USER MANUAL

ZPAD

Version: V1.0

Date: July 2014

About This Manual

- This document introduces the user interface and menu operations of ZPad.

- The ★ marked feature of the manual that not all devices available. Please subject to the actual product.

- All design and specification declared are subject to change without notice in advance.

Important Claim

Firstly thank you for purchasing this facial and fingerprint hybrid terminal, before use, please read this manual carefully to avoid the unnecessary damage! The company reminds you that the proper user will improve the use affect and authentication speed.

No written consent by our company, any unit or individual isn't allowed to excerpt, copy the content of this manual in part or in full, also spread in any form.

The product described in the manual maybe includes the software which copyrights are shared by the licensors including our company, Except for the permission of the relevant holder, any person can't copy, distribute, revise, modify, extract, decompile, disassemble, decrypt, reverse engineering, leasing, transfer, sub-license the software, other acts of copyright infringement, but the limitations applied to the law is excluded.

Due to the constant renewal of products, the company cannot undertake the actual product in consistence with the information in the document, also any dispute caused by the difference between the actual technical parameters and the information in this document. Please forgive any change without notice.

Contents

1 Quick Start

1.1 Overview

1. DC 12V: Connect the factory default adapter.	**2. USB Interface**
3. TCP/IP	**4. SD Card ★**
5. Backup Barry ★	**6. Reset Button**: Reboot device.
7. Power Button: Press and hold this button to Shut down device.	**8. Backspace Key**: Click this button to return to the previous interface.
9. Home Key: Click this button to return to desktop.	**10. Information Bar**: Click this bar to view the detail about Date, USB, Core Service and Ethernet Connection.
11. Fingerprint Sensor and Punch Card Area ★	**12. Camera**

Note: The **Lock Connection** (**NC**, **COM** and **NO**) is optional function.

1.2 Finger Placement

Recommended fingers: The index finger, middle finger or the ring finger; the thumb and pinkie finger are not recommended (since they often present more difficulties to be recognized).

The finger is flat to the surface and centered in fingered guide.

Not flat to the

Off-center

Slanting

Off-center
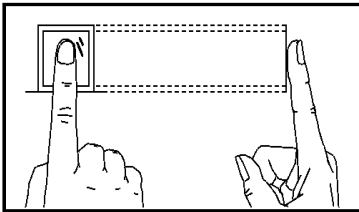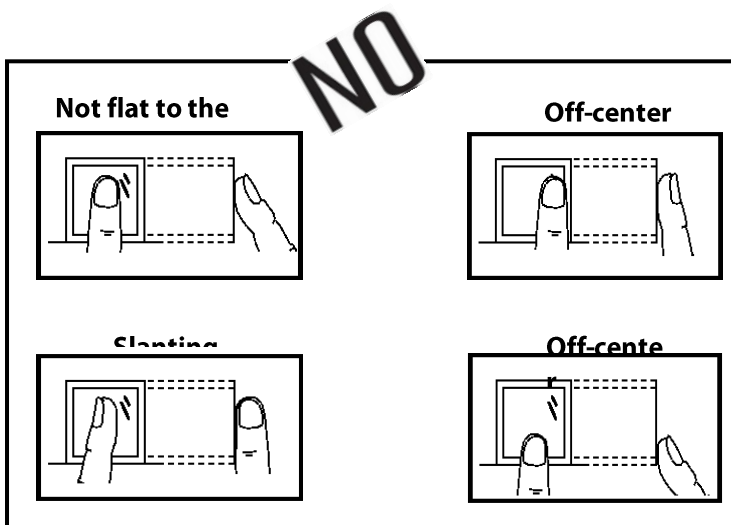
1.3 How to use touch screen

Use finger pulps slid or click the touch screen. The fingertip and fingernail may affect the using of touch screen.

1.4 Basic Operation

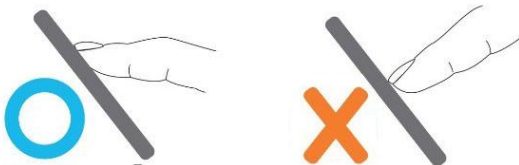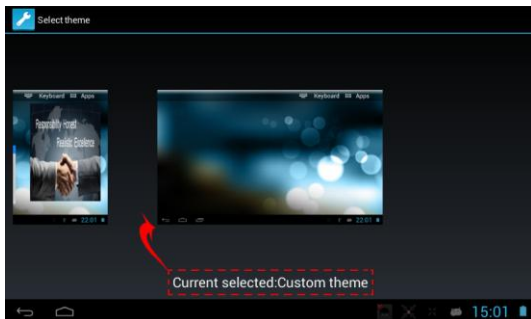The device has three widgets on the desktop at the factory status: **Check In**, **Check Out** and **Clock**.
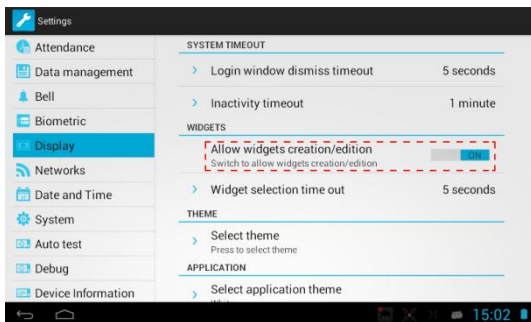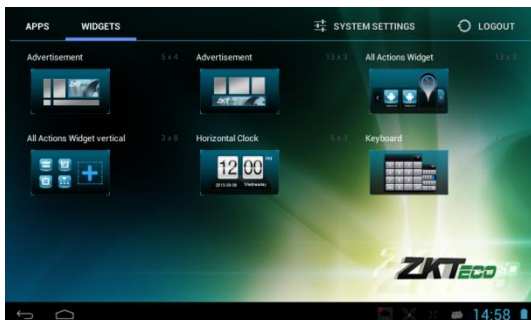

Custom design Widgets:

1. Click **Apps** > **SYSTEM SETTINGS** > **Display** to enter the Display Settings interface.

2. Select the Theme as **Custom theme** and Enable the **Allow widgets creation/edition** function.

3. Click **Apps** > **WIDGETS** to enter the **WIDGETS** interface. Set WIDGETS as required. For detail, please see **13 Widgets Setting**.

1.5 Verification Type
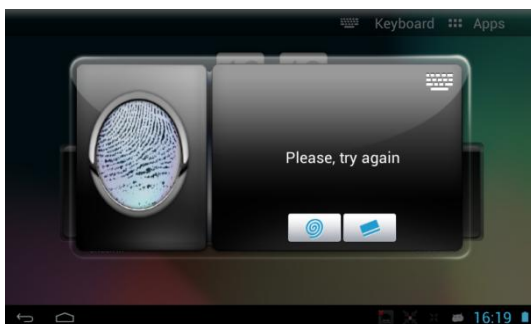
1.5.1 1: N Fingerprint Verification

The terminal identify current fingerprint collected by the Fingerprint Sensor with all fingerprint data on the terminal.

When device in the initial interface, press your finger on the Fingerprint Sensor by adopting the proper finger placement. For details, see 1.3 Finger Placement.

- Successful Verification
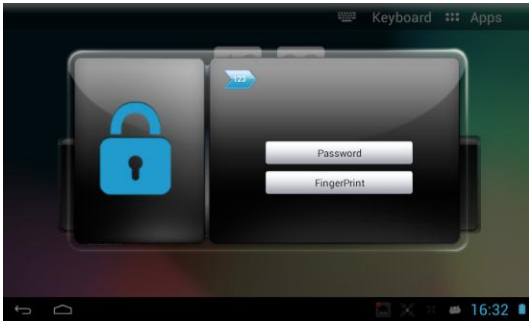

- Failed Verification.

1.5.2 1:1 Fingerprint Verification

The terminal identify current fingerprint collected through the Fingerprint Sensor with that in relation to the Pin entered through keyboard. Adopt this mode only when it is difficult to recognize the fingerprint.
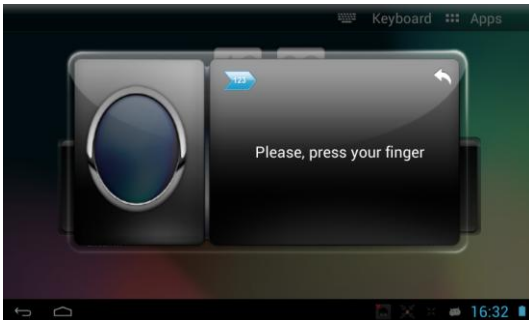
1. Click [**Keyboard**] icon to pop-up the Input ID box:

2. Enter user ID and click [**OK**] button.

**3.** Click **[Fingerprint]** button to enter the 1:1 Fingerprint Verification interface.

4. Press your finger on the Fingerprint Sensor by adopting the proper finger placement. For details, see **1.3 Finger Placement**.

● Successful Verification.

Note: If the device says *Please try again*, place the finger on the fingerprint sensor again. You can try another 2 times by default. If it fails after 2 times, return Step 1 for second operation.

● Failed Verification.
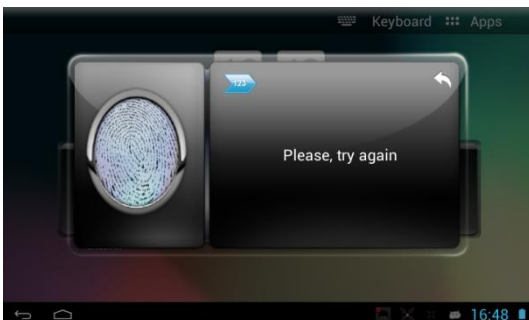
1.5.3 Password Verification

In the password verification mode, the terminal compares the password entered with that in relation to the user ID.

1. Click [**Keyboard**] icon to pop-up the Input ID box:

2. Enter user ID and click **[OK]** button.

3. Click **[Password]** button to enter the 1:1 Password Verification interface.

4. Input the correct password, and then click **[OK]** button to confirm.

● Successful Verification.

Note: You can try another 2 times by default. If it fails after **2** times, return to the initial interface.
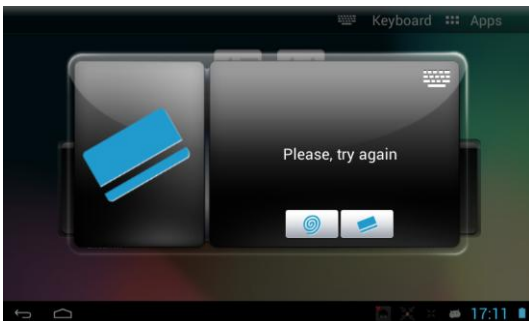
1.5.4 Card Verification ★

Some devices have an embedded ID or Mifare card module, providing the verification function. The device identifies the read card ID with all card IDs enrolled in the device during verification.

● Successful Verification.

● Failed Verification.

**Notice**: The card area ★ in device is round the Fingerprint Sensor.

2 Applications

Click [**Apps**] icon to enter the **Applications** interface:

App Name	Instruction
Attendance Events	Add, edit or delete attendance events as required.
Authority	Set ROLES (Contents **setup options**, **enroller** and **supervisor**) and assign Employee Authority as required.
Department	Build the department structure. Add/Edit/Delete department. Supports up to three-level department.
Employee	Add, edit or delete the basic employee information: enroll **Pin**, **Name**, **Fingerprint**, **Card★** and **Password**; assign **Department** and **Authority** as required. To facilitate administrators to locate an employee quickly from a large number of enrolled employees, the device enables user query by **Pin** or **Name**. In addition, you can assign schedule for employee as required.
Message	Add or delete public or personal messages as required.
Reports	Calculating and view **Attendance Report** and **Exception Log Report**. You can download them to the pen drive and check on the PC.
Widget Template	Add, edit or delete widget template, create widget at this interface as required.
Work Code	Add, edit or delete work code as required.
Work Shift	Add, edit or delete DAY and SHIFT as required.

3 Attendance Events

Click **[Apps]** > **[Attendance Event]** to enter the **Attendance Event** interface:
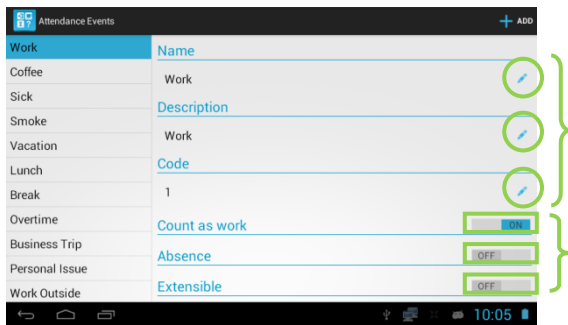
Click ![icon] icon to enter modify interface.

Touch these icons to switching between **OFF** and

This device has **11** attendance events in default, namely **Work**, **Coffee**, **Sick**, **Smoke**, **Smoke**, **Vacation**, **Lunch**, **Break**, **Overtime**, **Business Trip**, **Personal Issue** and **Work Outside**.

You can modify the attendance events as required. In addition, the default Attendance Events can't be deleted.
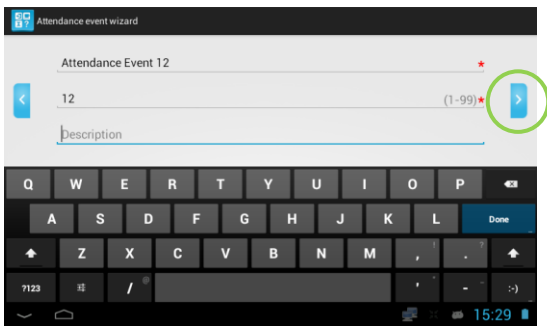
3.1 Add Attendance Event

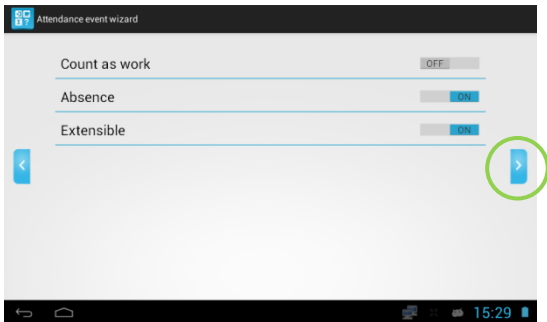**1.** Click **[Add]** icon to enter the **Creation Wizard** interface.
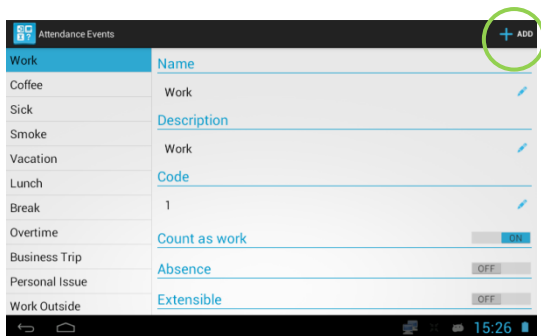
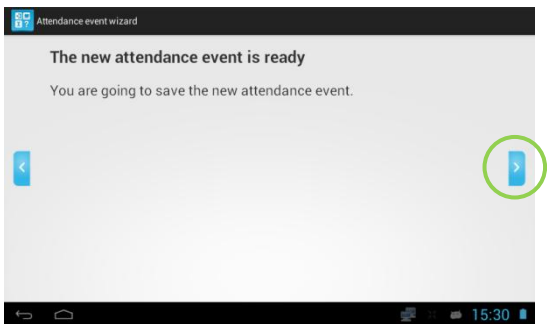

2. Read carefully and click ![icon] to continue.
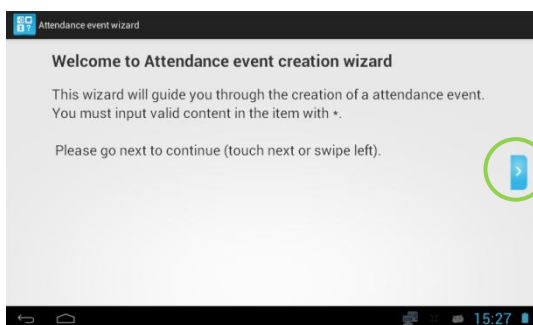
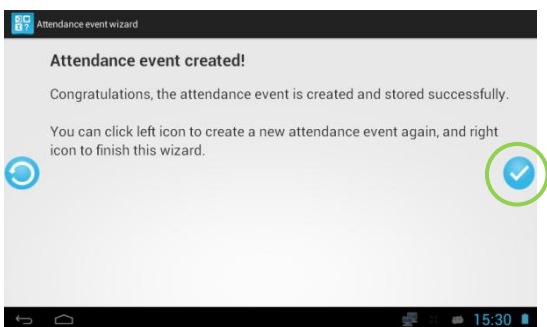**3.** Input **Name**, **Code** (1~99, Unrepeatable) and **Description**, and then click ![icon] to continue.

4. Click ![arrow icon] to continue.

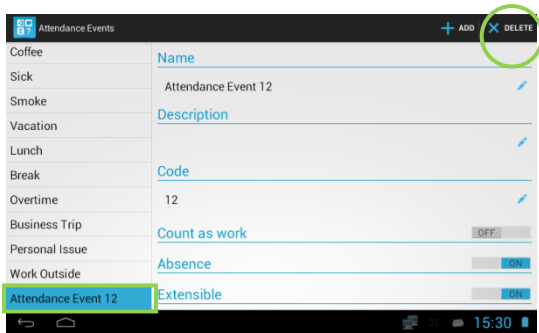**5.** Click ![arrow icon] to continue.
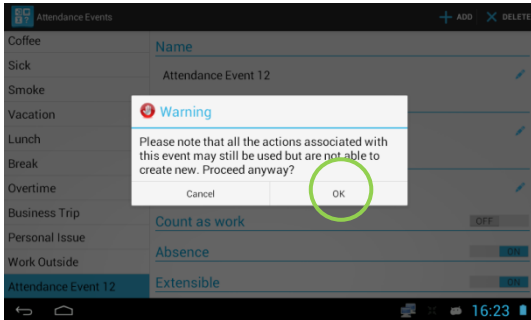

6. Click ![check icon] to confirm.

3.2 Delete Attendance Event

Notice: Only the user-defined Attendance Event can be deleted.

