2 Department Management

Click **Department Management** in the **Base Setup** menu, pop –up the **Department Management** main interface, like as following figure.



Click  or  to add or delete a interrelated department,  is to **Enroll Department Staff** Button.

After established a new department, if want to shift a staff to anther department, first select the head-office, then click Enrolling Department Staff button, pop-up following interface.



Select the staff of corresponding department and add it to column, click enroll staff button.

2.3 User Management

User management provides maintenance work for staff information. Click **User Management** from drag-down menu of **Basic Setting**, and main window of department management will pop up as follows::

User Information Maintenance

User List

Drag a column header here to group by that column

| ID | Name | Department | Gender | Title | Privilege |
|------|------|------------|--------|-------|-----------|
| 1 | 1 | OUR COMP | | | User |
| 1653 | 1653 | OUR COMP | | | User |
| 2 | 2 | OUR COMP | | | User |
| 3 | 3 | OUR COMP | | | User |
| 4 | 4 | OUR COMP | | | User |
| 5 | 5 | OUR COMP | | | User |

Count 6

FP enrollment status Import Export

Department: [Dropdown]
 Name: [Text]
 No: [Text]
 Gender: ☐ Male ☐ Female
 Title: [Text]
 Privilege: [Dropdown]
 Card Number: [Text]
 Set Password
 Fingerprint manage(Require U.are.U Scanner support)
 [Dropdown] Connect Device
 Enroll with sensor Enroll with Fingerprint device
 Enroll Verify
 From Pc to Device From Device to PC
 Write card by FP device Empty card by FP device

Please connect device first if you want to enroll fingerprint or ID card

(1) User list Sort Order: Click the name of field. Choose a triangle symbol which is beside the field, according to ascending order to arrange when the triangle symbol point upwards, otherwise, the triangle symbol point downwards that means the sort order follow the descending order, you can click triangle symbol to change the rise or down rank.

Statistic: the software can automatically count the total record and also can count grouping record.

Left side is a user list and right side is a user maintenance setting area. If one staff is redeployed from a headquarter to other department, click corresponding the department from down drag buttons of **Department**, a dialog will appear and ask whether the staff is redeployed to this department or not. Here, you can set user's privilege. If you want to change one user to other identity, for example an administrator, first select this user in list on the left and then select **Administrator** from down drag options of **Privilege** on the right. If you want to add password to one user, first select this user in list on the left and then click **Set Password** to add password. After this user is uploaded to fingerprint machine,

one user number will be added in password registration. Therefore, this user can not only use fingerprint, but also use password when identifying.

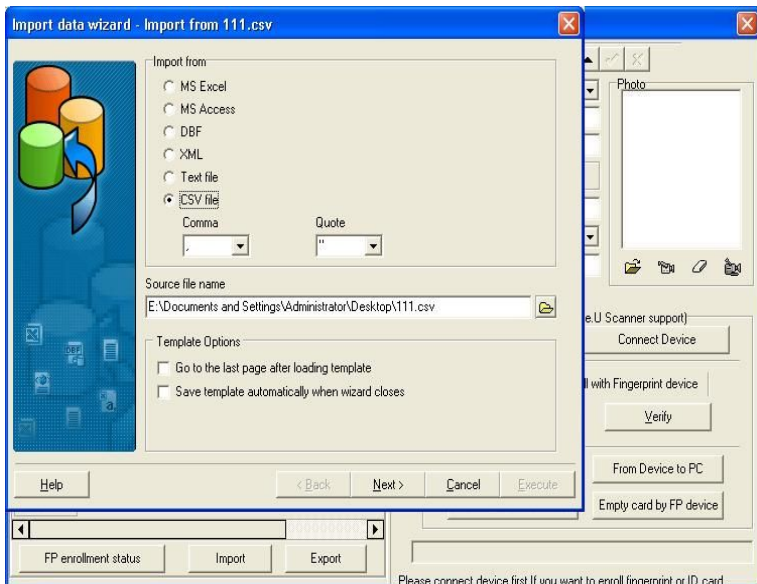
(2) Enroll fingerprint State: this item will show every user enrolling State:

(3)Import: This function can realize to import data, this importing software support all kinds of format user's data file.

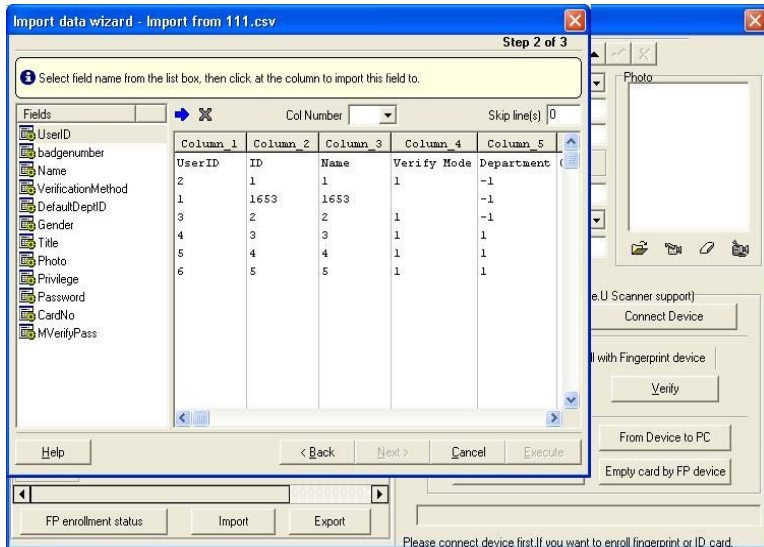
This system support following format data to import

MS Excel、MS Access、DBF、XML、Text File、CSV file, we recommend use the CSV file to import, the following example which take CSV file to import user's data is used to illustrate how to import data.

(1)、First click the radio button of CSV file, then select the file that want to be import.



(2)、Click **Next**, the following figure appear



The left side list is a field list, the right side is a import file rank, there are Skip line(s) on the right-up part, that means want to skip amount of the line, if the first line to be import isn't material data, you can fill 1 here, that show to skip the first line to import data.

Fields List Explain:

UserID: The ID only is used in the system interior, **it is useless to import the fields, please don't use the field**

BadgeNumber: User code, this code is that user adopts the number in the fingerprint machine and the software.

Name: User name, these fields must exist.

VerificationMethod: User's verification method. This item can be neglected.

DefaultDeptID: Department ID. If you want to import the data from other origin, this item can be neglected.

Gender: Males or Females

Title: Title

Photo: Photo can be neglected

Privilege: Privilege can be neglected.

Password: Password can be neglected.

CardNo: ID card number can be neglected.

(3)、First choose the field in the Fields list as to import, then select the corresponding rank in the right side list. The Fields list will automatically attach the corresponding number to the name of field, such as it is, arrange all fields and corresponding rank after to complete, click next.

If you want to cancel a field's setup, first choose the field, and then click corresponding rank, the software will cancel this field's setup.

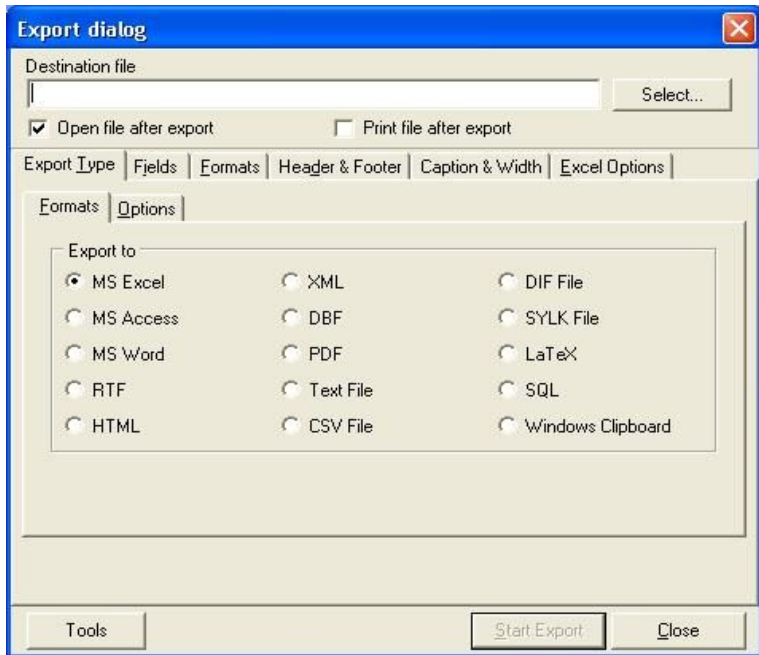
(4)、Click **Execute** button to run input operation.

Export: This function can realize that the software export user's data via all kinds of format which can be support by the software. In order to it is convenient to supply third party to use.

Following, take the exporting MS Excel file as an example to explain:

Click the **Export** button, appear following interface

1. Select the object file which is to be exported



2、Click **Start Export** button to export the file via default format, otherwise, can configure exporting content through to click the different option card.

Fields: Select the field to be export, the default format is all, it is only to export field's content after selected field.

Formats: Be exporting format of defined all kinds of field value.

Header & Footer: The file is starting and ending of the text.

Caption & Width: The title and width of field

Excel Options: Set font

Transfer User's Information and Fingerprint

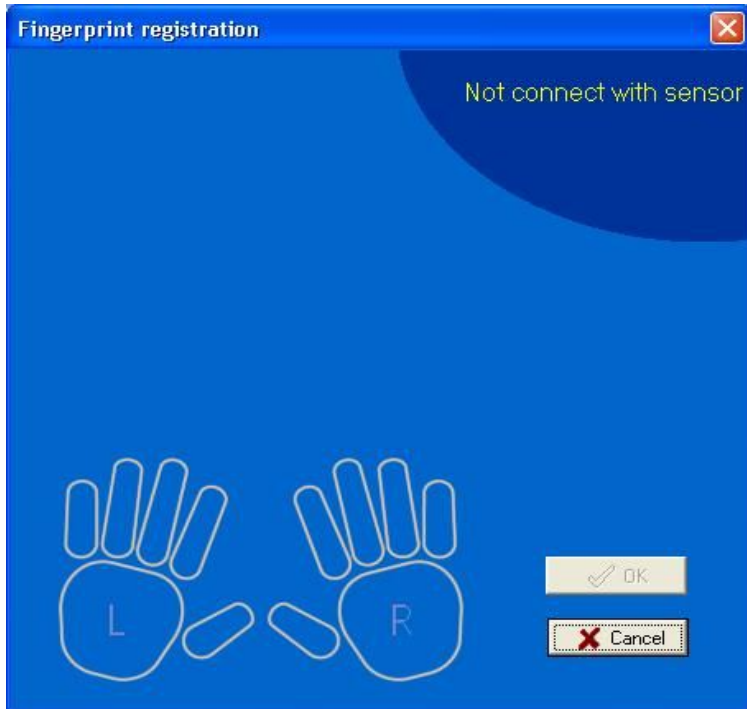
(5) **Photo:** There are two ways to attach photo, one way is directly import photo into the file, and other way is to utilize a

camera to seizing image.