1. Click and select *Attendance Event*. Click **[DELETE]** icon.

2. Click **[OK]** button to confirm and delete the selected *Attendance Event*.

Tips:

Count as work: Count the Attendance Event as work.

Absence: The demonstration is approval absence in the EXCEPTIONS LOG Report.

Extensible: Such as when the employee's Attendance Event is **Business Trip**, then when he/she back and check on the device, the system will cancel the **Business Trip** Attendance Event to **Work** automatically.

4 Department Settings

Browse the department information of device. The device has 7 departments in default, and the max capacity of department is 100. You can add, modify or delete department as required.
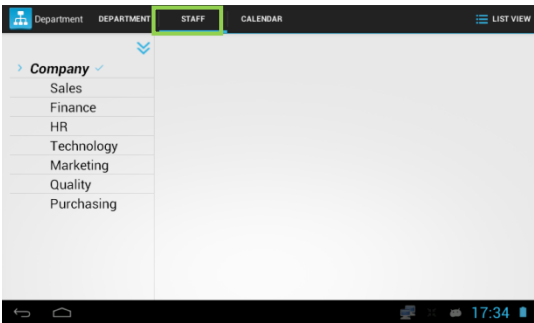
Click **[Apps] > [Department]** to enter the **Department Setting** interface, you can click ⌄ icon to hide the department information, or click ⌃ icon to show department information.
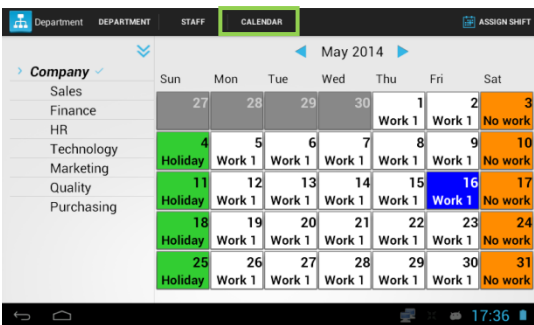
● Department Interface
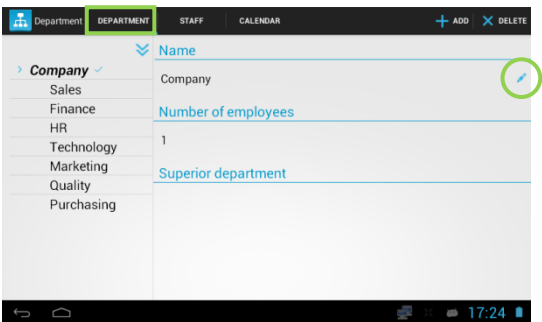
Click ✎ icon to enter modify interface.
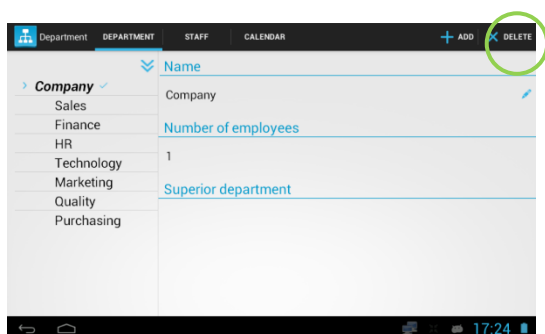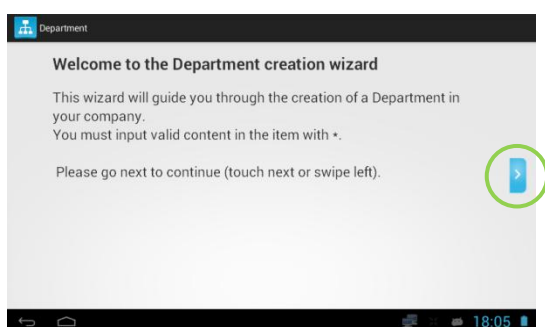
Staff Information of Department

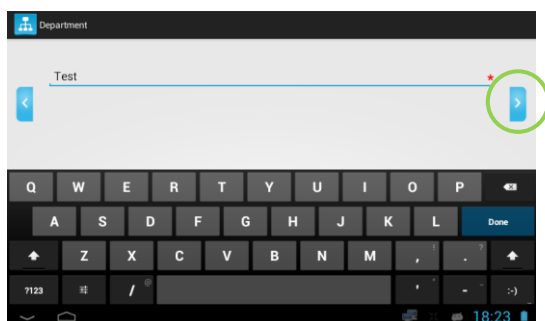**Calendar**

4.1 Add Department

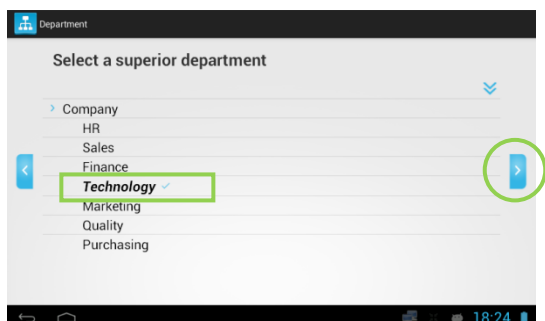**1.** Click **[Add]** icon to enter the **Creation Wizard** interface.
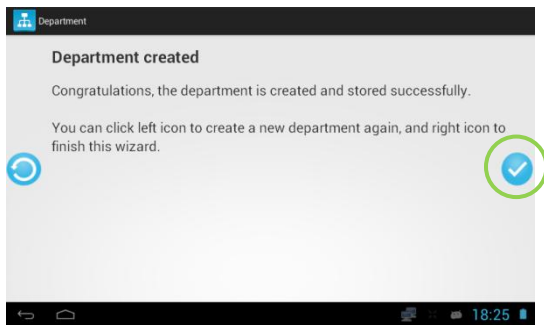

2. Read carefully and click to continue.

3. Input department **Name** and then click to continue.

4. Select a superior department and then click to continue.
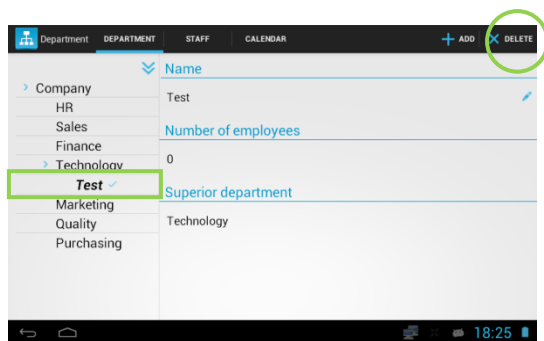
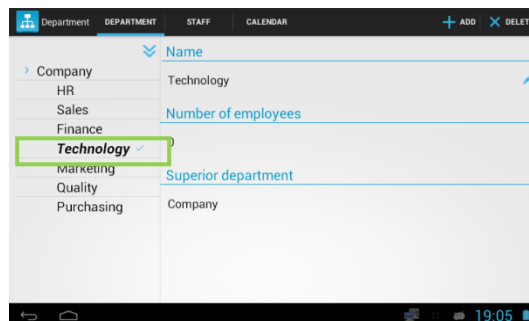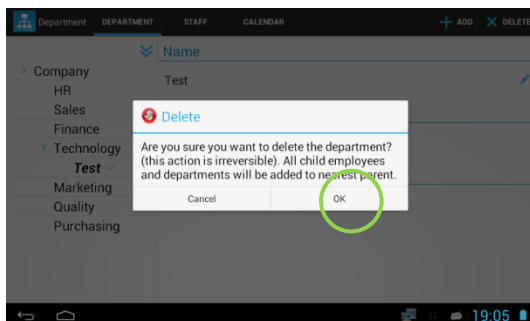

5. Click to confirm.

4.2 Delete Department

1. Click and select the department, and then click **[DELETE]** button to pop-up the prompt box.

2. Click **[OK]** button to confirm and delete the selected department.

Notice: The delete department operation is irreversible. All child employees and departments will be added to nearest parent.

5 Employee Management

Add, edit or delete the basic employee information: enroll **Pin**, **Name**, **Fingerprint**, **Card ★** and **Password**; assign **Department** and **Authority** as required.

In company's attendance management, for employee's change, the information on the device also needs modification. Therefore, operations including **Add**, **Delete**, **Check**, **Modify**, etc. can be done on the device.
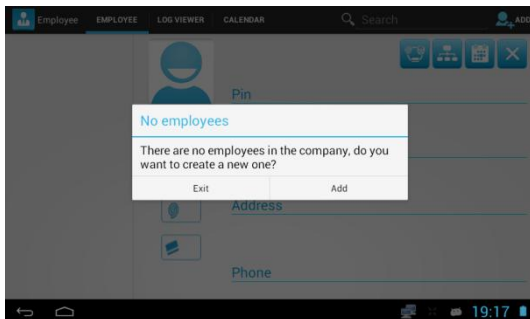
For the first use, after click **[Apps] > [Employee]**, the following box will pop-up, suggest you to add employee.
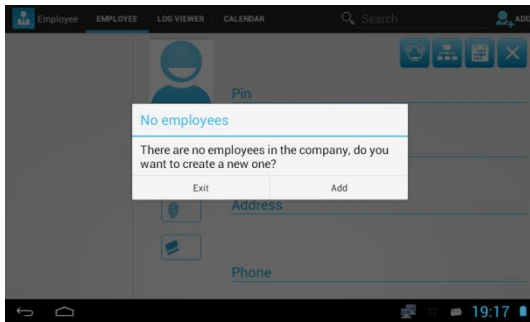
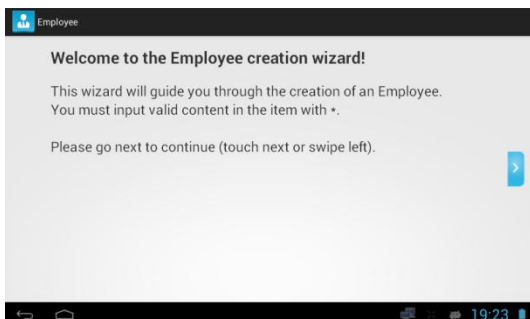**Tips: There are no employees in the company; do you want to create a new one?**

5.1 Add Employee

1. Click **[Add]** button to enter the **Creation Wizard** interface.
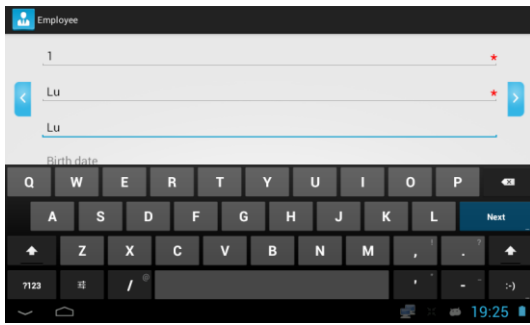

2. Read carefully and click > to continue.

3. Input **Pin** (1~999999999, Unrepeatable), **First name** and **Last name**.

Note: The maximum characters of **First name** and **Last name** is 8 and 20.

4. Click **Birth date** bar to pop-up the birth date setting box. Slide up or down to select date, and then click [**Done**] button to confirm.

5. Select **Gender** and click > to continue.
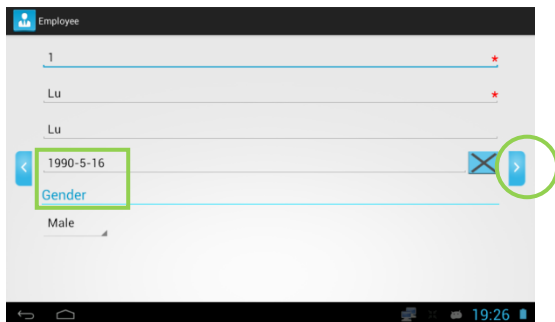
6. Enter **National ID**, **Phone**, **Mail** and **Address** as required. Then click > to continue.

7. Choose a department assigned to this new employee. Then click > to continue.
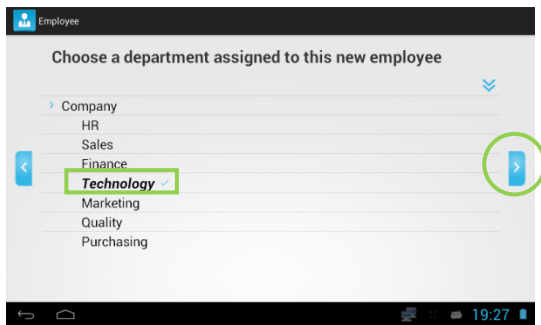
8. Then click ⟩ to continue.
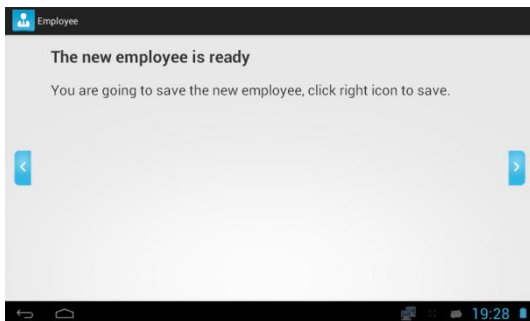
9. Click ✓ to confirm.

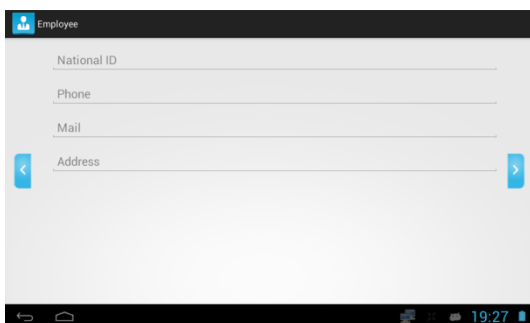**10.** Read the **Information** carefully. Then click **[OK]** button to confirm.

⬤ **Enroll Fingerprint (Step 11 to 13)**

11. Click the fingerprint icon to pop-up the enrolling box.
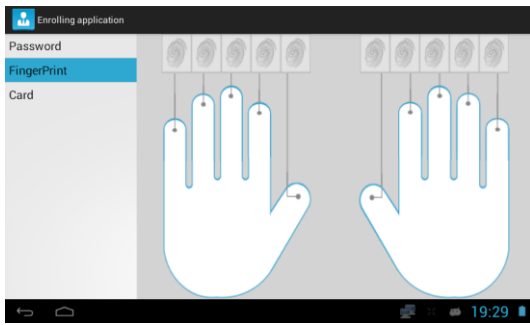
12. Place the same finger on the Fingerprint Sensor for three consecutive times correctly until enrollment succeeds, and then returns to the previous interface.
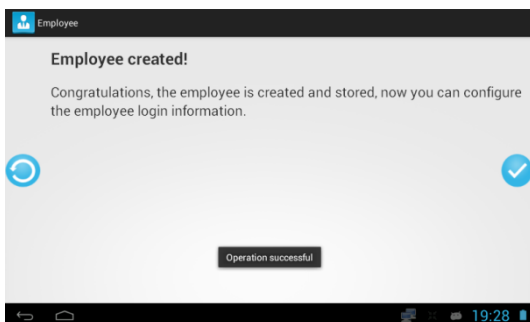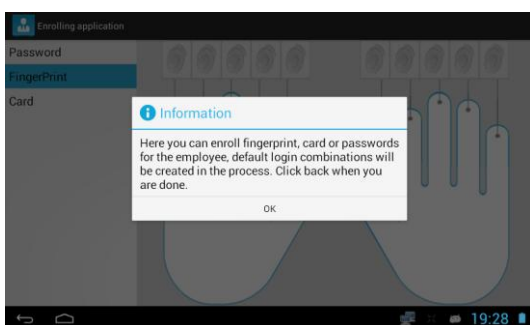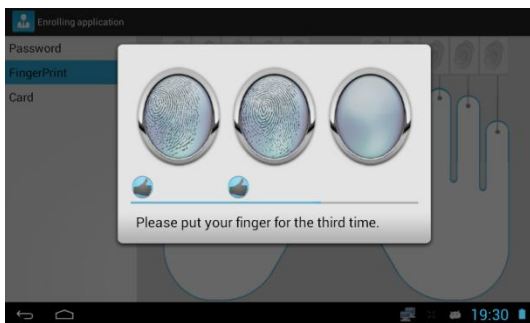

13. View the registered fingerprints' image.
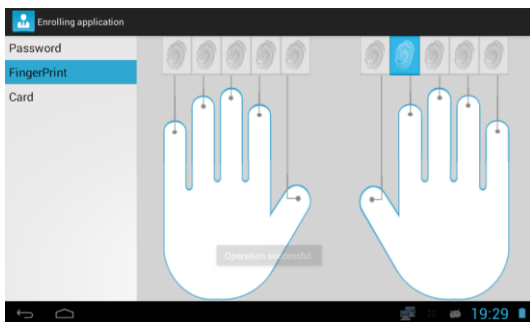
○ **Enroll Password (Step 14 to 15)**

14. Click **Password** item to enter the **Password Management** interface, and then click **[ADD]** button to pop-up the **Password Setting** box.
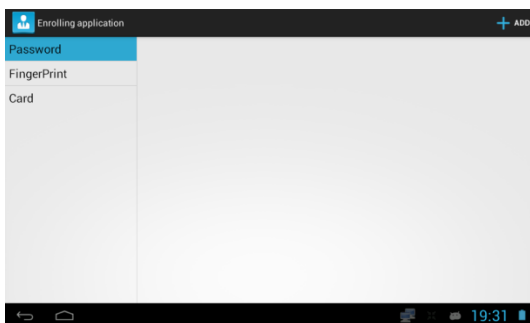
15. Write the password (at least 4 characters) and confirm, and then click **[OK]** button to save and return the **Password Management** interface.
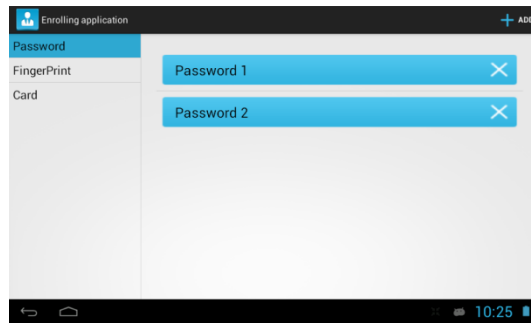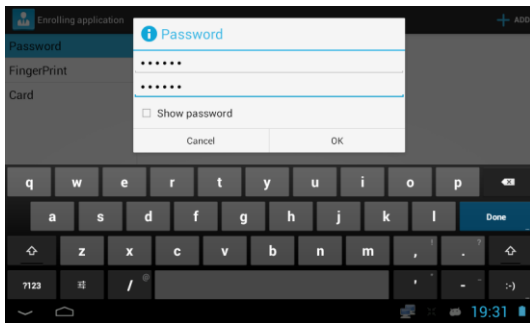
Tips: Each employee can add two passwords at most.

⭕ **Enroll Card ★ (Step 16 to 18)**

16. Click **Card** item to enter the **Card Management** interface.
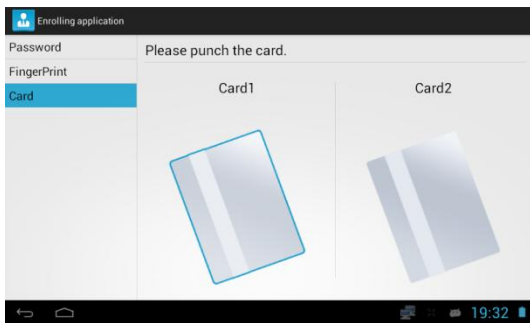
17. Click **Card1** or **Card 2** icon, and then punch card properly in the Punch Card Area.
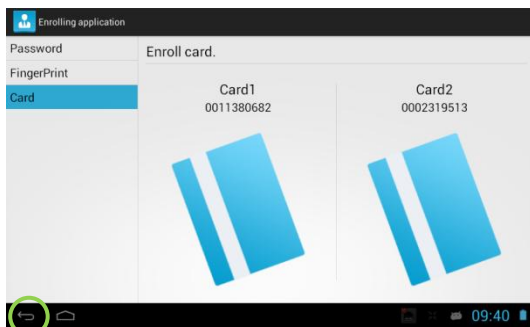
Tips: Display the card No. after successful enrollment card, each employee can enroll two cards at most.

18. Click [ ] icon to return to the **Employee** interface, and complete add employee operations.

5.2 Edit Employee

⭕ **Employee Basic Information**

Click ✏ icon to enter modify interface. Then modify as required.

📇1 Click this icon to enter the **Password** interface. You can add or delete passwords here.

👆1 Click this icon to enter the **Fingerprint** interface. You can enroll, override or delete fingerprints here.

💳1 Click this icon to enter the **Card** interface. You can enroll, override or delete cards here.

Click the enrolled fingerprint or card icon, pop-up the operation prompt box.
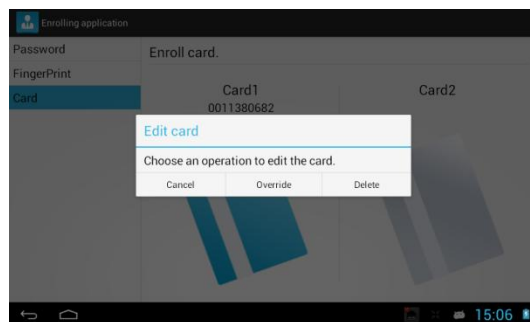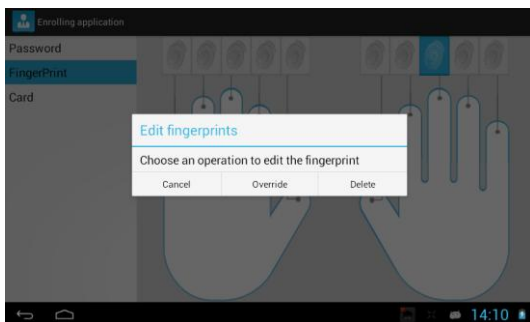
➢ **[Cancel]:** Click this button to cancel operation.
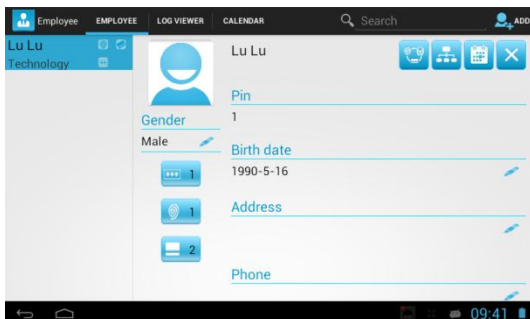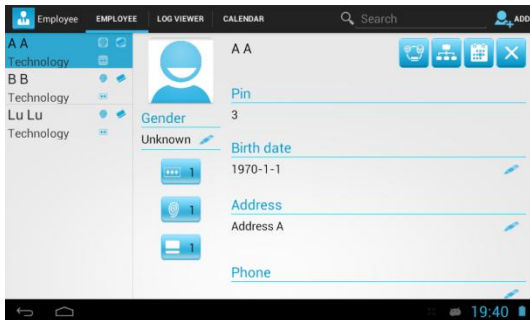➢ **[Override]:** Click this button to override the enrolled fingerprint or card, and then enroll fingerprint or card again.
➢ **[Delete]:** Click this button to delete the enrolled fingerprint or card.
➢ **Login Combinations Setting** ★

Click 🗔 icon to enter the **Combinations Management** interface. Here you can create login combinations for the employee.

Tips: Click **[New combination]** button to add login combination, click ✕ button to delete combination.

Fingerprint Verification
1:1 Fingerprint Verification
Card Verification
Password Verification
Card + Fingerprint
Password + Pin + Fingerprint
Password + Pin + Card
Password + Pin + Card + Fingerprint
Pin + Card + Fingerprint

○ **Choose Department**

Click ⊞ icon to enter the **Choose Department** interface. Here you can choose the department where the employee is going to work.
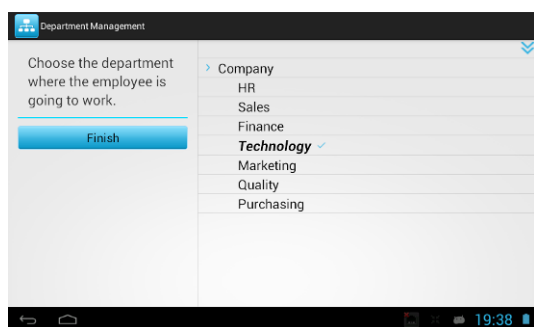
Tips: Click the department name to choose department, and then click **[Finish]** button to save and return to the **Employee** interface.

5.3 Employee Schedule

5.3.1 Work Shift Assignment

1. Click and select employee, and then click ![icon] icon to enter the welcome interface.
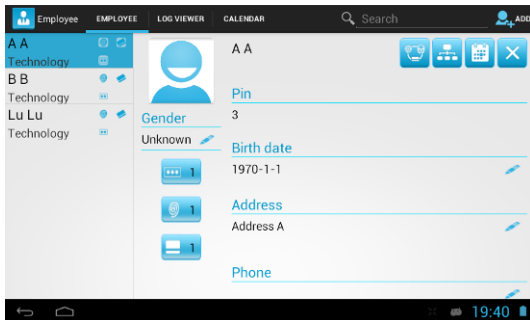
2. Click ![icon] to continue.
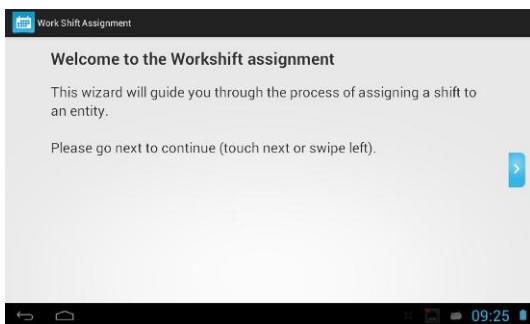
3. Click and select work shift, and then click ![icon] to continue.
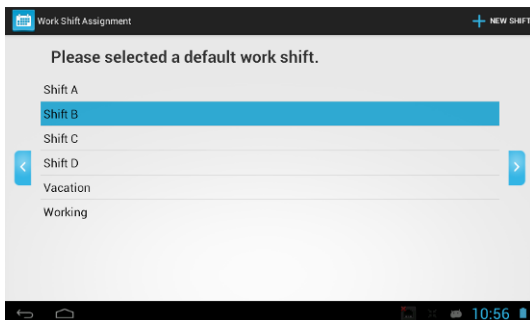
4. Click the date icon to set it as the start date of shift. Then click ![icon] to continue.
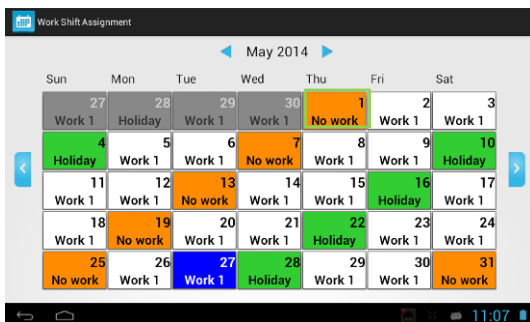
Tips: The settings about Shift please see **7 Work Shift Management**, the detail of Shift B, as shown in the left figure.
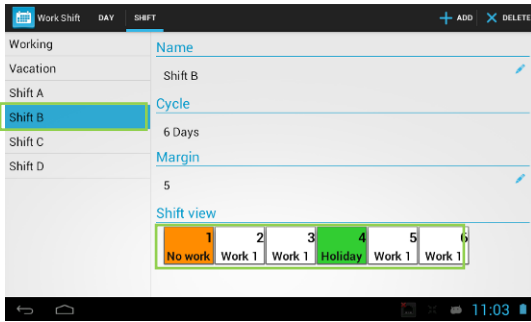
5. Slide up or down to choose when the employees start to work, and then click ⟩ to continue.
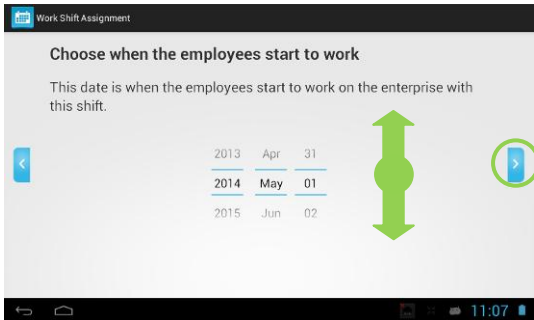
6. Tick and select *Set an end to the shift*. Slide up or down to select when does the shift should end, and then click ⟩ to continue. (Optional, set as required.)

7. Click ⟩ to continue.
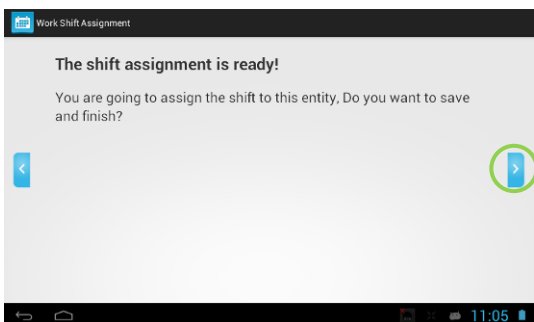
8. Click ✓ to confirm.
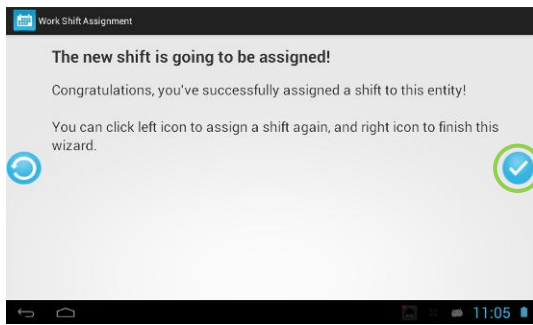
9. Click and select employee, and then click **CALENDAR** item to view the employee schedule information.
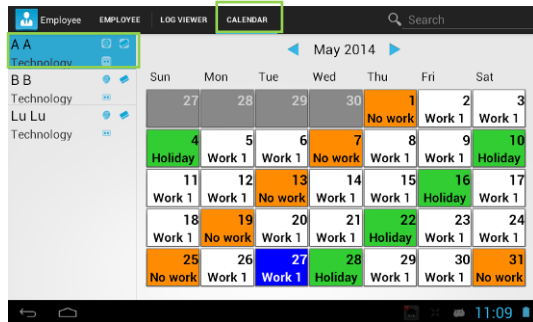
5.3.2 Employee Temporary Shift

1. Click and select employee, and then click **CALENDAR** item to view the employee schedule information.
Click the date icon to enter the **Modify the date** interface:
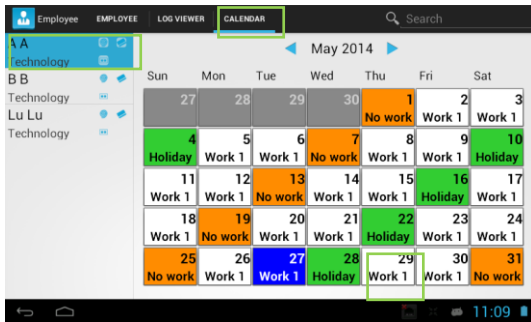
2. Set duration in days, and click **[Done]** button to confirm.
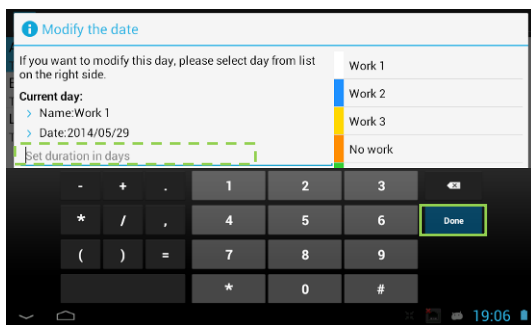
3. Click and select DAY from list on the right side.
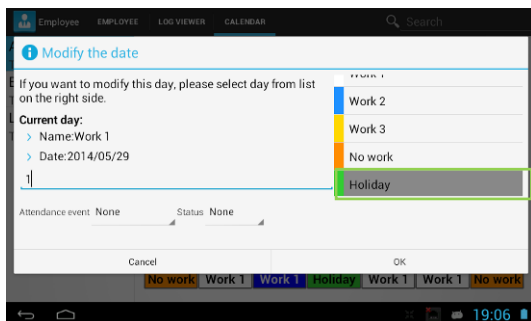
4. Click and select Attendance event/Status. Click **[OK]** button to save, and return to the **CALENDAR** interface.
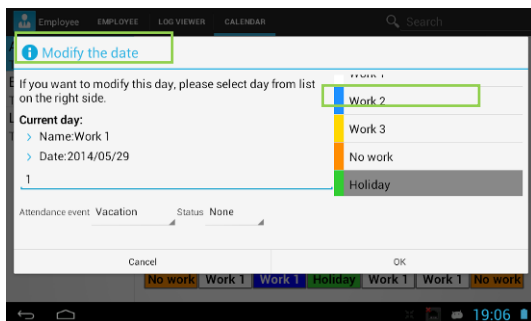
The Shift of May 29 has modified as **Holiday.**
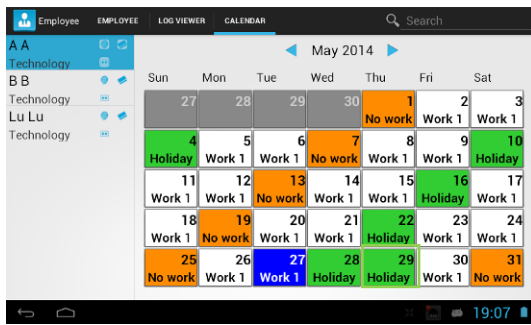
5.4 Log Viewer

Display the employees' attendance logs by the day.

Click and select employee, and then click **LOG VIEWER** item to display the employee's attendance logs by the day.

Note: Only display the current **50** attendance logs.
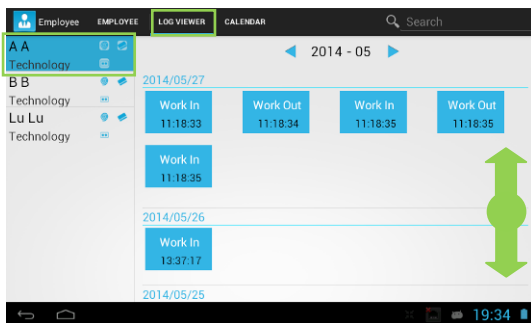
5.5 Search Employee

To facilitate administrators to locate an employee quickly from a large number of enrolled employees, the device enables user query by his/her **Pin** and **Name**.