(6) Fingerprint Management

Enroll Fingerprint by The Fingerprint Sensor:

To use U.are.U sensor can enroll user's fingerprint under the connecting condition, click shortcut “+” button to add new user in the staff maintenance item, choose fingerprint sensor to enroll fingerprint after finishing the enrollment procedure and close enrolling interface, the system will store the user's fingerprint into the local Database, the new user's info can be send to the fingerprint machine via **From PC to Fingerprint machine**. The enrollment interface like as following figure illustration.:



Select the finger which want to be enrolled to enroll; if want to delete this fingerprint, please double click this finger.

Select a user you want cancel, Click shortcut “-” button to delete the user.

Enroll Fingerprint by The Fingerprint Machine: Use the fingerprint machine to enroll. Select the fingerprint machine on the blank area, Click **Connect Enrollment Equipment** to connect fingerprint machine, after to connect successfully, the **disconnection** will appear, click **Enroll** to begin registration fingerprint.

Note: this function only is used for black-write LCD fingerprint machine, Now the TFT Screen Fingerprint does not support this function.

Enroll Mifare Card: Choose the user who wants to register the Maifare Card, then click **Through Fingerprint Machine to Write Card**, the software will remind **Punch Card**, to slide the card near an appropriate place in the fingerprint machine, after to show **Write Card successfully** on the unit, this user's code and the fingerprint will store in the card. Click **Through Fingerprint Machine to Clear Card** to delete user's data in the Mifare, the program remind **Present Card**, to slid the card near an appropriate place in the fingerprint Machine, after to notice **Clear Card successfully** to show the operation well.

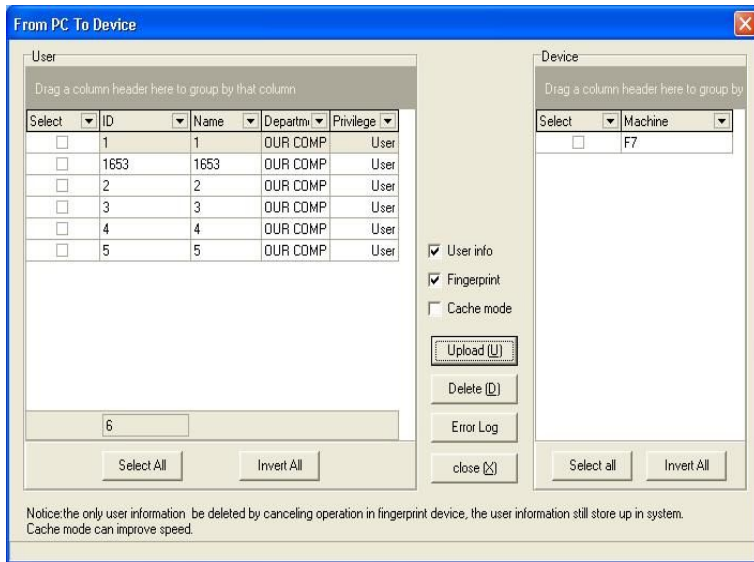
Note: this feature is available only to the fingerprint machine which support the Mifare card enrollment

Fingerprint Register Status: to show the detail of user and fingerprint register

Sort Order: can arrange the record according to the ascending or descending order in the record list, directly click the head of rank to achieve, following figure is the process of sort order which according to the name.

(6) **Transfer User's Information and Fingerprint**

Form PC to Fingerprint Machine: the user which is store in the database will be uploaded to the fingerprint machine, click **From PC to fingerprint machine**, pop -up the interface to upload user's fingerprint.



Upload: Base on your need, Select a staff and an uploading fingerprint machine, click **Upload**, it is able to upload user's data to the defined fingerprint machine.

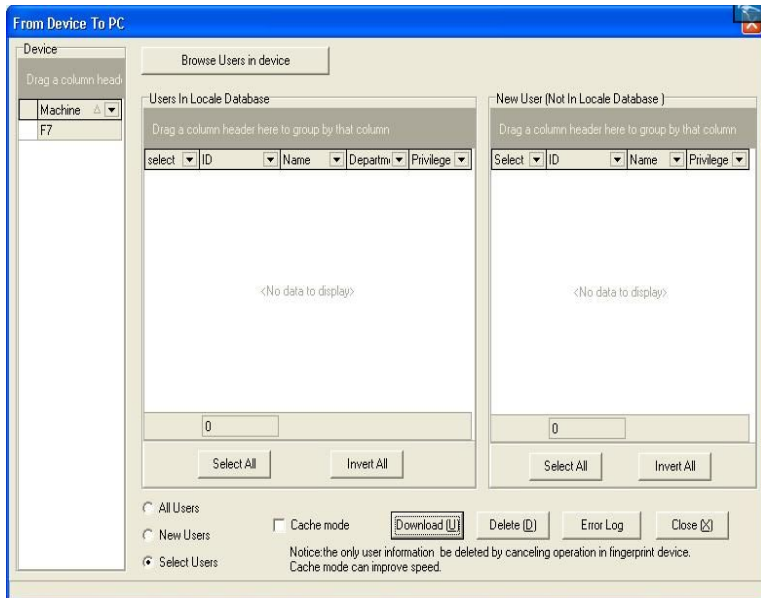
Notice: User's data include user information and fingerprint.

Delete: If you want to delete a user in a fingerprint machine, first choose user and corresponding fingerprint machine, and then click **Cancel** button.

Operation Log: That is an error log during operating process

Batch: Utilize the function to speed up communication when there a lot of users are need to be uploaded, if there a few user, do not use it. (E.g... 30user)

From Fingerprint machine to PC: The user which is store in the fingerprint machine will be downloaded to the local database, click **From fingerprint machine to PC**, pop -up the interface to download user's data.



Select a fingerprint machine No. to download user's information which is on the left side list, click **View User in the Fingerprint machine**, it is able to display all user in the fingerprint machine, Select a user to be downloaded, click the **"Download"** button to download the user information and fingerprint from fingerprint machine to local database

View User in the Fingerprint machine: Display all users in the fingerprint machine

Download: Download user data to be selected.

Delete: If you want to delete a user in a fingerprint machine, first choose user, and then click "click" button.

Batch: Utilize the function to speed up communication when there are a lot of users to be Downloaded, it isn't need to a few user.

Note: this function only apply to Black–white LCD serial fingerprint machine, the TFT screen serial fingerprint machine do not support this

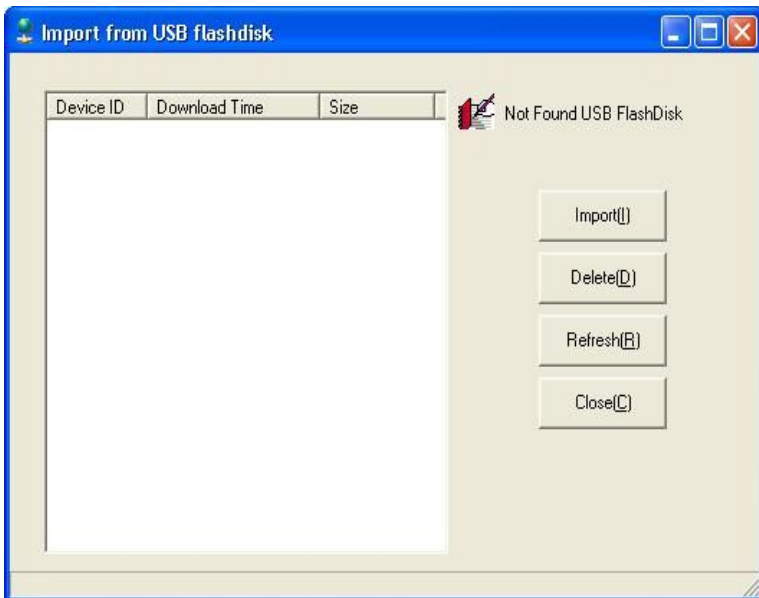
function.

Operation Log: that is a error log during operating process.

Note: In the process of the user management, if the fingerprint and user will be upload or download, the monitor function should be shut down firstly, if want to upload, the download operation will be priors, the operation must enter user management once again.

2.4. Load from the USB flash disk

Load the attendance data of USB flash disk to the software through this item, like as following figure:



Load in : On the left side list choose the data you want load in. click **Load in** to load data to system.

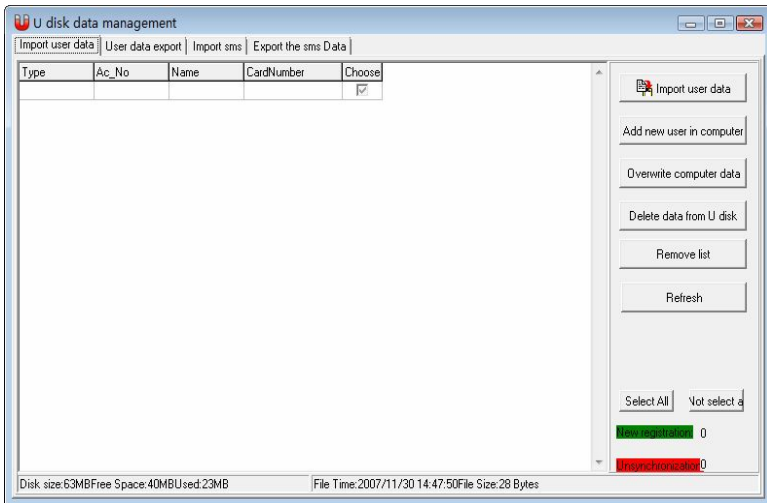
Delete Data: On the left side list choose the data you want delete. Click **Cancel** to delete the data from system

2.5 Management USB Flash Disk

The Option can be used to download the attendance data, and download and upload employee data through USB flash disk. This operation is as following

2.5.1 Load in the User Data

Click **USB Flash Disk Management** in the **Base Setup**, and enter the U flash disk management interface. Like as follow figure.



Click **Load the User Data from the USB disk** button. The system will automatically search the user data and load it into the system from the USB flash disk, if a new use is found, the system will prompt whether add the new user to system or not.

In the list the records with red color show this record do not

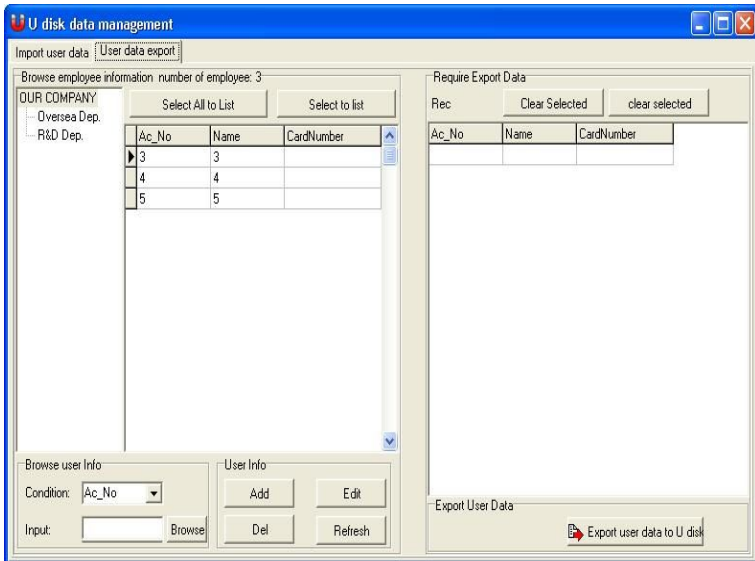
synchronization with data of software, click override to cover asynchrony data up by the data of computer.

Delete Data of U Flash disk: Delete user data of user data of U flash disk

Clear List: clear list on left side

2.5.2 Export user data

Click label of exporting data, display as follow



Left side is a department list. Ability to choose a department from the list, all staff information will be appear on the information list, Double click staff record or selected staff and click **move the selected record to right side** add an employee information in the right side. If there are a lot of staff record, ability to show all staff information of the staff to be queried through staff information query function.

Maintained Staff Information

Add: Add a piece of information of staff.

Modify: modify selected staff's information

Delete: delete selected staff's information.

Click export user data to U flash diskette. Then all record accessories in the ready exporting to U flash to data list will be exported to U flash disk

2.6 System Setup

System Setting of Access control software mainly includes following several parts. First open System Setting, as shown in figure below:

System setup

☐ Automatically monitor

☒ When program starts, activate automatic monitor

Default device polling cycle (second)

Keep the number of device record

Times of reconnection due to failedure

Activate monitor in designated time zone

Download all log time

Synchronize the time for machine

Server

☐ Start Network Server Addr.: Server Port:

company name

Set database connection ☐ When start-up Windows, start-up this program

2.6.1 Automatic monitoring

Run automatic monitoring when program start-up

If this option is selected, program start-up will enable automatic poll all devices that has been connected with. If this option is not selected, program start-up will not enable poll.

Default device rotation periodicity

During device continue poll, some fingerprint machines may disconnect temporarily due to various reasons. Here, you can modify device rotation periodicity in second (it is recommended to set to 120)

Remain device record

Device record number means user attendance records that are downloaded in every device. You can enter a record number. If actual record number exceeds the pre-set value, the software will clear all fingerprint records stored in fingerprint machine. For example, record number to store is set to 1200, when record number downloaded is 1201, all fingerprint records in fingerprint machine will be deleted and record number downloaded resets to 0.

Count for continuous failure retries

Count for continuous failure retry (it is recommended to set to 3) that is convenience to reconnect automatically under the condition of fingerprint machine recovers normal connection.。

Run monitoring in specified Period time

Here, we can define one time period to run monitoring. If run uninterrupted polling, it will bring huge burthen to whole monitoring network. You can define one time period to run monitoring, in order to reduce burthen of monitoring network. Please pay attention to time format, such as 06:00-22:00.

Download all record cycle: Set the cycle to download record automatically.

Synchronize time of fingerprint machines:

You can define a time to synchronize time of all fingerprint machines that have been added into device. Please pay attention to time format, such as 10:00

2.6.2 Parameter of Server

Select start to connect with network function; it is need to input the IP address and port of linked Server.

2.6.3 Function Configuration

Select the function you want, the three function can be shifted before use the function you have to restart the device.

Unit Name: Enter company name here.

Set database connection: For more detail see **Set Database Connection**,

Run the program when windows start-up If this option is selected, then the program will run automatically every time after PC start-up. If this option is not selected, then this program will not run automatically every time while PC start-up

3. Access Control Setup

Access control setting is to set unlock time and assign privilege for registered users. Settings of each user consist of three period time settings and one group setting. Relationship between period time and period time is “OR”. Group also consists of three period time settings and by the same token, relationship between these three period time is “OR”.

Simply put, if you want to keep a registered user in unlock status. Firstly the group that this user is in should be defined in unlock combination (one group can be defined in one combination together with other group, but these groups are required to unlock door together). Second, current unlock time is in any availability range of user time period and period time of its group.

Under system default, a new registered user is in Group 1 and group combination is Group 1. So new registered user is in unlock status under default. If a group that user is in is not defined in group unlock combination setting, then the use can only record attendance and cannot unlock door.

3.1 Period Time

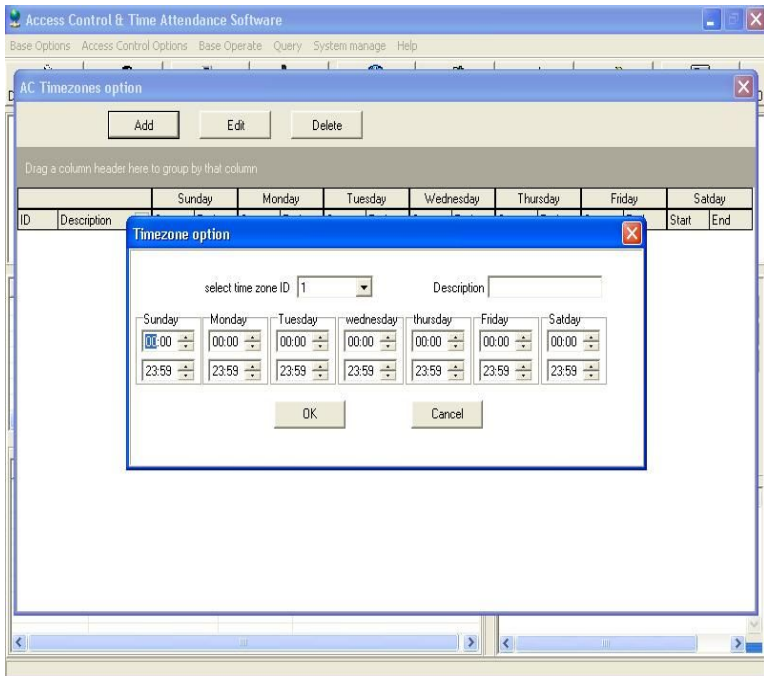
Time period is the smallest time period unit in Access control setting. In whole system, you can define up to 50 time periods. Each time period defines 7 time intervals, i.e. one week. Each time interval is valid time period in 24 hours everyday. Each use can set up to three time periods and the relationship between these three time periods is “Or”, which means the user is valid as long as identification time satisfied one of these three time periods. Each time period format of time period is HH: MM-HH: MM, i.e. in term of 24 hours format and precision to second.

End time less than start time (23:57-23:56) means all day forbidden. End time larger than start time (00:00-23:59) means valid in the

time interval.

Valid time period for user unlocks: all day open (00:00-23:59) or time period with end time larger than start time.

Click **Time period** from Drag-down menu of **Access Control Setting**, window of adding **Time period** will pop up. Click **Add** button and system will pop up a timetable from Sunday to Saturday. Here, you can define any time period you may use. Then click **Confirm** to save the time period automatically. If you want to use several time periods, continue to click **Add**. In addition, time period can be edited and deleted.



3.2 Group

Group function can divide users into groups and combine different

groups to different unlock combinations, which make group management of Access control more convenience. So user can define many unlock combinations. System has defined 5 groups: Group 1, Group 2, Group 3, Group 4, and Group 5. Under system default, new registered user is in Group 1 and can be re-assigned to other group.

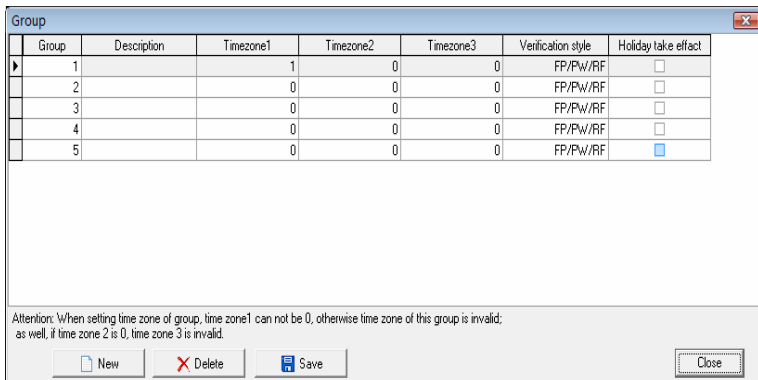
Under system default, a new registered user uses time period of Group 1. After the user is re-assigned to other group, the user uses default time period of the corresponding group. So please make sure to define default time periods for each group.