1. Click the **Search Field** to pop-up the *Input Keyboard*.

2. Input the **Pin** or **Name**, and then click **[Go]** button to confirm and close the *Input Keyboard*.
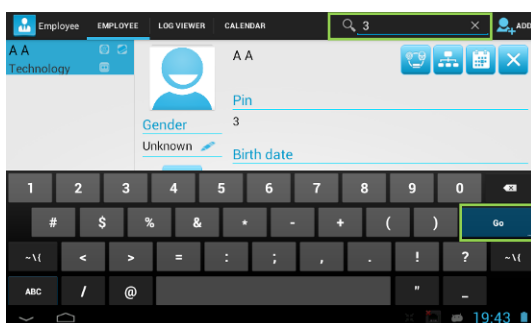
The device will locate the cursor to the desired employee.
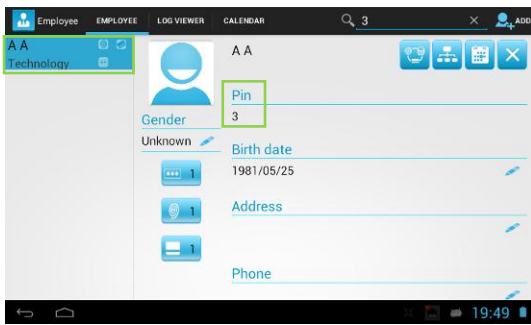
5.6 Delete Employee

1. Click and select employee, and then click ⊠ button, the Delete confirms box wills pop-up.
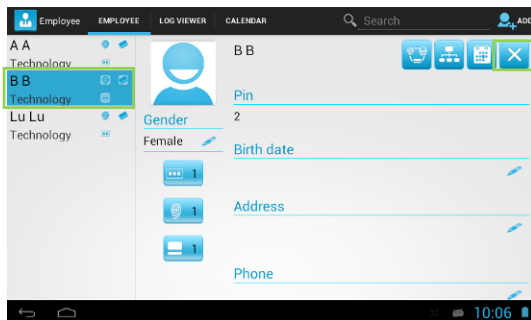
2. Click **[OK]** button to confirm and delete the selected employee.
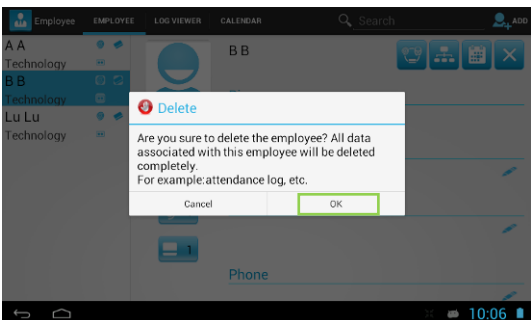
Tips: The delete employee operation will delete this employee's attendance logs.
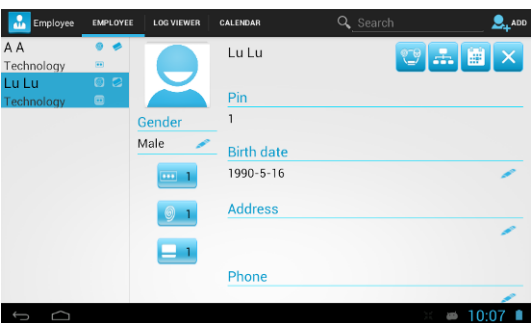
6 Authority Management

6.1 Role Viewer

Click **[Apps]** > **[Authority]** > **[ROLES]** to enter the **Role Settings** interface. The device has four roles in default, namely *Super Admin*, *Enroller*, *Attendance Admin* and *System Admin*. Each role has three types of privileges, namely *setup options*, *enroller* and *supervisor*. You can check as required.
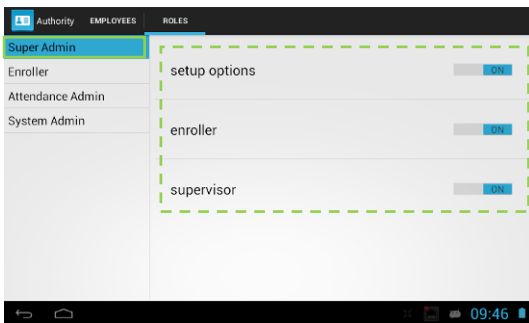
Tips: Click the role name to view the detail privileges setting.

6.2 Employee Authority Setting

Assign authority for employees.

Click **[Apps]** > **[Authority]** to enter the Authority Setting interface. (**Note:** According to the current user privilege to display employee information.

1. Click and select employee.
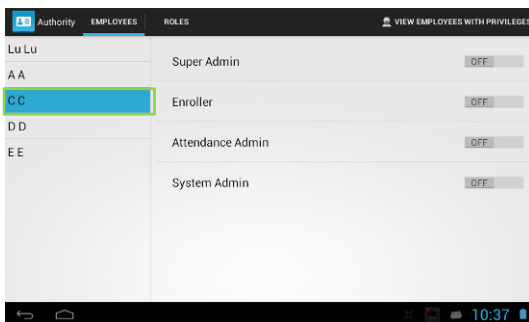
Tips: For the first setting, if you don't assign at least one Super Admin, the **Error** box wills pop-up.
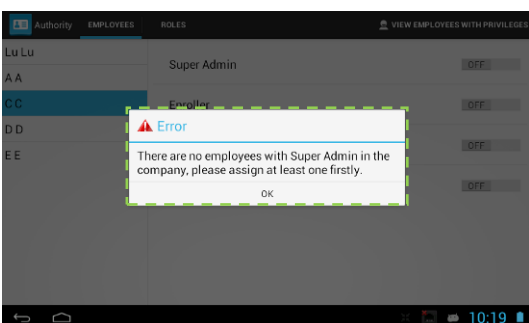
2. Click the **[OFF]** button to enable the privilege while click the **[ON]** button to disable the privilege.
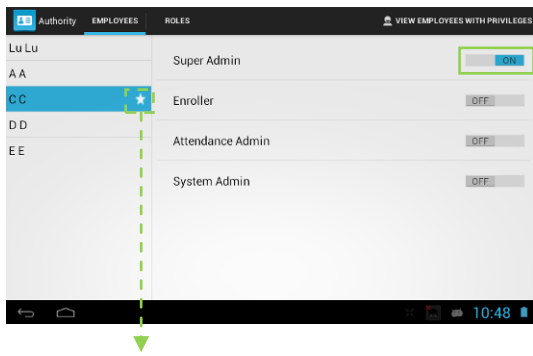
Means this employee has **Super Admin** privilege.

7 Work Shift Management

7.1 DAY Setting

⭕ **Add DAY**

1. Click **[Apps] > [Work Shift]** to enter the **DAY Setting** interface. Click **[Add]** button to enter the **Creation wizard** interface.
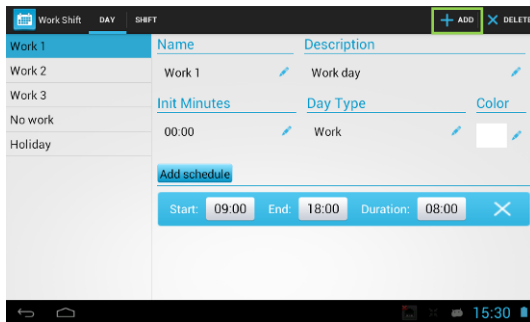
2. Read carefully and click to continue.
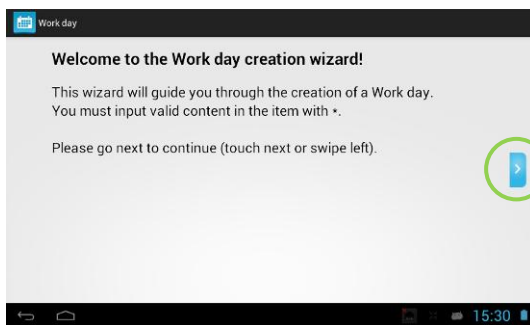
3. Select day type (Work, Rest or Vacation). Click to continue.
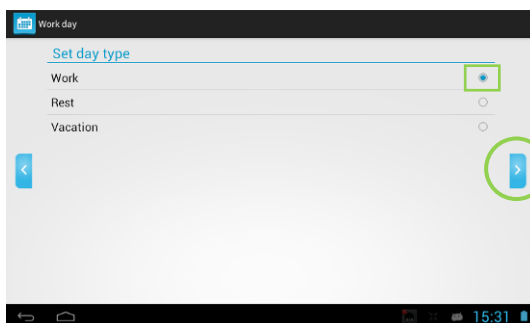
4. Input the Name and Description, and then click to continue.
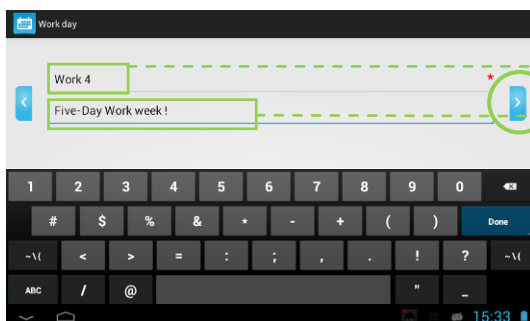
Name (Please input 1 to 24 characters.)

Description

5. Click **[Add schedule]** button to pop-up the **Add schedule** box. Tick (**All day**) or click the *Select starting* and *Select ending* bar to pop-up the **Set time** box, slide up or down to select time, and then click **[OK]** button to confirm.
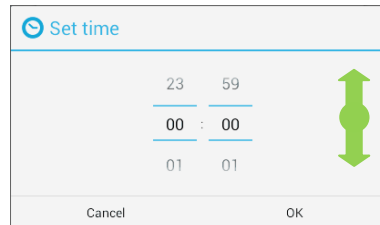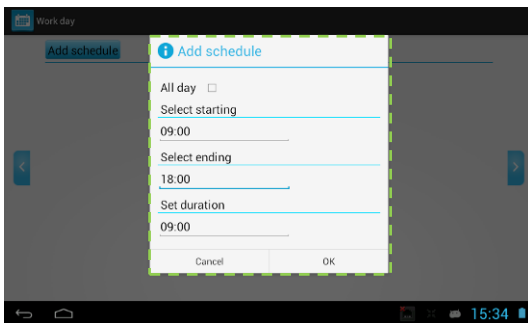
6. Click ▶ to continue.
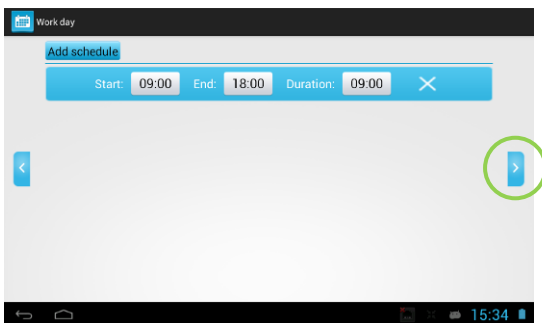
7. Click ✓ to confirm.
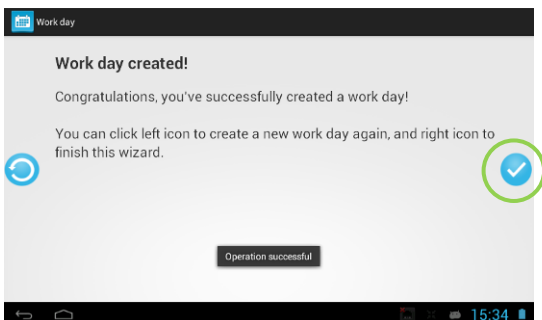
➡ Display the added DAY.
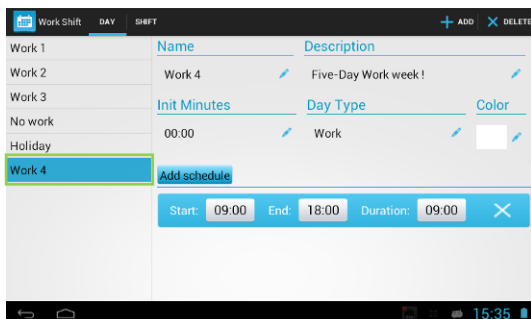
⭕ **Edit DAY**

➡ Click 🖉 icon to enter modify interface. Then modify (Name, Description, Init Minutes, Day Type and Color) as required.
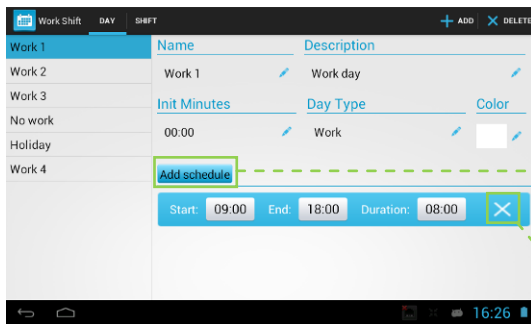
Click **[Add schedule]** button to pop-up the **Add schedule** box. Then add shcedule as required.

Click this icon to delete schedule.

○ **Delete DAY**

Tips: The operation of delete DAY is same as delete employee, please see 5.6 Delete Employee.

7.2 SHIFT Setting

○ **Add SHIFT**

1. Click **[Apps]** > **[Work Shift]** > **[SHIFT]** to enter the **SHIFT Setting** interface. Click **[Add]** button to enter the **Creation wizard** interface.
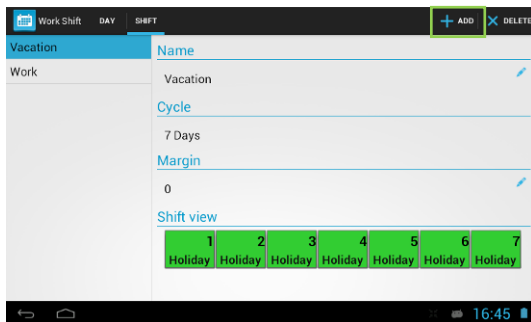
2. Read carefully and click ▷ to continue.
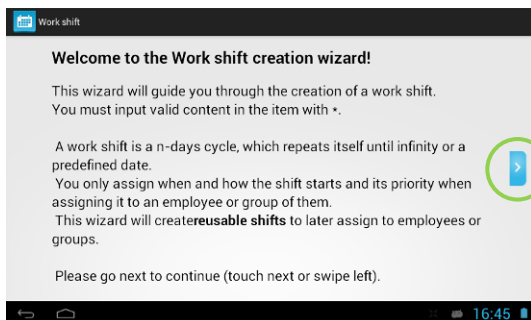
3. Input the shift name, and click ▷ to continue.
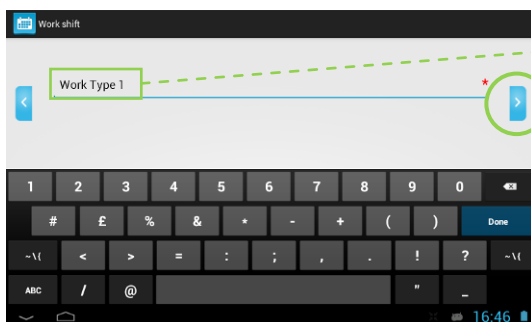
Shift Name (Please input 1 to 40 characters.)

Note:

**(1)** Read carefully. Select on **Common shift** in default.

(2) If you want a different shift, please select on **Customize shift**; after select this item, the input keyboard will pop-up, input days, and click ⌫ icon to close the input keyboard.
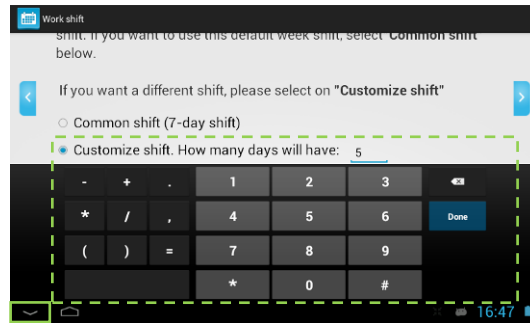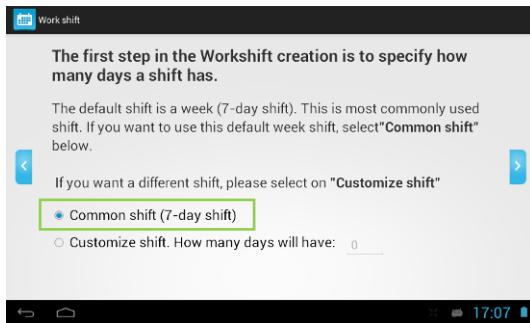
4. Click ❭ to continue. As shown in **Figure 6**.
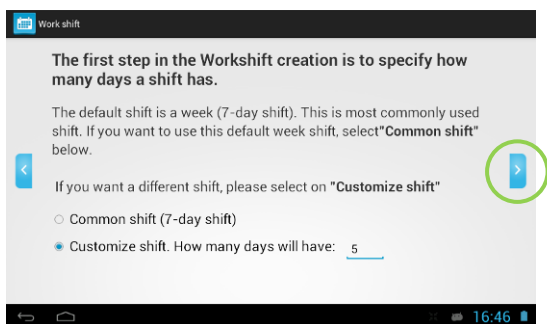
Tips: White stand for **Work 1**; **Blue** stand for **Work 2**; **Yellow** stand for **Work 3**; **Orange** stand for *No Work*; **Green** stand for *Holiday*; **Red** stand for **Work 4.** You can change the color meaning as required, for detail please see **Edit DAY**.
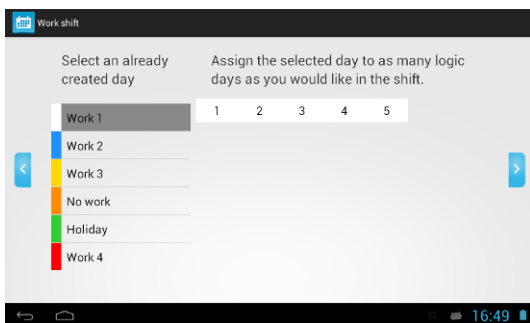
➡ For example, assign **Work 4** to day 1, 2, 3 while *Holiday* to day 4 and 5. For detail, please see step **5** to **8**.

5. Click **Work 4**, and then click **day 1**, **2** and **3**. (**Tips: Red** means assign as **Work 4**.)
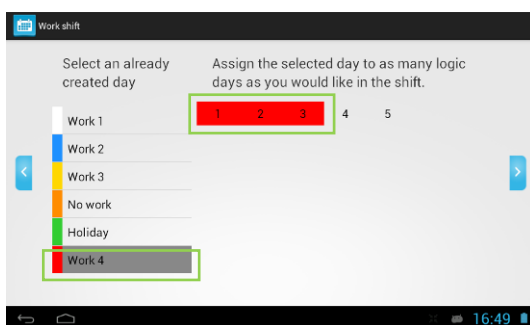
6. Click **Holiday**, and then click **day 4** and **5**. Click ❭ to continue.

(**Tips: Green** means assign as **Holiday**.)
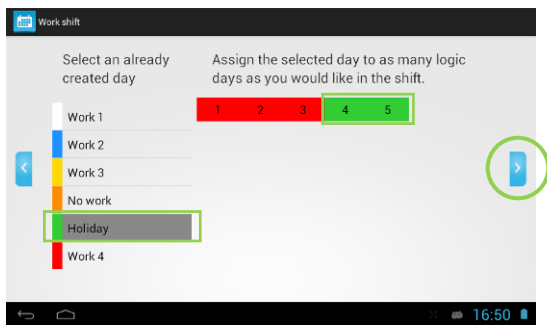
7. Read carefully, input the margin as required, and then click [>] to continue.
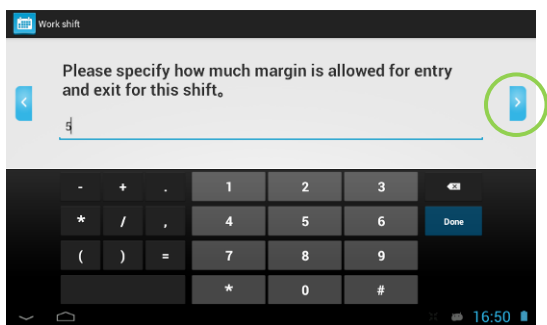
8. Click [✓] to confirm.
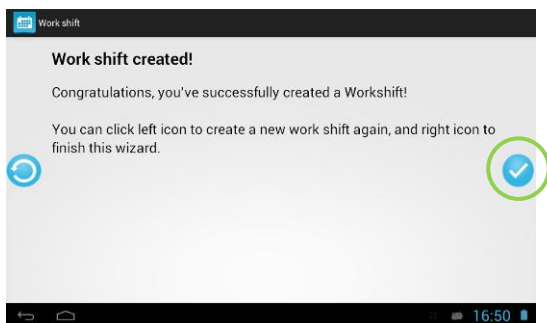
⭕ **Delete SHIFT**

Tips: The operation of delete SHIFT is same as delete employee, please see 5.6 Delete Employee.

8 Message Management

SMS is similar to notice. The operator can edit the notice content in advance and make it into message displayed on the screen. Message includes *Public* message and *Personal* message. If *Personal* message is set, the employee who can receive message can see the message after successful attendance.

8.1 Add and Check Message

⭕ **Add and Check Public Message**

1. Click **[Apps] > [Message]** to enter the **Message management** interface. For the first use, the **No public messages** box wills pop-up. Click **[OK]** button to enter the **Creation wizard** interface.
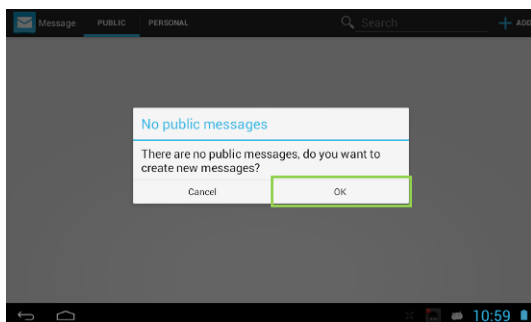
2. Read carefully and click ▷ to continue.
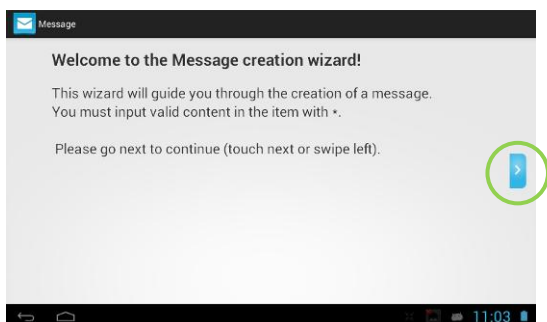
3. Click the **Start date** bar to pop-up the **Set start date** box; slide up or down to select date, and then click **[OK]** button to confirm.
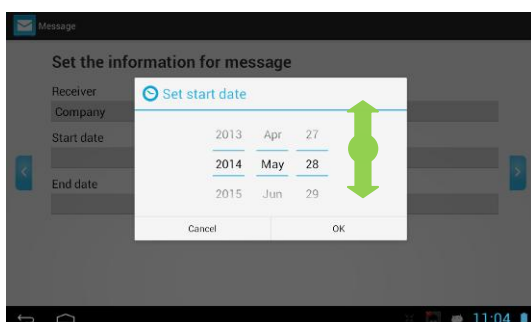
4. Set the **End date** as the same method, and then click ▷ to continue.
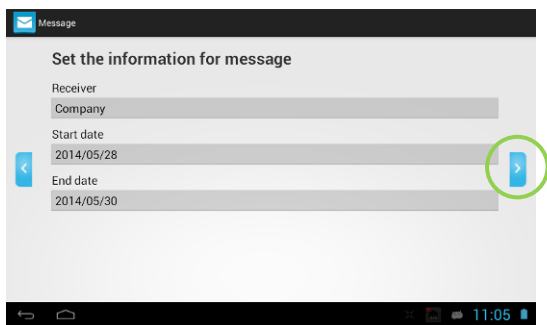
5. Input the Subject and Content, and then click ▷ to continue.
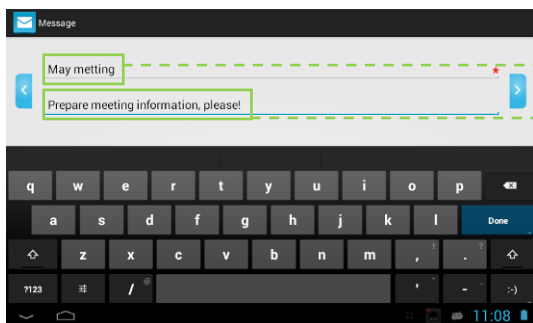
Subject (Please input 1 to 40 characters.)

Content

6. Click ✓ to confirm.
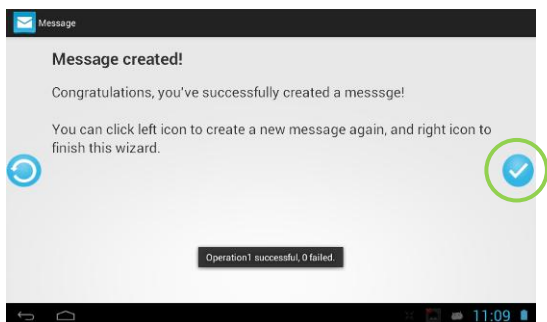
7. Display the added public message. Click ⌫ icon to return to the initial interface.
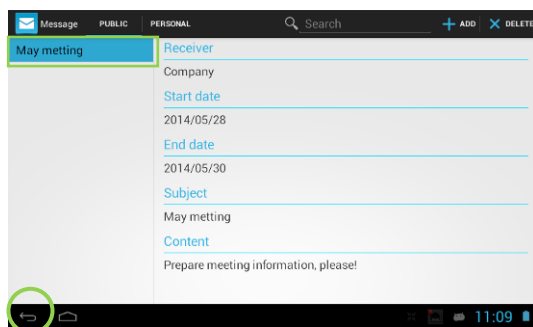
Tips: Click ◀ and ▶ button to view all public messages.

Note: You should create Message widget on the desktop first.

⭕ **Add and Check Personal Message**

1. Click **[Apps]** > **[Message]** > **[PERSONAL]**, for the first use, the **No personal messages** box wills pop-up.
Click **[OK]** button to enter the **Creation wizard** interface.
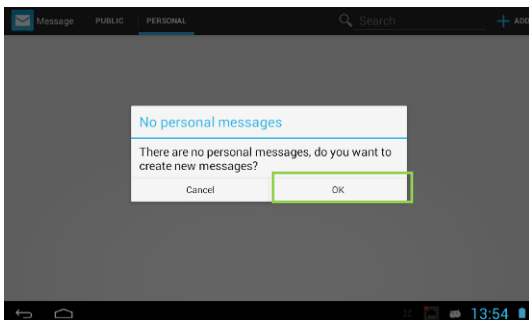
2. Read carefully and click ⟩ to continue.
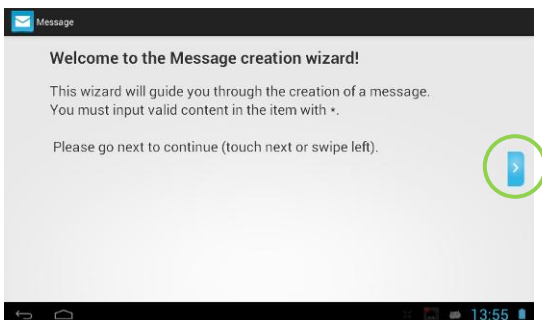
3. Click **Receiver** bar to pop-up the **Set receiver** box, tick and select employee and then click **[OK]** button to confirm.
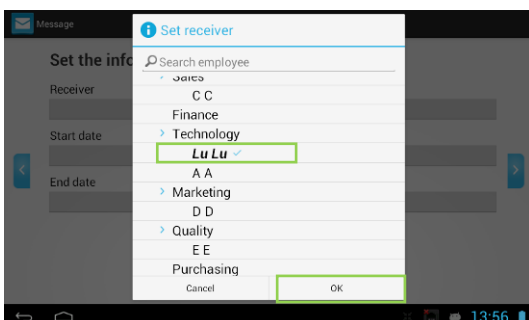
4. Click the **Start date** bar to pop-up the **Set start date** box; slide up or down to select date, and then click **[OK]** button to confirm.
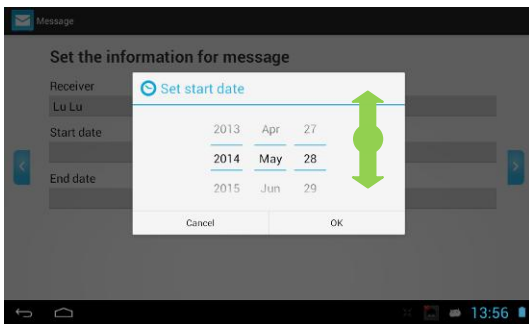
5. Set the **End date** as the same method, and then click 〉 to continue.
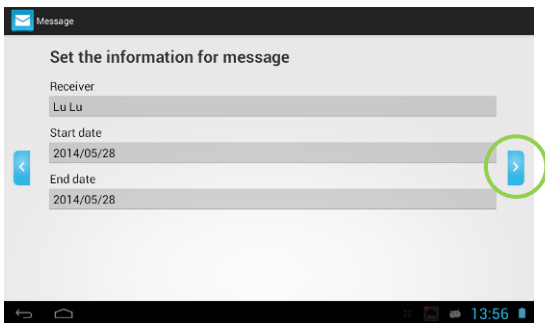
6. Input the Subject and Content, and then click 〉 to continue.
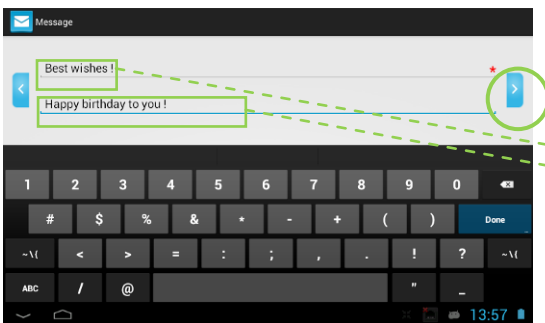
Subject (Please input 1 to 40 characters.)

Content

7. Click ✓ to confirm.
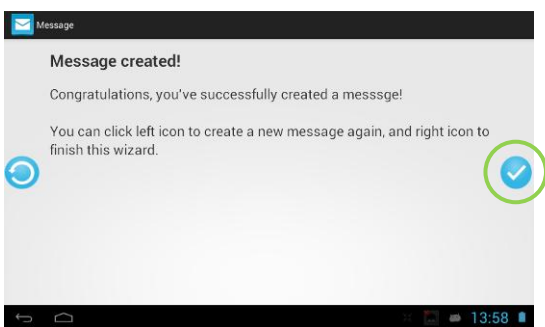
Display the added personal message.
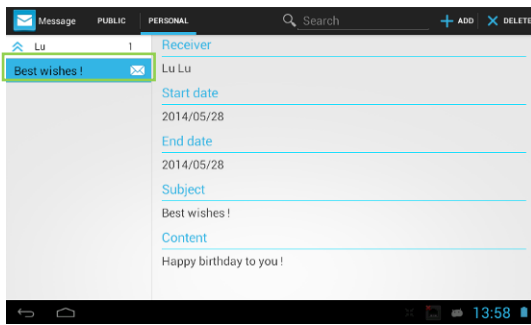
When the receiver successful attendance. The device will display corresponding prompt.

Click the **1 message** bar to check the message.
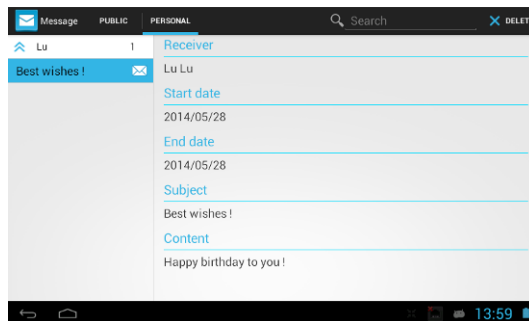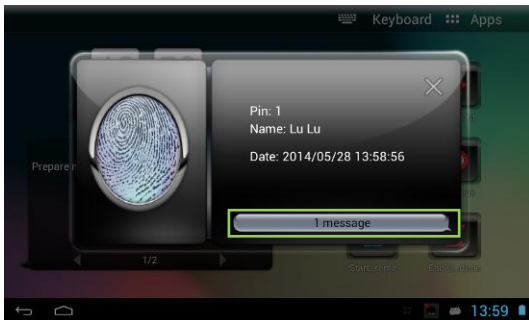
8.2 Delete Message

➡ Take delete **Public** message as example.

1. Click **[DELETE]** button to enter the **Delete message** interface.
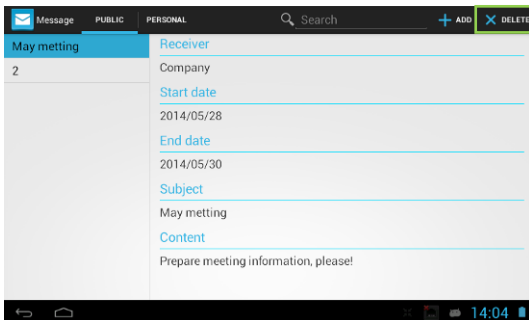
2. Tick and select message (multiple). And then click **[Done]** button, the **Delete message** box will pop-up.
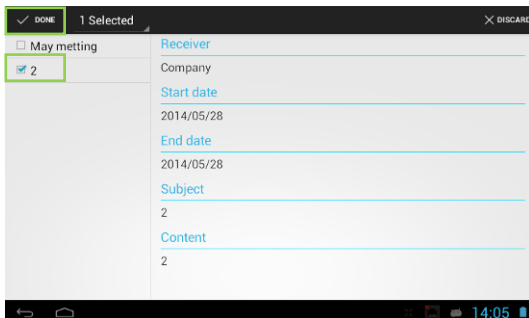
3. Click **[OK]** button to confirm and delete the selected messages.
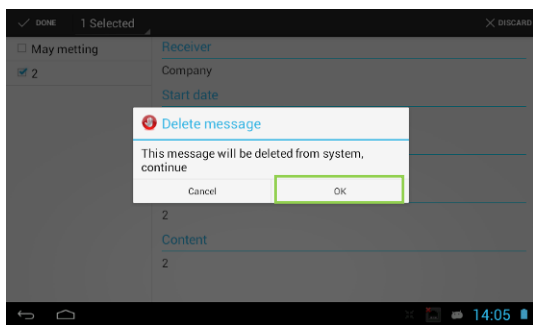
➡ No longer display the deleted messages.
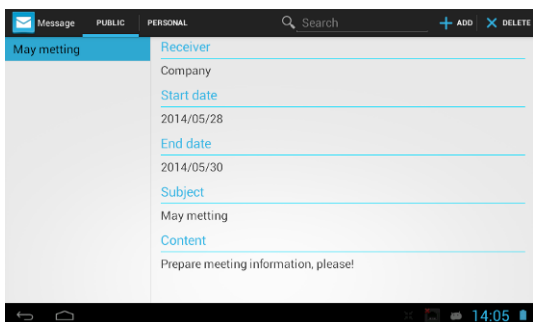
9 Work Code Management

Salary is based on attendance. There are many work types for employees. An employee may have different work type in different time periods. Different work types have different pays. Therefore, in order to distinguish different attendance states when user is dealing with attendance data, the device has provided a parameter to mark which attendance record belongs to which work type.

Work codes are downloaded together with attendance records. Users can use relevant data based on the specific attendance software.

9.1 Add Work Code

1. Click **[Apps] > [Work Code]** to enter the **Work Code management** interface. For the first use, the **No Work code** box wills pop-up. Click **[OK]** button to enter the **Creation wizard** interface.

2. Read carefully and click to continue.

3. Input the **Code No.**, and then click to continue.

Code No. (Please input 1 to 14 characters.)
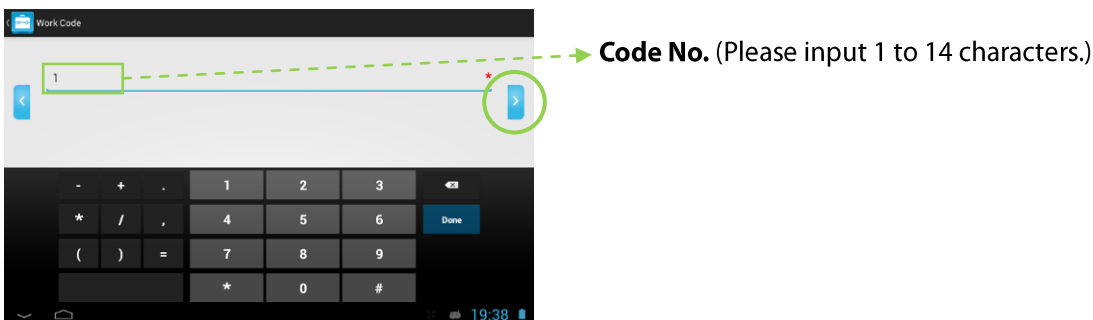
4. Input the **Code Name** and **Description**, and then click to continue.
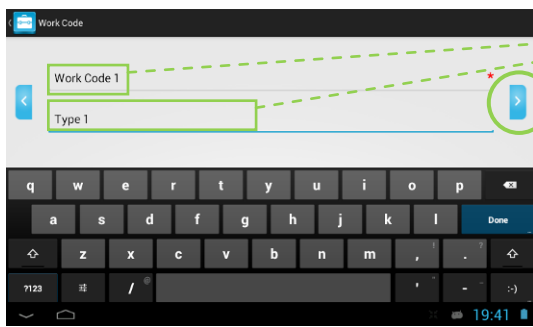
Name (Please input 1 to 24 characters.)