Group Setting

Entered the "group" setting ,there are two ways to enter:

- 1) Through bar options of the system menu: Access Control Settings -> Group, set up group access interface.
- 2) Through shortcuts button options of the system : Time Period, Enter the group setting interface.

Enter the "group setting" interface, shown as following figure.



| Group | Description | Timezone1 | Timezone2 | Timezone3 | Verification style | Holiday take effect |
|-------|-------------|-----------|-----------|-----------|--------------------|-------------------------------------|
| 1 | | 1 | 0 | 0 | FP/Pw/RF | <input type="checkbox"/> |
| 2 | | 0 | 0 | 0 | FP/Pw/RF | <input type="checkbox"/> |
| 3 | | 0 | 0 | 0 | FP/Pw/RF | <input type="checkbox"/> |
| 4 | | 0 | 0 | 0 | FP/Pw/RF | <input type="checkbox"/> |
| 5 | | 0 | 0 | 0 | FP/Pw/RF | <input checked="" type="checkbox"/> |

Attention: When setting time zone of group, time zone1 can not be 0, otherwise time zone of this group is invalid;
as well, if time zone 2 is 0, time zone 3 is invalid.

Group editing. left click item that need to edit with cursor to enter the editing state.

Access control software introduction

Group

| Group | Description | Timezone1 | Timezone2 | Timezone3 | Verification style | Holiday take effect |
|-------|-------------|-----------|-----------|-----------|--------------------|-------------------------------------|
| 1 | | 1 | 0 | 0 | FP/PW/RF | <input checked="" type="checkbox"/> |
| 2 | | 0 | 0 | 0 | FP/PW/RF | <input type="checkbox"/> |
| 3 | | 0 | 0 | 0 | FP/PW/RF | <input type="checkbox"/> |
| 4 | | 0 | 0 | 0 | FP/PW/RF | <input type="checkbox"/> |
| 5 | | 0 | 0 | 0 | FP/PW/RF | <input type="checkbox"/> |

Attention: When setting time zone of group, time zone1 can not be 0, otherwise time zone of this group is invalid;
as well, if time zone 2 is 0, time zone 3 is invalid.

New Delete Save Close

Through drop-down box to choose the Time Period .

Group

| Group | Description | Timezone1 | Timezone2 | Timezone3 | Verification style | Holiday take effect |
|-------|-------------|-----------|-----------|-----------|--------------------|-------------------------------------|
| 1 | | 1 | 0 | 0 | FP/PW/RF | <input checked="" type="checkbox"/> |
| 2 | | 1 | 0 | 0 | FP/PW/RF | <input type="checkbox"/> |
| 3 | | 2 | 0 | 0 | FP/PW/RF | <input type="checkbox"/> |
| 4 | | 3 | 0 | 0 | FP/PW/RF | <input type="checkbox"/> |
| 5 | | 4 | 0 | 0 | FP/PW/RF | <input type="checkbox"/> |

Attention: When setting time zone of group, time zone1 can not be 0, otherwise time zone of this group is invalid;
as well, if time zone 2 is 0, time zone 3 is invalid.

New Delete Save Close

Through the drop-down box to choose verification way

Group

| Group | Description | Timezone1 | Timezone2 | Timezone3 | Verification style | Holiday take effect |
|-------|-------------|-----------|-----------|-----------|--------------------|-------------------------------------|
| 1 | | 1 | 0 | 0 | FP/PW/RF | <input checked="" type="checkbox"/> |
| 2 | | 0 | 0 | 0 | 0 FP/PW/RF | <input type="checkbox"/> |
| 3 | | 0 | 0 | 0 | 1 FP | <input type="checkbox"/> |
| 4 | | 0 | 0 | 0 | 2 PIN | <input type="checkbox"/> |
| 5 | | 0 | 0 | 0 | 3 PW | <input type="checkbox"/> |

Attention: When setting time zone of group, time zone1 can not be 0, otherwise time zone of this group is invalid;
as well, if time zone 2 is 0, time zone 3 is invalid.

New Delete Save Close

If you want to holiday Time Period take effective, selected it by cursor clicks, if you want the holidays is invalid, it can not selected.

| Group | Group | Description | Timezone1 | Timezone2 | Timezone3 | Verification style | Holiday take effect |
|-------|-------|-------------|-----------|-----------|-----------|--------------------|-------------------------------------|
| 1 | 1 | | 1 | 0 | 0 | FP/PW/RF | <input checked="" type="checkbox"/> |
| 2 | 2 | | 0 | 0 | 0 | FP/PW/RF | <input type="checkbox"/> |
| 3 | 3 | | 0 | 0 | 0 | FP/PW/RF | <input type="checkbox"/> |
| 4 | 4 | | 0 | 0 | 0 | FP/PW/RF | <input type="checkbox"/> |
| 5 | 5 | | 0 | 0 | 0 | FP/PW/RF | <input type="checkbox"/> |

Attention: When setting time zone of group, time zone1 can not be 0, otherwise time zone of this group is invalid; as well, if time zone 2 is 0, time zone 3 is invalid.

Set up is completed, click on "Save" to save

3.3 Unlock Combination

Definition of unlock combination function

Unlock combination is the direct expression for controlling unlock. For example, if you want that all registered users cannot unlock door, then set Unlock Combination to null.

Definition of unlock combination is defined to different combinations that can unlock door, and each combination consists of different groups. Unlock combination directly uses group number and does not consider order for identifying user between each group. For example, "123" means door will only be unlocked when at least one user in each group of Group 1, Group 2 and Group 3 passes identification together with other two users. "4" means door will be unlocked when one user in Group 4 passes identification together with other two users. System can define up to 10 unlock combinations at the same time and door will be unlocked as long as one of these 10 unlock combinations passes identification.

Unlock Combination

Drag a column header here to group by that column

Group Detail

| CombID | Description | Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|--------|-------------|---------|---------|---------|---------|---------|
| 1 | | 1 | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |

Close

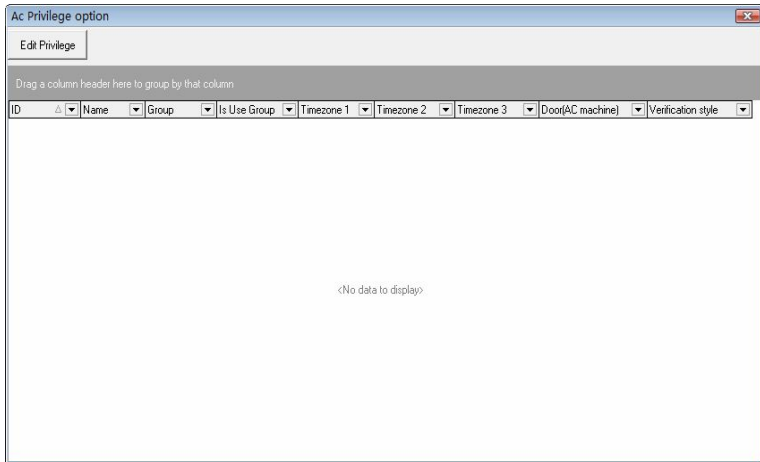
3.4 User Privileges

User privilege mainly applies to user access control setting: if a user whose personal No. is assigned as 1,2,3,4, and is distributed to No. (1) Device in the default period time, likes as follow, add user to right list first, then add device to right side list. Click allows passing.

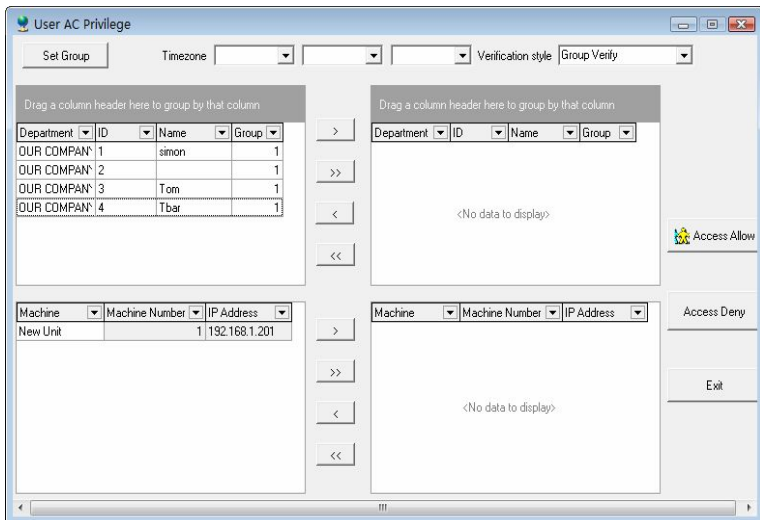
1 entered the "Access Control Privilege" setting there are two ways to provided:

- 1) through the system menu bar options: Access Control Settings -> Access Control Privilege, enter Access Control Privilege interface.
- 2) through directly shortcuts button of the system : Access Control Privilege, enter Access Control Privilege interface.

2 enter the "Access Control privilege" interface such as shown.