Description

5. Click ❯ to continue.
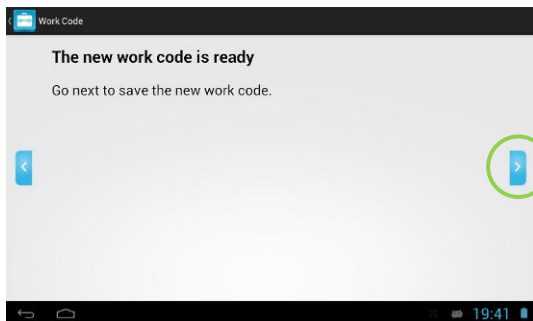
6. Click ✓ to confirm.
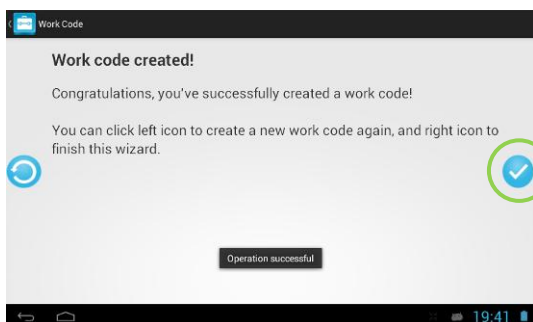
➡ Display the added Work Code.
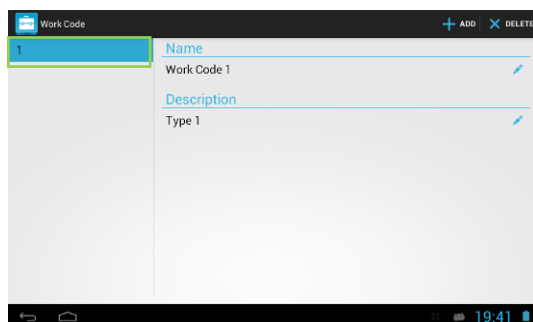
9.2 Edit/Delete Work Code

⭕ **Edit Work Code**

Click ✎ icon to enter modify interface. Then modify as required.

⭕ **Delete Work Code**

Tips: The operation of delete Work Code is same as delete employee, please see .

9.3 Use Work Code

When the work code function is enabled, the device displays the work code selection interface upon successful verification on the initial interface.

1. Click **[Work Code]** on the initial interface. Pop-up the *Work Code Bar* and prompt *Please identify yourself*.

Notice: You should create Work Code widget on the desktop first. For detail, please see .

2. Press finger or punch card ★ to verify. After successful verification, the **Select work code** box will pop-up.

Click to select work code, and then click **[OK]** button to confirm.
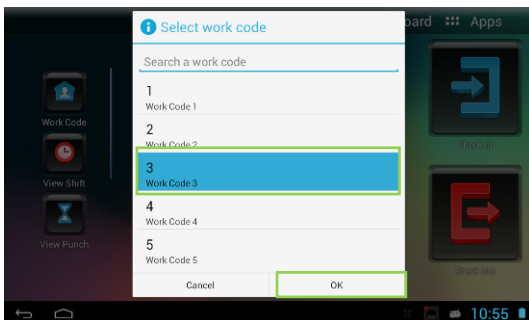
➡ Pop-up the successful attendance prompt box.
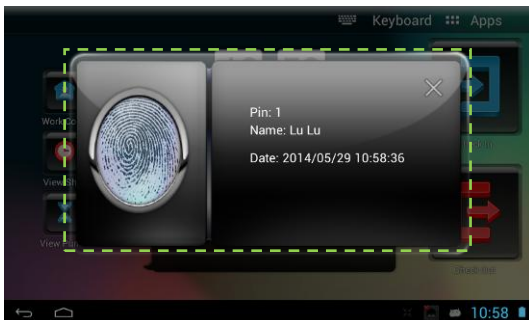
Note: After the work code function is enabled, a work code must be entered for verification. Employees without a work code can enter any inexistent work code for verification.

10 Reports Management

This is the application to generate and export reports, please choose a tab and follow the instruction to generate a report.

10.1 Attendance Report

○   **Check Attendance Report**

1. Click **[Apps] > [Reports] > [ATTENDANCE REPORT]** to enter the **ATTENDANCE REPORT** interface. Click **[Generate]** button, the **Report setup** box wills pop-up.
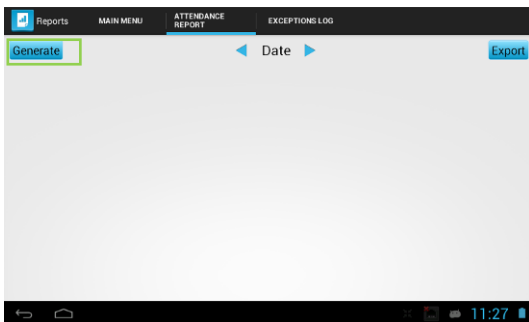
2. Tick and select the desired employee or department you want to see the report.
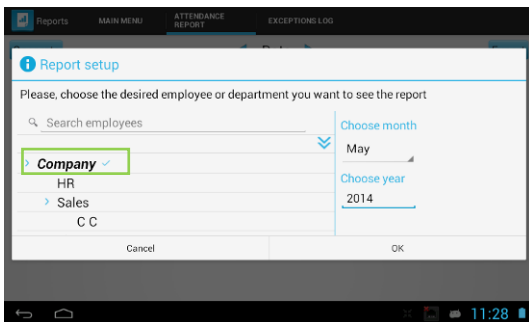
3. Click to choose month.
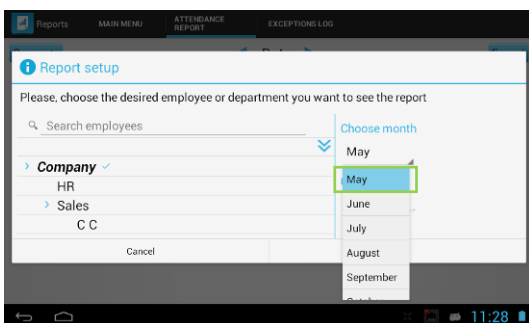
4. Click **Choose year** to pop-up the *input keyboard*, input year and click **[Done]** button to confirm.

5. Click **[OK]** button to continue.

➡ Slide up or down to display more attendance logs.

⭕ **Export Attendance Report**

1. Click **[Export]** button, the **Destination** box wills pop-up.

2. Choose **Export File type** and input the **File name**, and then click **[OK]** button to confirm.

Export File type

File name (Please input 1 to 24
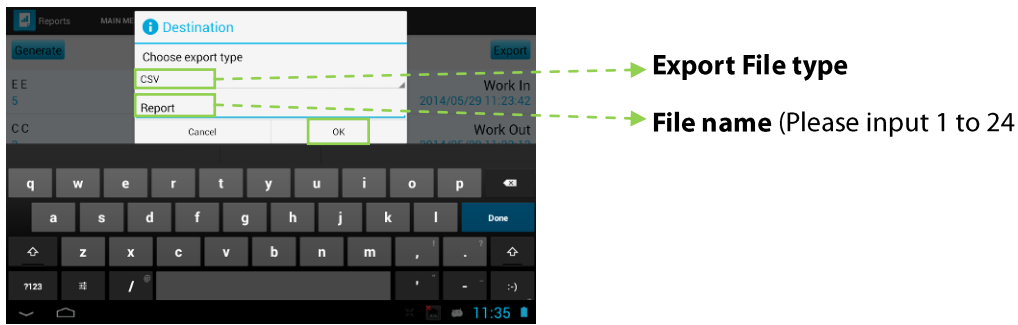
3. After successful export, the **Operation successful** box wills pop-up.
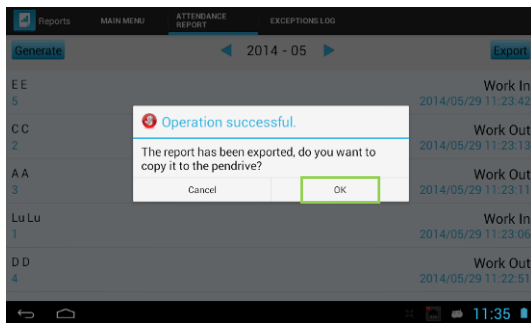
4. Plug the pen drive into the device, and then press **[OK]** button to copy the attendance file.
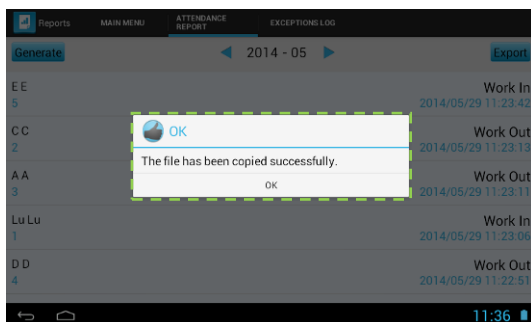
Tips: If you want to copy the report file to the pen drive, you should plug it into the device first. Otherwise the **Error** box wills pop-up.
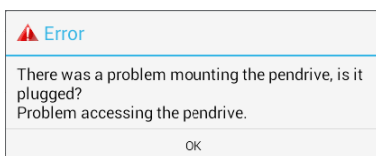
10.2 Exception Log

Tips: Specific operations of Check and Export Exception Log are same as check Attendance Report. For detail, please see **10.1 Attendance Report**.
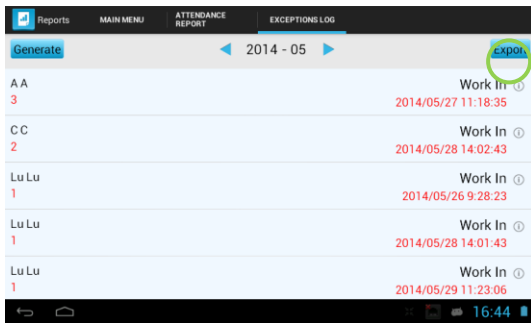
Note: Click [i] icon to view the Error information, as shown in **Figure 2**.
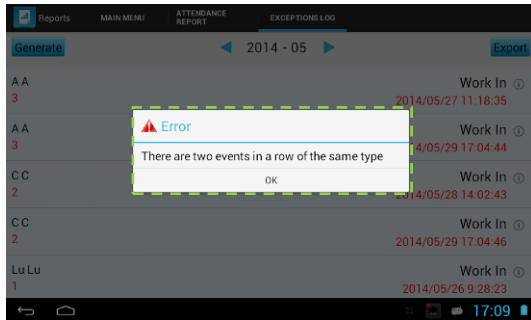
11 System Settings

11.1 Attendance Setting

1. Click **[Apps] > [SETTINGS] > [Attendance]** to enter the **Attendance Setting** interface.

Slide up or down to display more items.
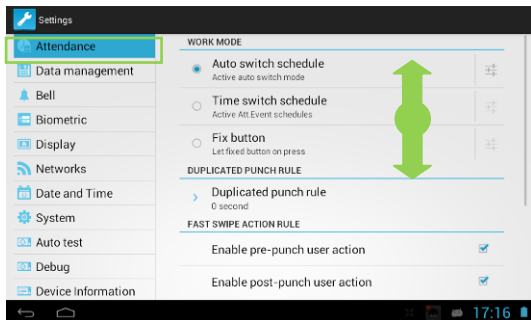
⭕ **WORK MODE**

Tick and choose as required, can choose as **Auto switch schedule**, **Time switch schedule** or **Fix button**.

Auto switch schedule: Device logs the first punch data as **Check In**, and then switch status between **Check In** and **Check Out** automatically. The default attendance event is **Work**; can change as required.

Time switch schedule: Device has attendance status auto set by time period, assign the current punch status to the employee; this is called time switch mode.

Fix button: Click and choose attendance status on the desktop before attendance.

⭕ **Duplicated punch rule**
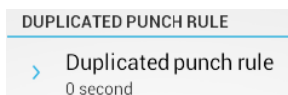
Set as **0** second in default. Means all logs are effective. For example, if set it as 60 seconds, then after successful punch each time, you must wait for **60** seconds to do the second punch.

⭕ **Fast swipe action rule**
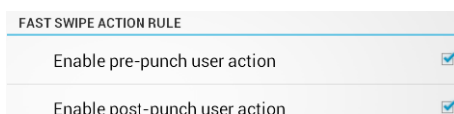
✅ Means enable pre-punch/post-punch user action.

⭕ **Storage limit setup**
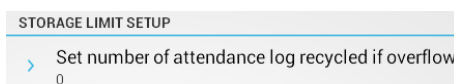
Set as required. (**Value scope:** 0~10000)

When the available space is insufficient to store the specified number of attendance logs, the device will recycling the attendance logs automatically as setting.

Note: If set it as **0**, the device will generate an alarm only.

⭕ **Photos on login process**

PHOTOS ON LOGIN PROCESS

Take photo if identification is successful   ☐   - - - - ▶ ☑ Means selected and enabled.

Take photo if identification is unsuccessful ☐

11.1.1 Auto switch schedule

Click [⊞] icon behind **Auto switch schedule** to pop-up the **Auto Switch Schedule** interface.

AUTO SWITCH SCHEDULE

› Default attendance event
   Work

› First punch after certain minutes of end of last shift
   540

› First punch after certain minutes of last IN punch
   540

Default attendance event: Simple attendance status calculation without checking other rules; click this item and then select the default attendance event in the pop-up **Attendance event** box.

First punch after certain minutes of end of last shift: Shift based attendance status calculation, the first punch after certain hours of end of last shift, counted as IN punch.

For example, the Shift period is 09:00 to 18:00; and we set the *First punch after certain minutes of end of last shift* as 720 (minutes). The employee A punch at 06:00; then this attendance log will count as check In.

First punch after certain minutes of last IN punch: Shift based attendance status calculation, the first punch after certain hours of last IN punch, counted as IN punch.

For example, the Shift period is 14:00 to 23:00; and we set the *First punch after certain minutes of last IN punch* as 1260 (minutes). Suppose the employee B punch at 13:00 (If the day has no attendance log, then this one will count as Check IN.); but forgot to punch after work; then he punch at 10:00 at the second day, this log will count as Check IN right now.

11.1.2 Time switch schedule
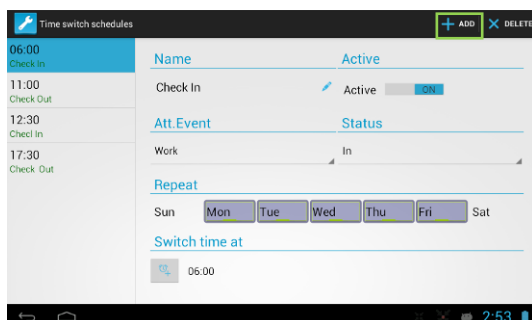
When it comes the set times, the device will switch its attendance state automatically. The current attendance state is shown on the initial interface.

Note: The attendance status is downloaded together with attendance records. Users can view the attendance status by using attendance software. The attendance status does not affect attendance calculation, which is based on the preset shift time.

○ **Add Time switch schedule**

1. Click [⊞] icon behind **Time switch schedule** to pop-up the **Time Switch Schedule** interface.

Click **[Add]** button to enter the **Creation wizard** interface.

2. Read carefully and click ![arrow] to continue.
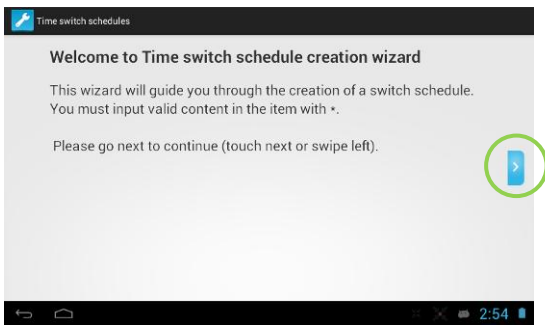
3. Input the **Name**, and then click ![arrow] to continue.

▶ **Name** (Please input 1 to 24 characters.)
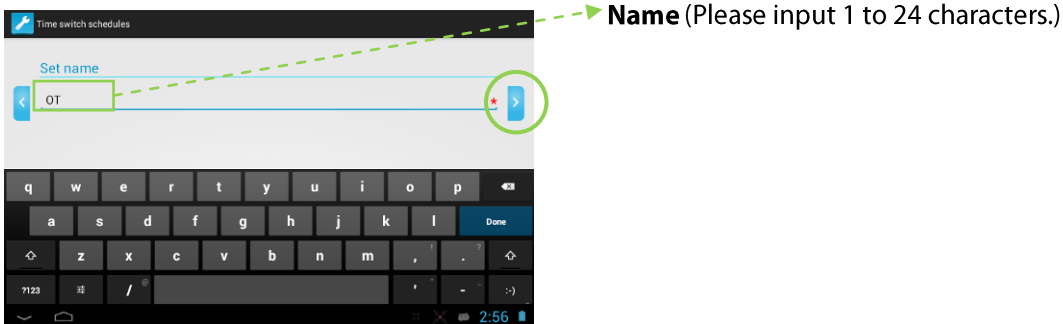
4. Click ![icon] icon to pop-up the **Set time** box, slide up or down to select date, and then click **[OK]** to confirm.
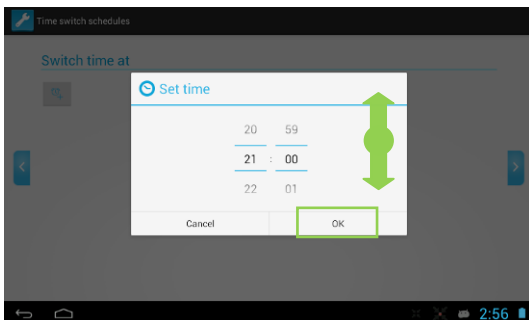
5. Click ![arrow] to continue.

6. Click the week icon to select repeat days, and then click ![arrow] to continue.
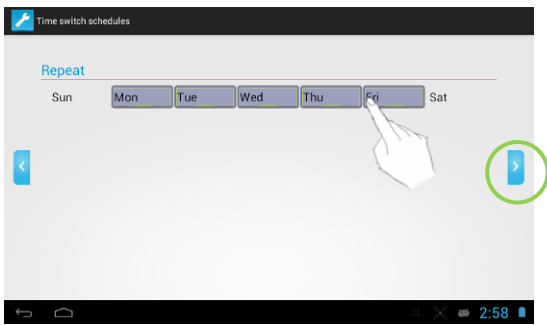
7. Choose **Att. Event** and **Status**, and then click ❯ to continue.
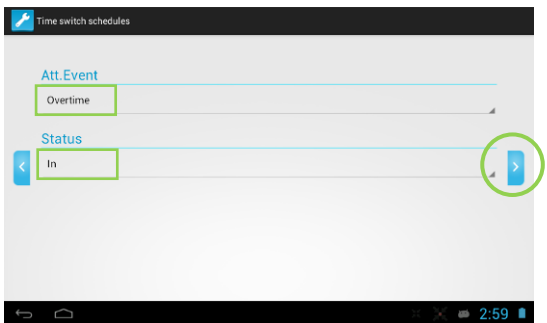
8. Click ❯ to continue.

Tips: ON means active this time switch schedule while **OFF** means disable it.
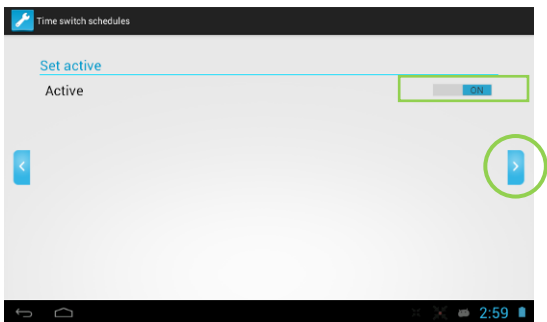
9. Click ❯ to continue.
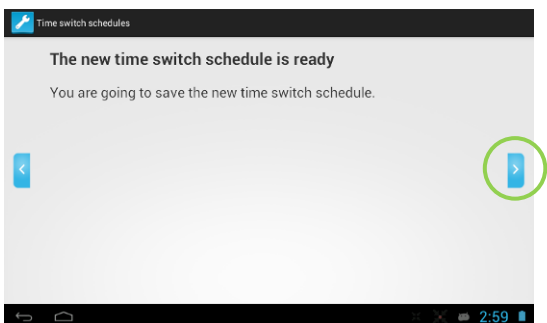
10. Click ✓ to confirm.
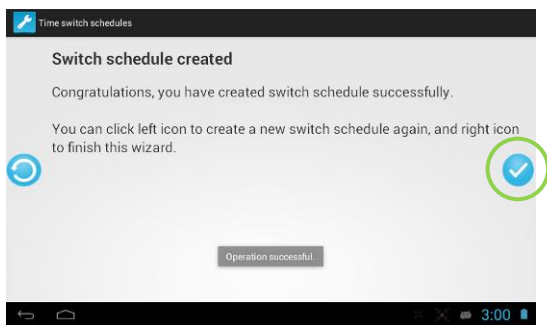
11. Display the added time switch schedule.
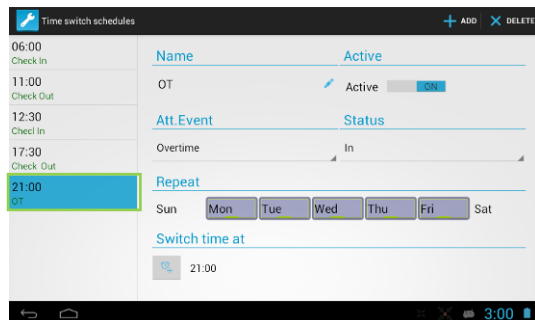
○ **Edit Time switch schedule**

Click ✎ icon or item to enter modify interface. Then modify as required.

○ **Delete Time switch schedule**

Tips: The operation of delete **Time switch schedule** is same as delete employee, please see 5.6 Delete Employee.

11.2 Data management

1. Click **[Apps]** > **[SETTINGS]** > **[Data management]** to enter the **Data management** interface.

Slide up or down to display more items.
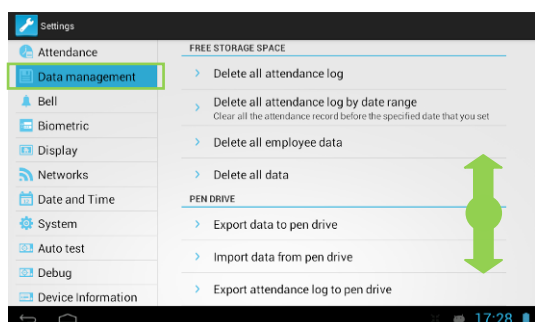
○ **FREE STORAGE SPACE**

➡Delete all attendance log stored in the device.

➡ Delete all attendance record before the specified data that you set.

➡ Delete all employee data stored in the device.

➡Reset the database, retain the factory default data.

⭕ **PEN DRIVE**

Export / Import attendance and employee data to / from pen

Export attendance log compatibility with the Linux device to pen

Export / Import System Settings to / from pen drive.

⭕ **FACTORY RESET**

Reset the System Settings to the factory state in default.

LIMIT NUMBER OF ENTRIES

➡ Set the upper limit for the number (1 to 999999) of records.

ⓘ Attendance log limit

Set the upper limit for the number of records

☑ Enable the upper limit warning 999999

| Cancel | OK |

➡ Set the upper limit for the number (1 to 99999) of employee.

ⓘ Employee limit

Set the upper limit for the number of records

☑ Enable the upper limit warning 99999

| Cancel | OK |

11.3 Bell Setting

Lots of companies need to ring their bells to signal the start and end of work shifts, and they usually manually ring their bells or use electric bells ★. To lower costs and facilitate management, we integrate the time bell function into the terminal. You can set the alarm time and duration for ringing the bell based on your requirements, so that the terminal will automatically play the selected ring tone and triggers the relay at the alarm time, and stop playing the ring tone after the set duration. (**Notice**: Only some devices have external ringing options.)

⬤ **Add Bell**

1. Click [**Apps**] > [**SETTINGS**] > [**Bell**] to enter the **Bell Setting** interface. Click [**Add bell**] button to enter the add bell interface.
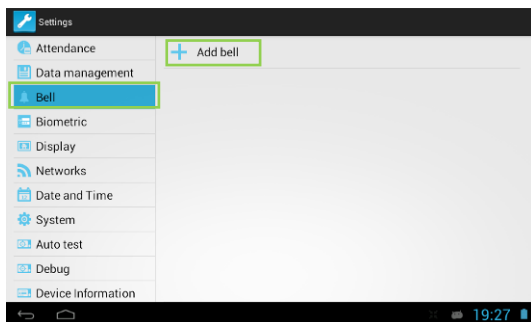
2. Click [**OFF**] item to enable ([**ON**]) the bell.
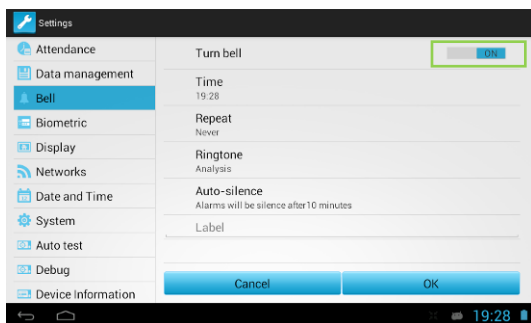
3. Click **Time** item to pop-up the **Set time** box. Slide up or down to select time.
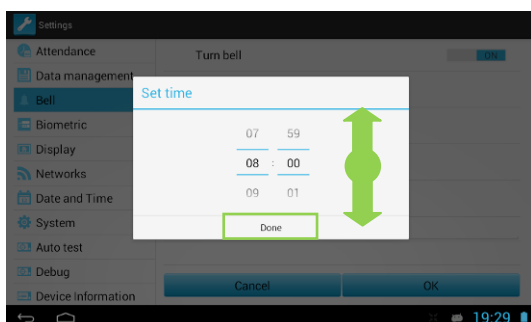
4. Click **Repeat** item to pop-up the **Repeat setting** box. Tick (multiple) and select the bell repeat day, and then click [**OK**] button to confirm.
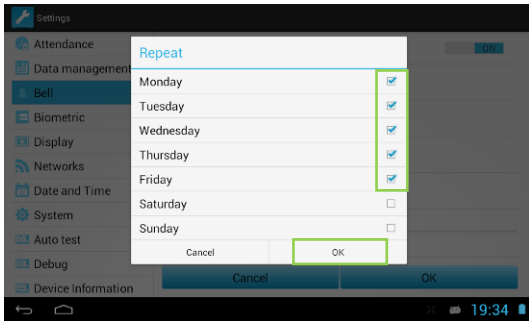
5. Click **Ringtone** item to pop-up the **Ringtone select** box. Tick and select ringtone, and then click **[OK]** button to confirm. (The device has **16** ringtones in default.)
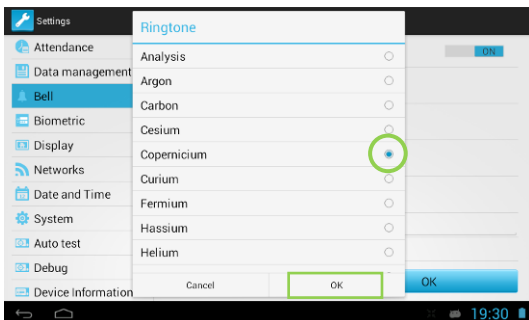
6. Click **Auto-silence** item to pop-up the **Auto-silence setting** box. Tick and select time, and then click **[OK]** button to confirm.
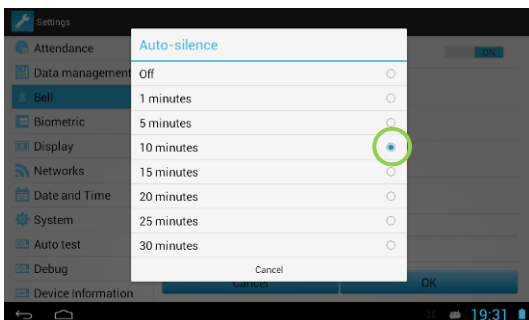
7. Click **Label** item to pop-up the *input keyboard*. Input the label name (bell name), and then click **[OK]** button to confirm.
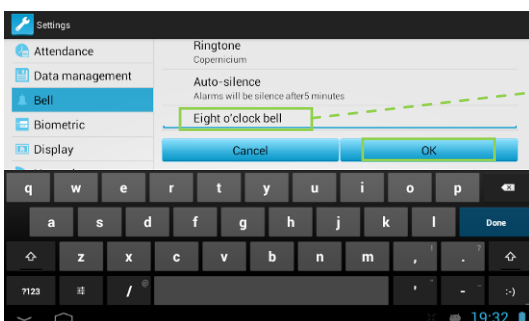
Label (Please input 1 to 22 characters.)

➡ Display the added bell. ☑ Means bell **ON**.
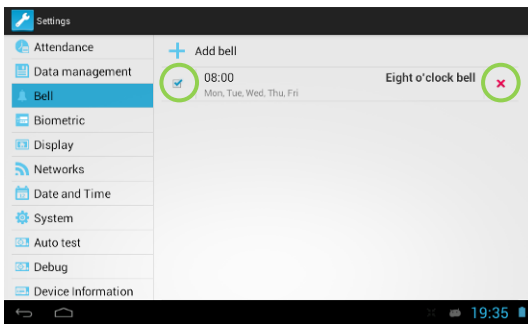
⭕ **Edit / Delete Bell**

Click the bell to enter the **Edit bell** interface. You can modify it as required.

Click **[Delete]** or ✖ button to delete the bell.
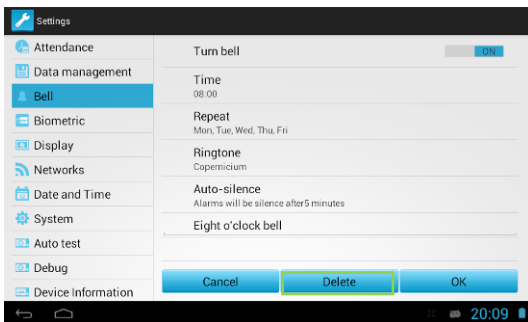
11.4 Biometric Setting

Click **[Apps]** > **[SETTINGS]** > **[Biometric]** to enter the **Biometric Setting** interface.

Slide up or down to display more items.
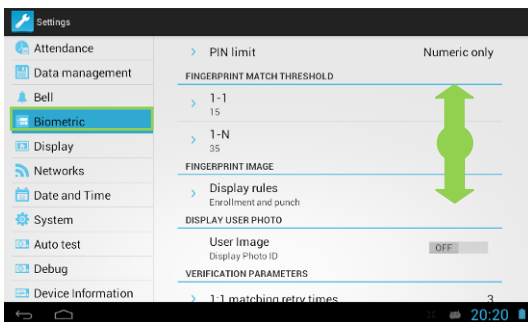
⭕ **PIN limit**
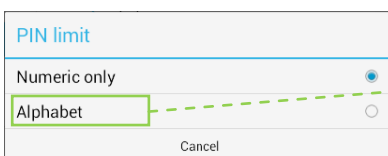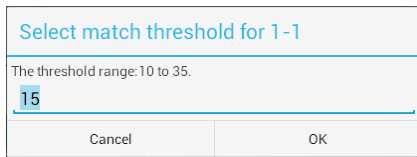
Support alphanumeric string.
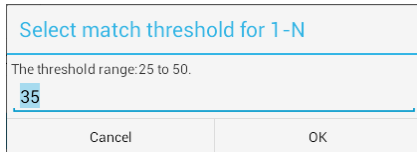
⭕ **Fingerprint match threshold**
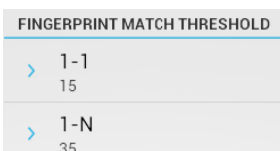
➡ The threshold range is 10 to 35.

Select match threshold for 1-1

The threshold range: 10 to 35.

15

| Cancel | OK |

➡ The threshold range is 25 to 50.

Select match threshold for 1-N

The threshold range: 25 to 50.

35

| Cancel | OK |
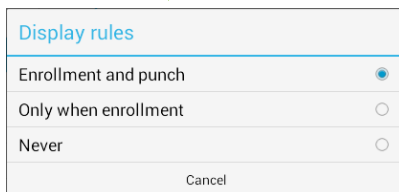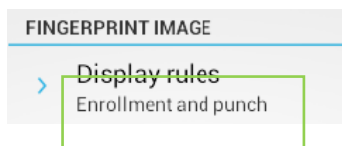
1: 1 Threshold: This parameter is used to set the threshold of matching between current fingerprint and the fingerprint template enrolled in the terminal in the 1:1 verification mode. If the similarity between current fingerprint and the fingerprint template enrolled in the terminal is larger than this threshold, the matching is successful; otherwise, the matching is not successful.

1: N Threshold: This parameter is used to set the threshold of matching between current fingerprint and the fingerprint template enrolled in the terminal in the 1: N verification mode. If the similarity between current fingerprint and the fingerprint template enrolled in the terminal is larger than this threshold, the matching is successful; otherwise, the matching is not successful.

The recommended thresholds are as follows:

False Rejection Rate (FRR)	False Acceptance Rate (FAR)	Threshold	
		1: N	**1:1**
High	Low	45	25
Medium	Medium	35	15
Low	High	25	10

⭕ **Fingerprint match threshold**

FINGERPRINT IMAGE

› **Display rules**
  Enrollment and punch

Display rules

Enrollment and punch ◉
Only when enrollment ○
Never ○

Cancel

➡ Display fingerprint image when enrollment and punch.
➡ Display fingerprint image only when enrollment.
➡ Never display fingerprint image.

Fingerprint Image: This parameter is used to set whether to display the fingerprint image on the screen during fingerprint enrollment or comparison. It has three values: *Enrollment and punch*, *Only when enrollment* and *Never*.

⭕ **Fingerprint match threshold**

Click [OFF] button to enable (ON) this function**.**

DISPLAY USER PHOTO

User Image
Display Photo ID   OFF

➡ After successful attendance, the user photo will display on the screen.
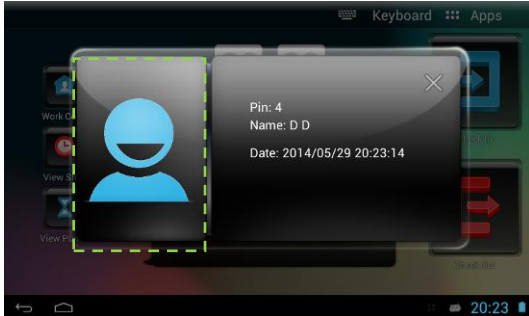
○   **Verification parameters**

VERIFICATION PARAMETERS

❯   1:1 matching retry times   3

❯   Password retry times   3

➡ Set 1:1 matching / Password retry times as required.

1:1 matching retry times		Password retry times	
3	●	3	●
2	○	2	○
1	○	1	○
Cancel		Cancel	

1:1 matching retry times/Password retry times: This parameter is used to set the retry times in the event of failure of 1:1 verification or password verification due to absence of fingerprint enrollment or improper finger placement, so as to avoid repetitive operations.