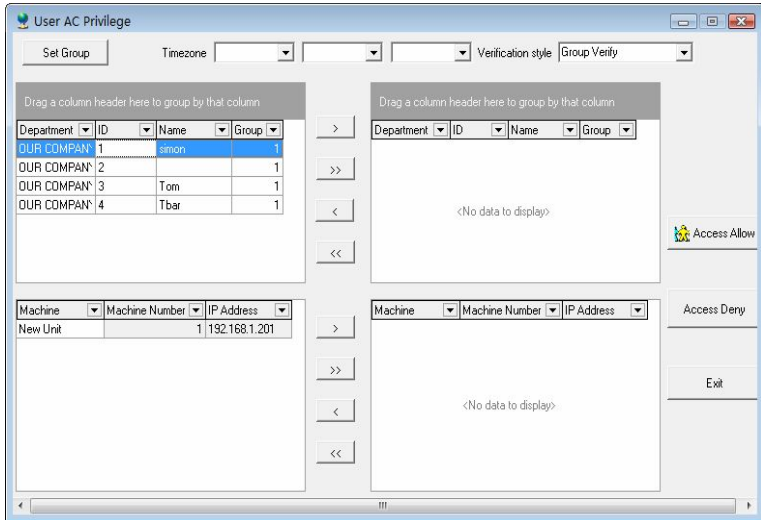


3 Click on "Edit Privilege" button and enter the Access Control Privilege to edit the interface, shown such following.

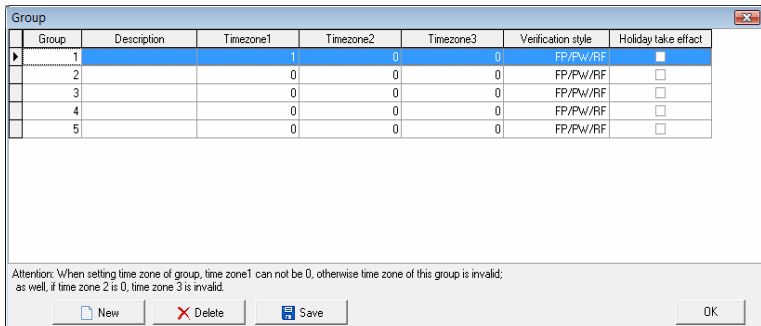


4 default users belong to Group 1, if need be assigned to other user groups, the need for users to re-allocation group. Here we illustrate:

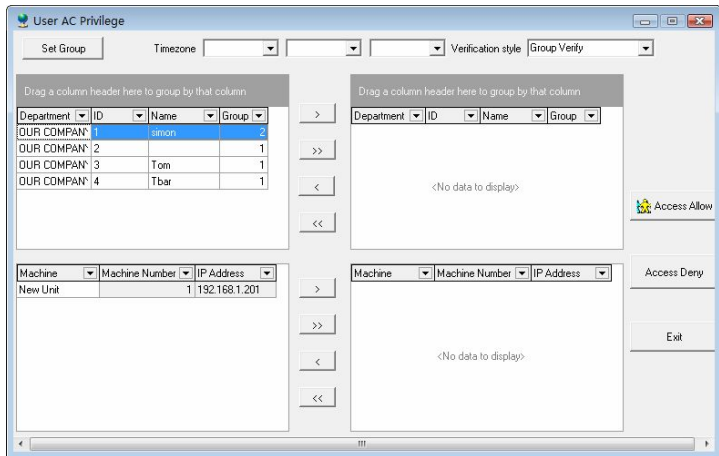
No. 1 users assigned to Group 1.
First selected No. 1 users, shown as following.



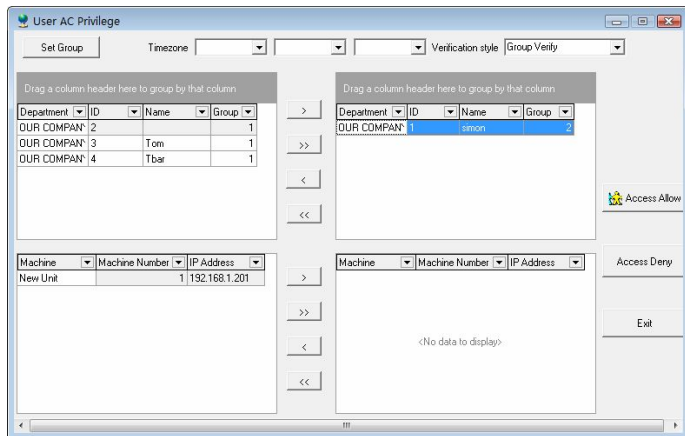
5 Click on the "Set Group" button and enter "the group setting" interface, select group 2.



6 through the above steps, the users will be assigned to the second group, shown as following.



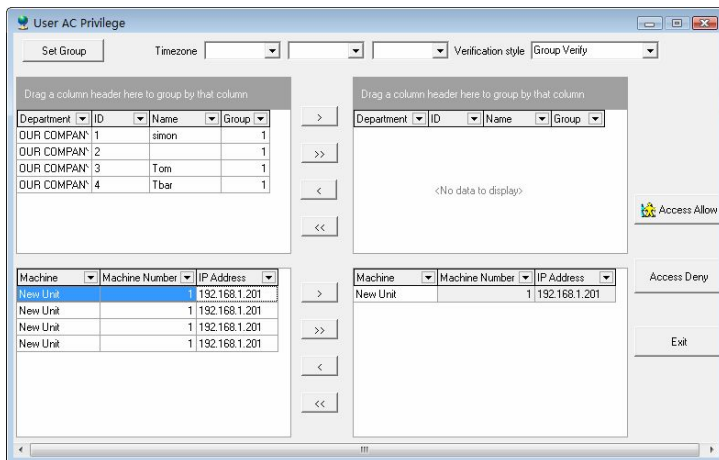
7 follow the 4-6 steps, set up the group those users respective. After the setting completed, through ">/>>" button, a single or all of users will be moved to the right critical areas, waiting for the Privilege setting. Shown as following



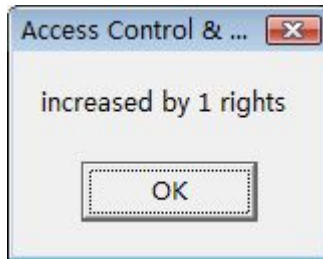
8 in the equipment list choose the equipment that need to upload Privilege.



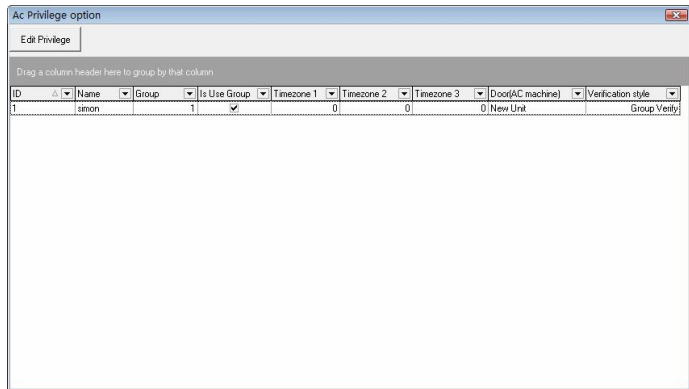
9 through ">/>>" button, single or all of the equipment will be moved to the right the critical region, waiting for Privilege setting. Like following equipment known as the NEW UNIT_1 , the equipment has been moved to the critical region, waiting for Privilege setting



10 after users and equipment is selected, click on "allows" button, the group Time period which is used by user in the critical periods will be assigned to the selected devices. After distribution is successful, prompt will appear shown as following

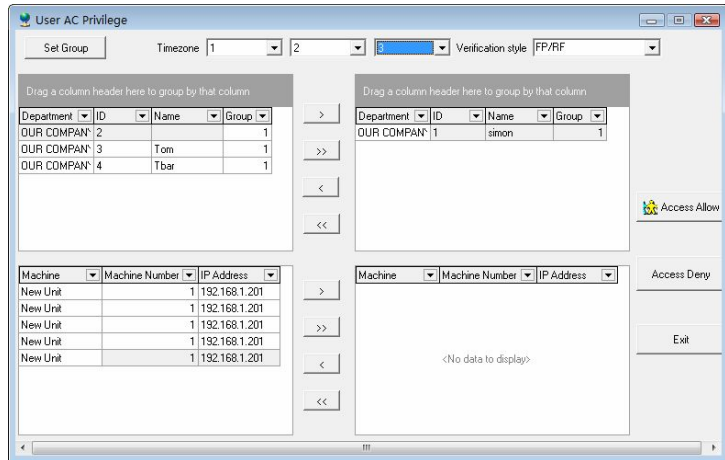


11 In the "User Access Control Privilege" interface, click "exit" button and enter the "Access Control Privilege Setting" and synchronize set up information of user groups will display in the list. Shown as following, NEW UNIT_1 in the No. 1 user group 1 Time Period.

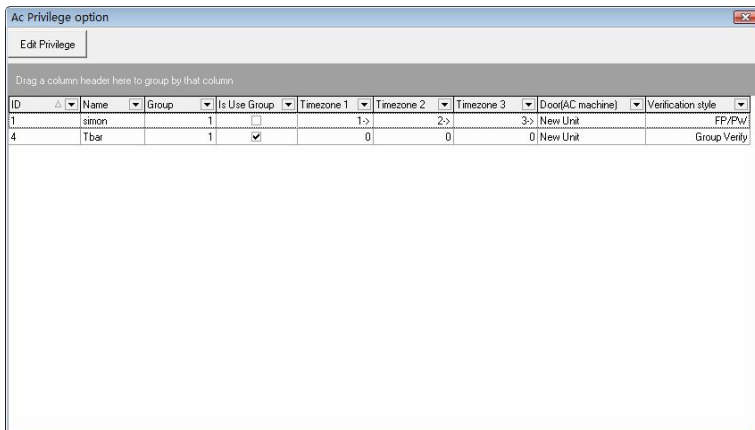


2) Set up the Access Control Privilege When a user do not use group

1 if a user belongs to the group, but she/he does not use group Time Period, then in the "User Access Control Privilege" setting interface, select the Time Period to be used, shows as below, No. 10 users belong to the third group, but he/she does not use group Time Period, and use the 1,2,3 Time Period

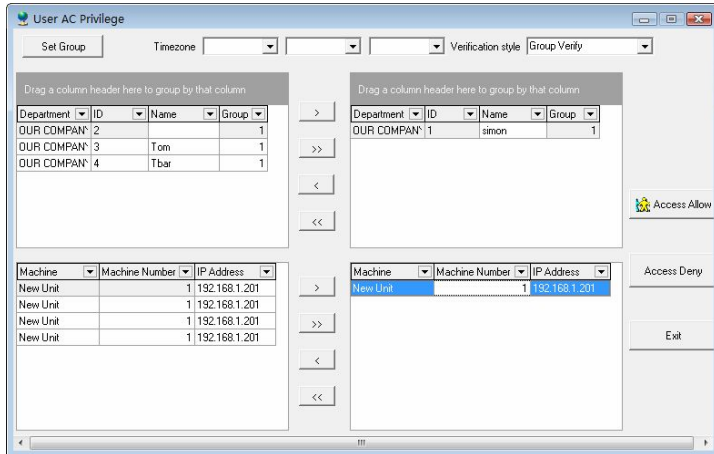


2 After completing, in the "user Access Control Privilege" interface, click "exit" button and enter the "Access Control Privilege Setting" and synchronize set information of user groups will display in the list. shown as following, in the NEW UNIT_1 the No. 1 user use the 2 group Time Period. in the NEW UNIT_1 the No. 10 user use group 3 Time Period, the non-use group, but use 1,2,3 Time Period



3) Delete the user Access Control Privilege

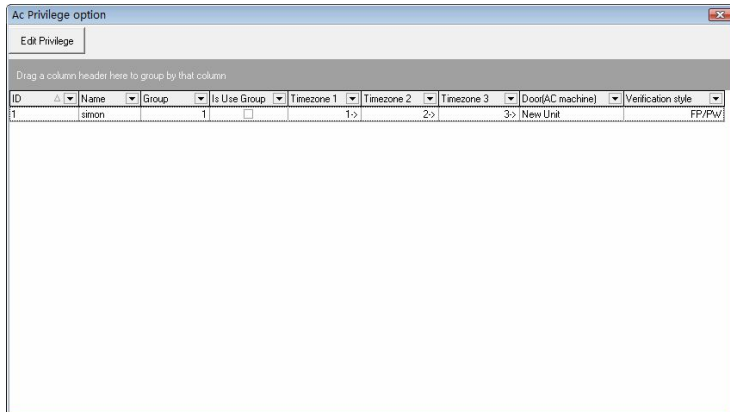
1 After choose the user who will ready to be deleted and his group , move their to the critical areas, and moved equipment whose the Privilege will be deleted to the critical, shown as below, delete the No. 1 users in NEW UNIT_1 , who use the Group 2 Time Period .



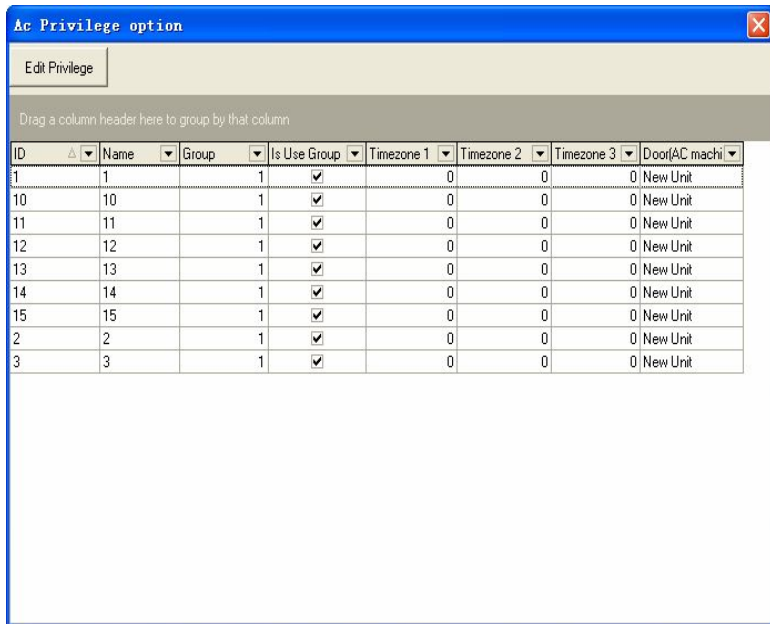
2 Click on the "AccessDeny " button, the group Time Period the user use will be deleted in critical area from the selected equipment. After deleted successfully, the system will prompt shown as in the dialog box.



3 after completion, in the "User Access Control Privilege" interface click "exit" button and enter the "Access Control Privilege Setting" , and synchronize the set information of user groups will display in the list. shown as following , only in the NEW UNIT_1 the No. 10 user use group 3 Time Period, Do not use group, but use 1,2,3 Time Period



After assigned the privilege, ability to automatically produce a privilege table, click **exit** to exit, the following figure will appear

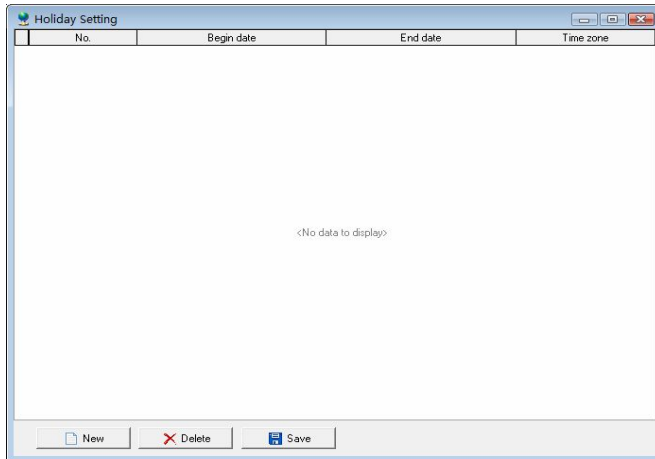


4 through shortcuts delete user privileges. in the Access Control Privilege setting interface, select the user to be removed , and then right click this item, the pop-up "delete" button. Click this button to delete users.

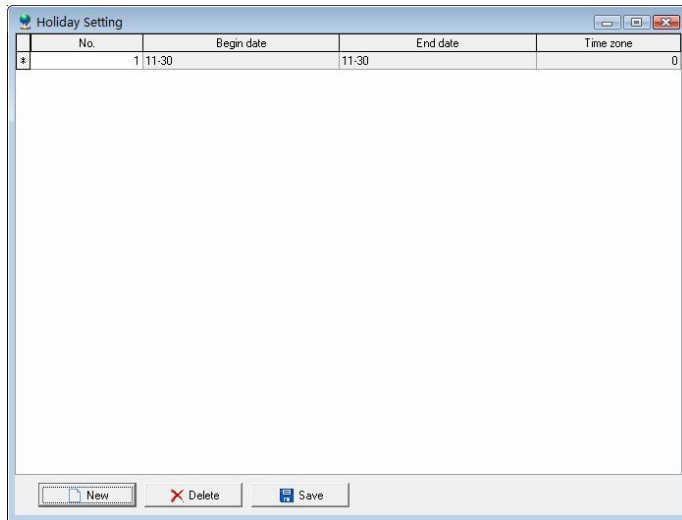
3.5Holidays setting

These steps is shown

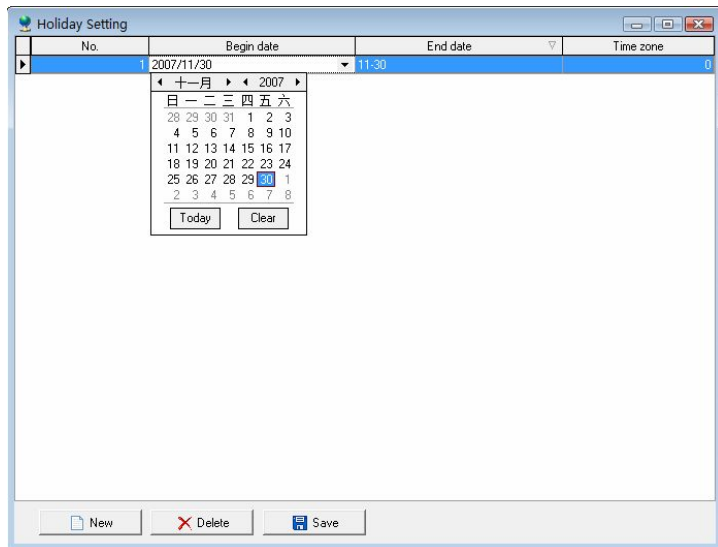
1 entered the holidays set. Choose Access Control Settings -> holidays set. Shown as following.



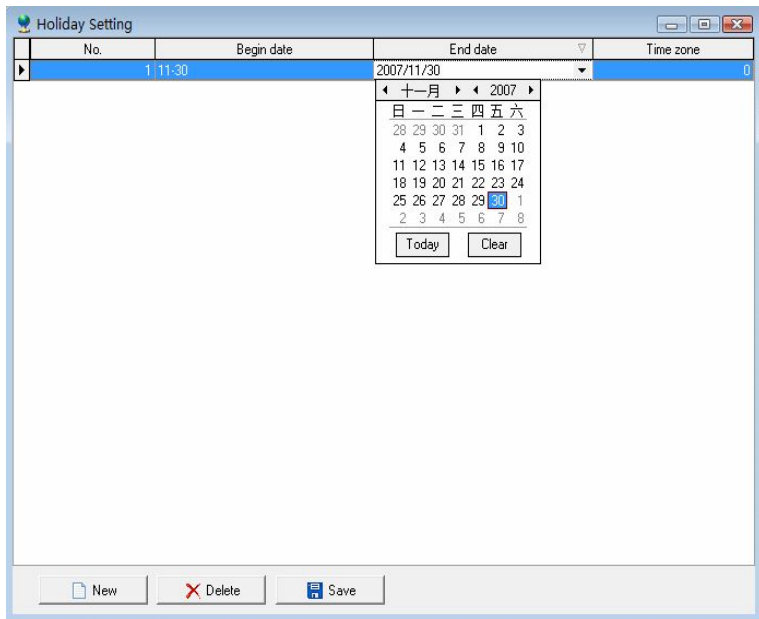
2 Click on the "New" button, can add a holiday. The default date is the date you choose.



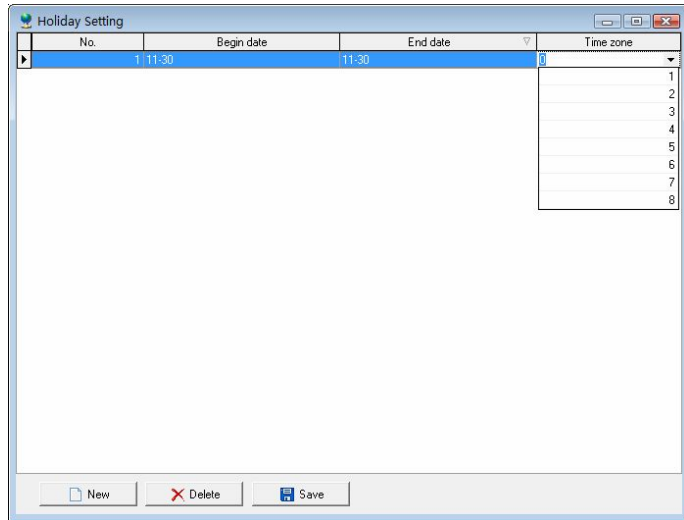
3 move the cursor to the "start date", it is start date to revise holiday,



4 move cursor to the "end date", it is end date to revise holiday .



5 moved the cursor to the Time Period to be set, choose the valid Access Control Time Period .



6 set is completed, click on the "Save" button, the setting will be saved.

After complete assigned the user privilege, next step is to upload **the user access control setup** and **the basic access control setup** to fingerprint machine, exit to the main program interface, may see **upload setup**, must upload the privilege to N machine prior selecting N machine, if want to upload many fingerprint, may hold down Ctrl to select and click **Upload setting** again, a dialog box will pop-up, As counting the need to click confirm to upload Access Control Setup.

Note: when the privilege is assigned to user, because all the group period time of users is defaulted as 1 group, therefore there are two kinds of situations occurring:

1st, user use group time period, designated a user in the left side user list (may hold down the Ctrl key to select), then click **redistribute** the group in the user privilege assign which the group is designated user .

2nd, user does not use the group time period and directly uses the time period, add a user to privilege distribution list in the right side , from three time period option in the top right corner the time period

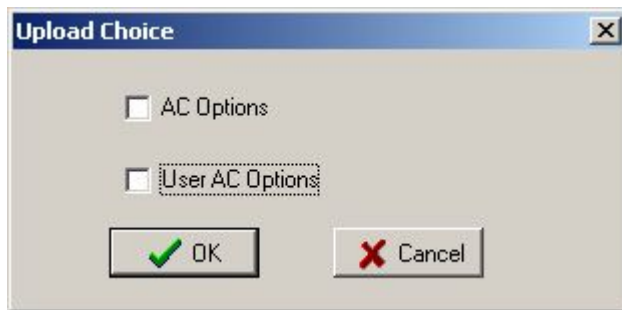
is choused in the user privilege distribution list which can use

4. Base Operation

The base operation fully provide with three sub-module—Upload Setting, Open Door, Starting/Stopping Monitoring.

4.1 Upload Setting

Choose operation device , click **Upload Device**, show as following interface :

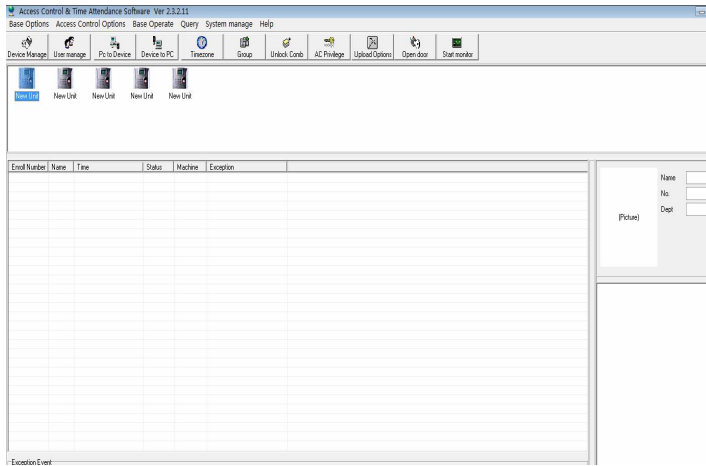


Select the Access control setting which you want, the two kind of setting ability to be choused at same time

4.2 Upload Equipment

Choose upload equipment. click icons to choose the equipment with mouse, selected this equipment.

Access control software introduction

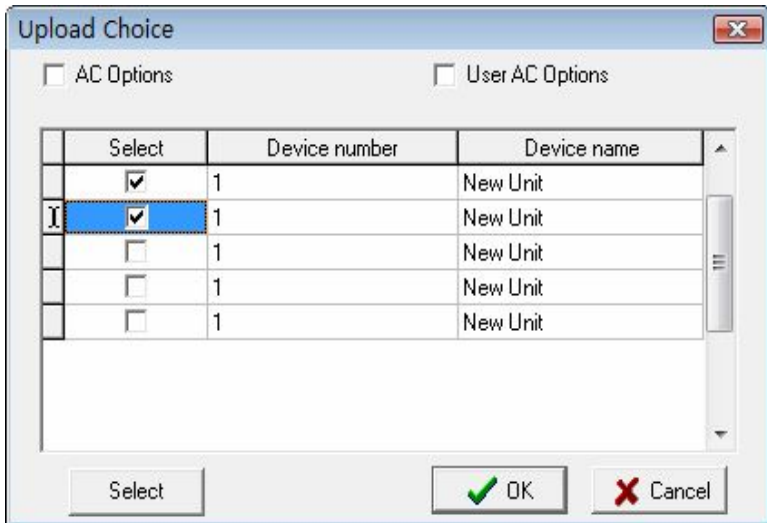


Select "upload set up" interface, there are two ways to enter:

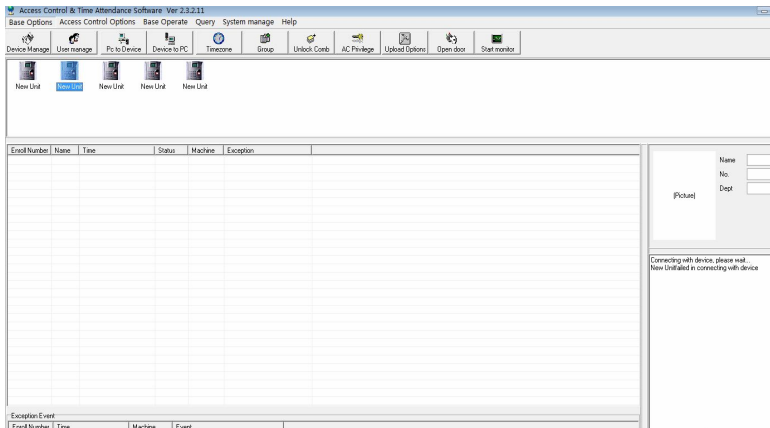
- 1) through bar options of the system menu: basic operation -> upload settings, enter upload interface.
- 2) through the system shortcuts button options: upload settings, enter upload interface.

There are two choices to upload interface elements, the basic setup and user Access Control Access Control setting, and it is better the two selected together at the same time to upload.

This can choose to upload multiple machines.



Upload success, in its lower right corner the successful operation prompt will be displayed, shown as below



4.2 Open Door

Click **Open Door** to open the selected door remotely.

4.3 Starting/Stopping Monitoring

The monitoring function already run after the program is running, the information about opening door and fingerprint verification will not show on the list

5. Query

These modules include record and alarm record

5.1 Record Query

In **Start/End Date**, you can select time period to query, Click **Query**, list below will show all users' come-in and go-out records within the time period. Each rank in the table has drag-down condition for searching. If you want to do classify Query, you can drag head of rank to table head of query table, show as following.

Search Employee's Checking Record

Condition

Time Range

From 07/12/2006 19 00:00

To 07/13/2006 19 16:01

Search Export

Drag a column header here to group by that column

| Department ▼ | Name ▼ | No. ▼ | Date/Time ▼ | Clock-in/out ▼ | Device ID ▼ |
|----------------------|--------|-------|-------------|----------------|-------------|
| <No data to display> | | | | | |

Click **Output** to output fingerprint records in various formats, such as Excel format, etc. this operation like as user management exporting operation.

5.2 Alarm Record

Click alarm record. The following interface appears.

The screenshot shows a window titled "Alarm event query" with a blue header bar. Below the header, there is a search bar with a "Delete" button, a date dropdown menu set to "7/12/2006", a "log" button, and another "Delete" button. Below this is a grey bar with the text "Drag a column header here to group by that column". Underneath is a table with five columns: "Operator", "DateTime", "Device", "Alarm Type", and "EnrollNumber", each with a dropdown arrow. The main area of the window is empty, displaying the text "<No data to display>".

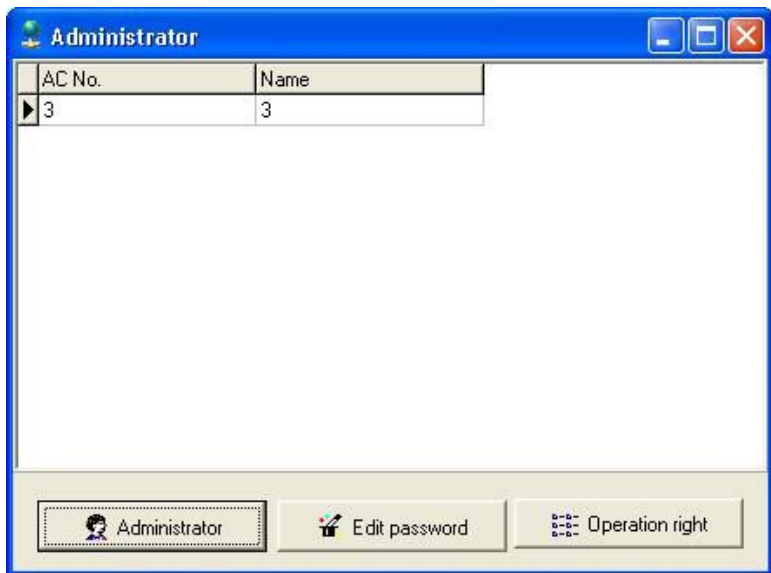
When the fingerprint identify fail or the Duress fingerprint has been verified the alarm record will produce.

6. System Management

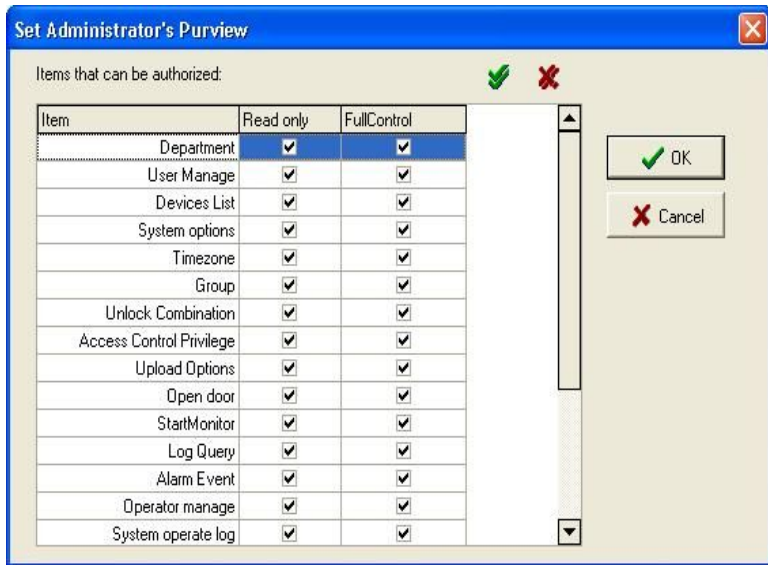
System Management includes that **Operator Management**, **System Operation Log**, **Backup Database**, **Clear old Data**, **Initialize System** and **Set Password of Database**. Eight sub-modules

6.1 Operator Management

Click **Operator Management** in the **System Management** menu, Pop-up the main interface of administrators maintained, like as follow.



Click **Administer**, Pop-up the two item of **Add Administer** and **Cancel Administer**, and then pop-up a user list frame, Select a user to be add a administer, and the click **Confirm** to pop-up a distributing privilege list. Like as follow



Put a tick in front of the administrator privilege, and then click **Confirm**.

If you want to cancel administrator, click **Administrator** firstly, and then click **Cancel Administrator** to complete the operation process.

It is able to modify administrator password and operation privilege after an administrator is added.

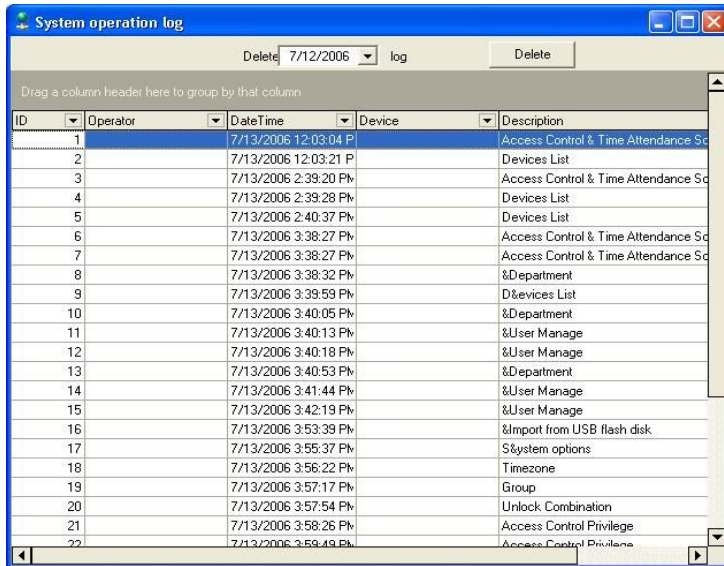
In the administrator interface, choose an administrator and click modify, then follow the system prompt to click **privilege** to reset its privilege.

If there is only one administrator in the system, an administrator wants to be canceled, you firstly find the Database Att2000, and open the list of Userinfo, delete the field Securityflags.

6.2 System Operation Log

The system operation Log is a track record which records this software operation history, and utilize list mode to record all

operation. Click **Cancel**, this operation is available to delete operation log to the defined previous date, appear following figure.

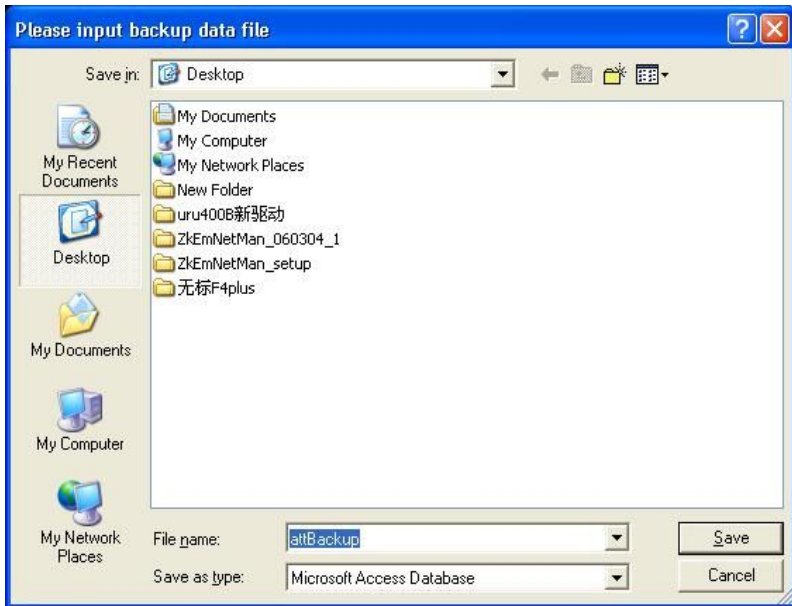


6.3 Data Maintenance

The Data maintenance is, consist up Backup Database, , Compress Database, Clear Old Data, threes module Buildup

6.3.1 Backup Database

Click Backup **Database** in the **System Management** menu, pop-up a dialog-box to backup database, you can name it as your favor, and save it in the defined location, like as following picture:



6.3.2 Database Compress

Click **Database Compress** in the **Data Maintenance** menu, to compress database, it is only capable to Access Database.

6.3.3 Clear Old Data

Can use the function to clear old data which are useless to utility, click **Clear Old Data** in the **Data Maintenance** display interface as follow



Click the Menu to choose the date, and then **Confirm** to clear old data at once, then old record data will backup in the installation directory automatically.

Note: The delete content doesn't include the ending date be selected. You can choose the operation to backup record data which is before the close data to your folder.

6.4 Initialize System

Click **Initialize System** in the **System Management** menu, pop-up a warn dialogs box, like as following figure , executes the command all the system will be initialized, after this operation the all data will be clear.

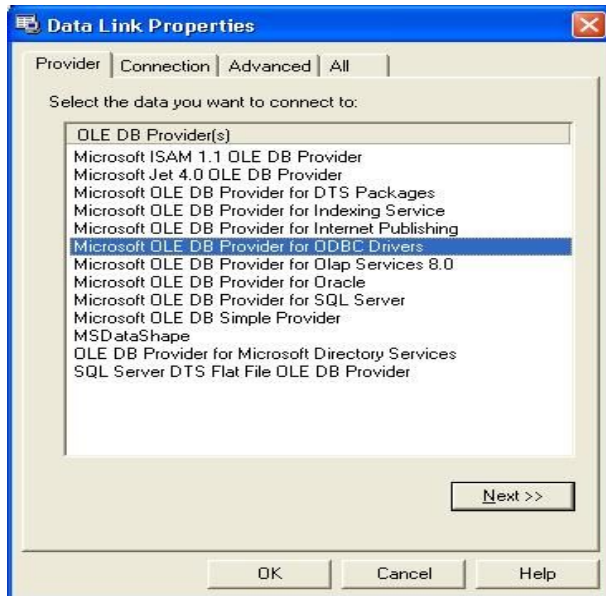


6.5 Set Database

Click **set database**


1 . Connecting Microsoft Access Database setup

(1) Provide program to select Microsoft Jet 4.0 OLE DB Provider;



(2) Click **“Next”** or **“Connect”** enter the following interface.

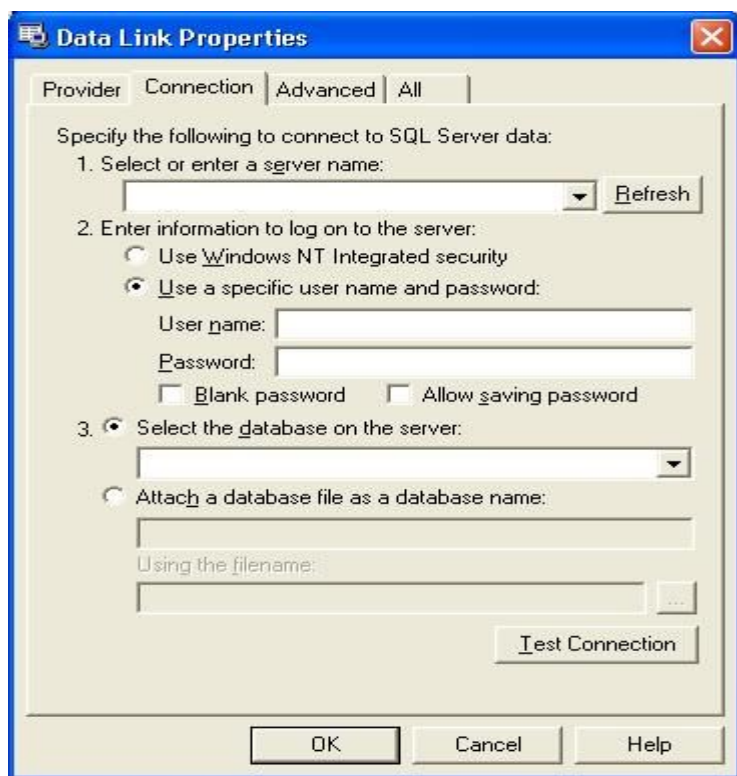


Click  button, Can select the database file, the default name is att200.mdb, according to real condition to renew setup of the database connection.

2 . SQL Server Database Connecting Setup

First you should establish the empty database on the database server. you can find a script file with the name of sqlserver.sql in the directory of instating CD, the empty database is established in the front of the searcher of SQL Server, and then open the sqlserver.Sql script files, to run database which is to create this software.

In the Provider Select Microsoft OLE DB Provider for SQL Server, click “next” or “connect” to enter this following interface



Confirm the server name for storing this database, information for logging on this serve, and the database name. After run test connection successfully Click (OK) button to complete settings

6.6 Set Password of Database

In order to ensure the database security, we may give the database to set a password, when the database is opened needs to input the password to prevent other people destroy the data

Clicks **setup database password** in the system administration menu, inputs your password to press the confirmation, please keep firmly in mind the password which you set. Has to revise this

password, enter the set database password interface to input the new password once more.