11.5 Display Setting

Click **[Apps]** > **[SETTINGS]** > **[Display]** to enter the **Display Setting** interface. Slide up or down to display more items.
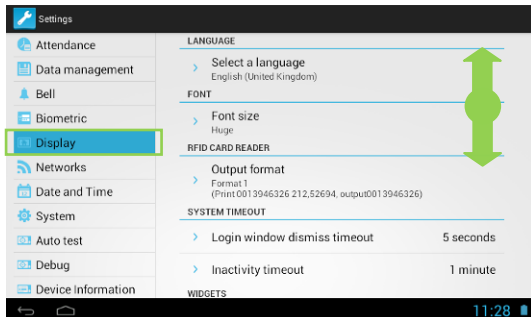
11.5.1 Basic Setting

⭕ **Language:** Select language for device. (Support **14** languages.)
⭕ **Font:** Select font size. (Small, Normal, Large or Huge.)
⭕ **RFID Card Reader:** Select the RFID Card output format as required.
⭕ **System Timeout**

Set as required.

⭕ **Application**
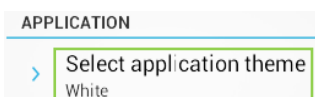
➡Select as required.
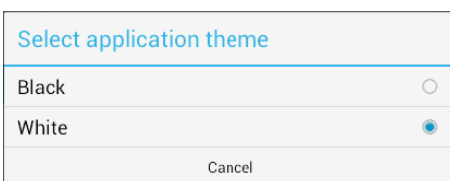
11.5.2 Theme and Widgets Setting

⭕ **Theme Setting**
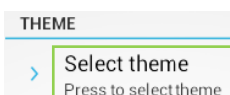
➡The device built-in **13** themes, one of 'em is**1** custom theme.
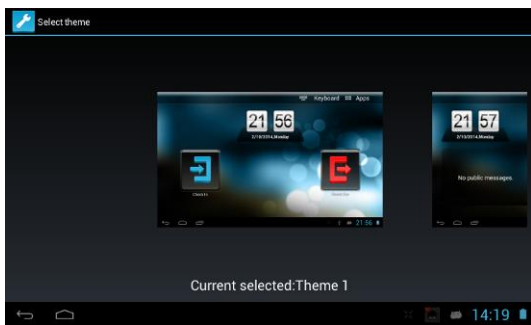
○ **Widgets Setting**

➡Select as required.

Tips:

(1) Only when the user set the **Theme** as **Custom Theme** can enable this configure item.

(2) Click **[OFF]** button to enable (**ON**) the *Allow widgets creation/edition* function.

(3) For detail about Custom Widgets Setting, please see <u>13 Widgets Setting</u>.

11.6 Networks Setting

Click **[Apps] > [SETTINGS] > [Networks]** to enter the **Networks Setting** interface.
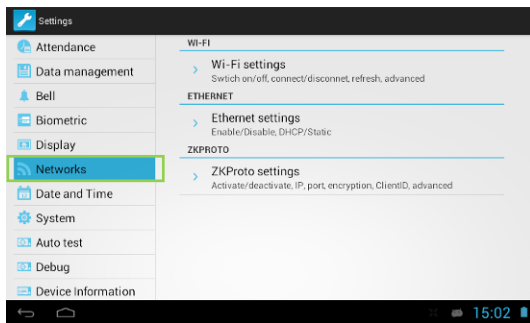
11.6.1 Wi-Fi Setting ★

1. Click **Wi-Fi settings** to enter the **Wi-Fi Setting** interface. Then click **[TURN ON]** button to turn Wi-Fi on. Now the device will searching for Wi-Fi networks automatically.
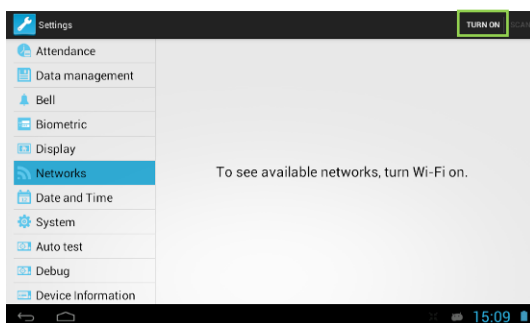
2. Click and select Wi-Fi name to pop-up the Input password box.
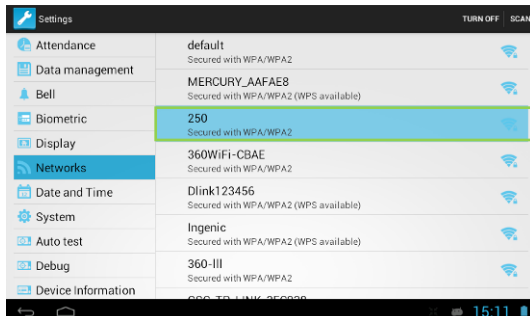
3. Input the correct password, and then click **[Connect]** button to connect the select Wi-Fi.
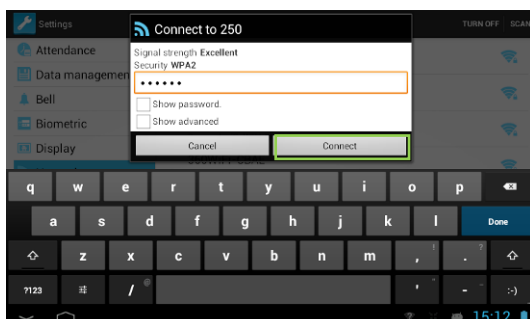
➡Means connected.

11.6.2 Ethernet Setting

⭕ **Static IP setting**

1. Click **[Ethernet Settings]** > **[STATIC]** to enter the **Static IP Setting** interface.
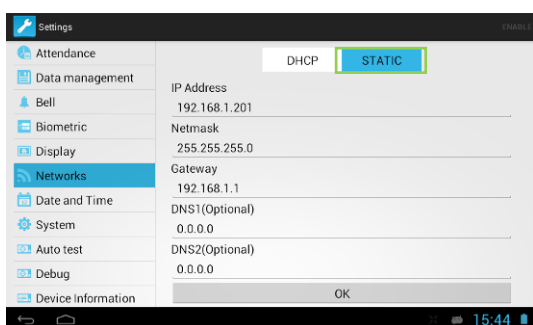
IP Address: The IP address is 192.168.1.201 by default and can be changed as required.

Subnet Mask: The subnet mask is 255.255.255.0 by default and can be changed as required.

Gateway: The gateway is 0.0.0.0 by default and can be changed as required.

DNS 1 (Optional): The DNS 1 address is 0.0.0.0 by default and can be changed as required.

DNS 2 (Optional): The DNS 2 address is 0.0.0.0 by default and can be changed as required.

2. After settings, click **[OK]** button to save.

⭕ **DHCP:** The device automatically obtains an IP address.

Click **[Ethernet Settings]** > **[DHCP]** to enable **DHCP** function.
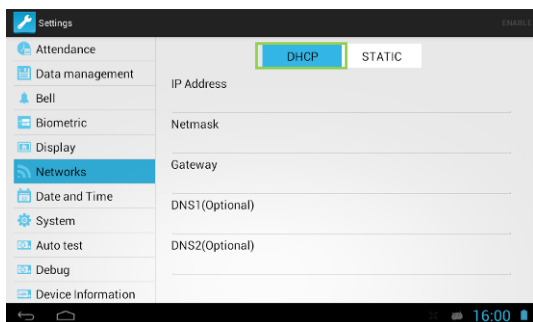
Notice: Only when the sever supports DHCP function, then the device can obtain IP address automatically. If not, please connect the network administrator.

11.6.3 Middleware Communication Setting

○ **Middleware definition and concept**

With the purpose of simplifying the synchronization between the server and different clients (terminals), the platform provides complete software (Middleware) that manages all types of data in transit between them in a transparent way for developers and users.

The middleware will set all the communications parameters in a very simple way such as the encryption of the data, the segregation between areas, client authorization, etc…
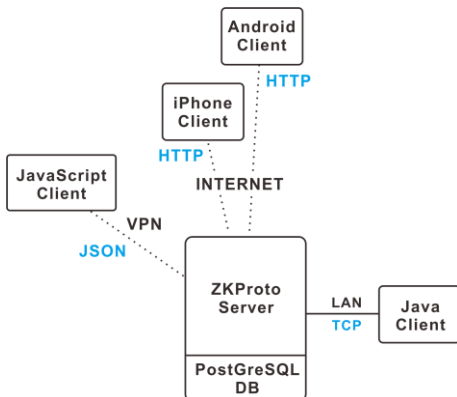
1. Click **[ZKProto settings]** to enter the **Basic Settings** interface, then click **[OFF]** to activate (**ON**) protocol.

Note: The device will search and display the available *Middleware Communication* automatically. (Such as ZKProto)
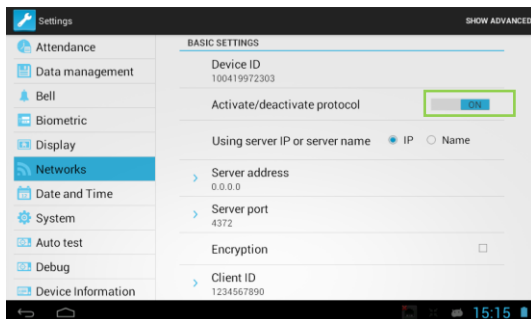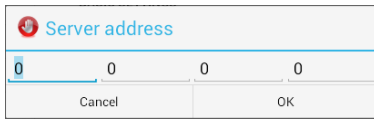
○ **Introduction to the Client-Server communication**

One of the major innovations that we are faced with the ZPad terminal is the new communication system between server and client we shall call **ZKPROTO.** We list the major features of this protocol:
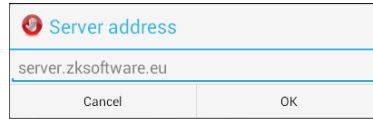
◆ **Communication model based on TCP/IP.**
◆ **Real time database sync.**
◆ **Multiple formats supported (TCP, HTTP, JSON…).**
◆ **Allows you to develop in different programming languages.**
◆ **Fast and light protocol.**
◆ **Allows you to encrypt the information in the protocol itself.**
◆ **Does not depend on external libraries.**
◆ **Is a multi-platform protocol (Windows, Linux, Mac, Solaris…).**

Server Address: To set the server IP address in which the terminal will synchronize the data. **Using server IP or server name**: Choose **IP** or **Name** for Server address.
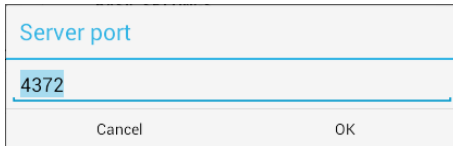
Input **IP** for Server address.   Input **Name** for Server address.
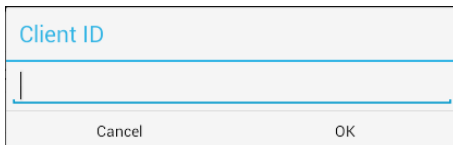
Server Port: To set the communication port between the server and client. The Server Port is 4372 by default.

Encryption: To define whether to encrypt the data or not to increase the security level. (Means enable server encryption function.)

Client ID: To identify the different terminals thru the Middleware. Set as required.
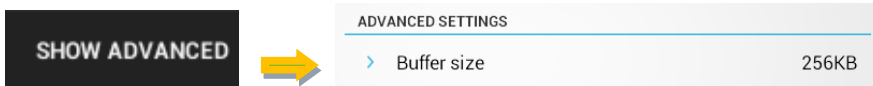
SHOW ADVANCED: To show advanced settings.

Buffer size: To set the buffer size of data transmitting between the ZPad terminal and sever. You can select it among the *Buffer Size* list.

Note:

1. In a weakness WAN environment, the buffer size should be smaller than normal.

2. The minimum of buffer size should be 128KB when photos are transmitting.

Click   icon to quit and save settings.

○ **ZKPROTO Operations**

The protocol has 3 basic operations:

✧ **Open:** Call from the client when it wants to establish a new connection. Sends clients related information such as the ID.

✧ **Push:** Is a call from the client when it has new data to transmit to the server. It is also called to inform the server that has successfully received the previous operations.

✧ **Pull:** Call from the client when it wants to update its database with the new operations that exist on the server.
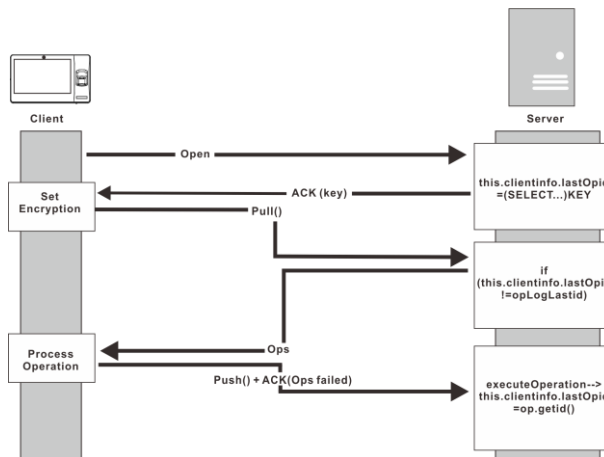
11.7 Date and Time Setting

Click **[Apps]** > **[SETTINGS]** > **[Date and Time]** to enter the **Date and Time Setting** interface.
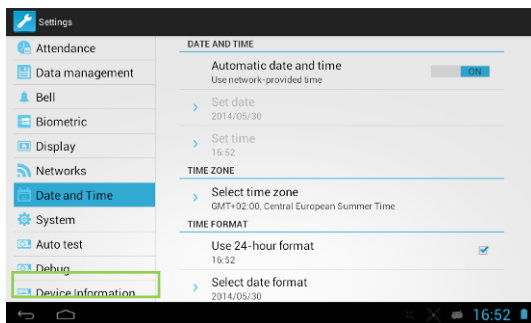
Tips: The device supports two ways to set date and time. One is **Automatic date and time**, namely sync date and time with the network provided time; the other one is custom date and time.

⭕ **Custom data and time**

1. Click **[ON]** button to disable (**OFF**) **Automatic date and time** function.
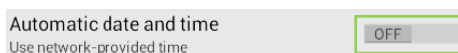
2. Click **[Set date]** item to pop-up the **Set date** box. Slide up or down to choose date, and then click **[Done]** button to save and return.
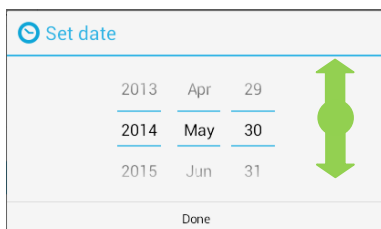
3. Click **[Set time]** item to pop-up the **Set time** box. Slide up or down to choose time, and then click **[Done]** button to save and return.
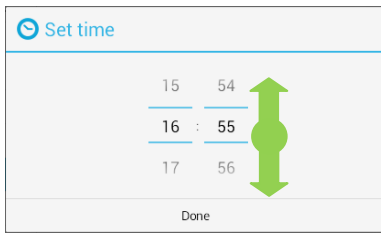
○ **Time Zone:** Select Time zone as required.
○ **Time Format**
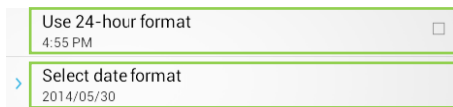
[✓] Means use 24-hour format. Check to display the time using 24-hour time format. For example, 13:00 rather than 1:00 pm.

Click and select as required.
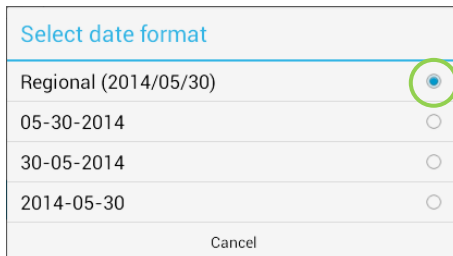
Note: The date and time of the device must be set accurately to ensure the accuracy of attendance time.

11.8 System Setting

1. Click **[Apps]** > **[SETTINGS]** > **[System]** to enter the **System Setting** interface.

Slide up or down to display more items.
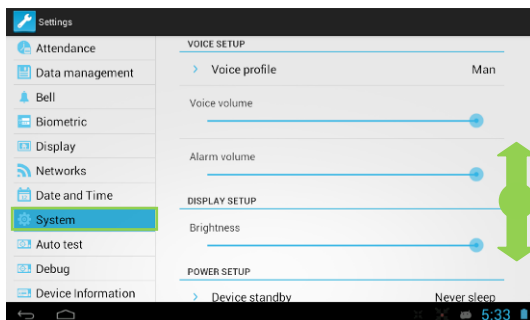
○ **Voice Setup**

Click **Voice profile** to pop-up the **Choose voice** box; choose as required.
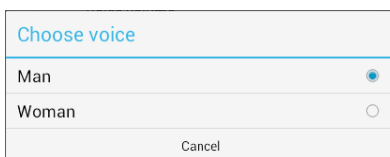
Slide left or right to change the value.
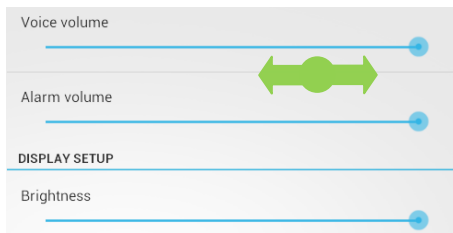
⭕ **Power Setup**

Click **Device standby** to pop-up the setting box; choose as required.

11.9 Auto test

Click [**Apps**] > [**SETTINGS**] > [**Auto test**] to enter the **Auto test** interface.
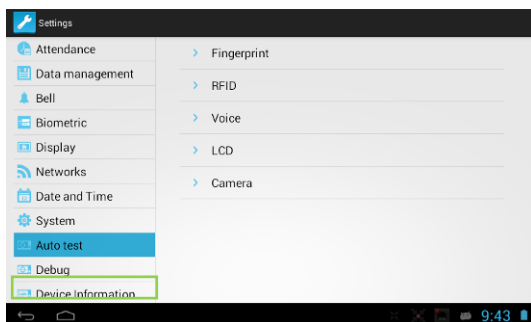
Fingerprint Test: The device tests whether the Fingerprint Sensor works properly by checking whether the fingerprint images are clear and acceptable. When the user places his/her finger in the fingered guide, the collected fingerprint image will display on the screen in real-time. Press ⬛ to exit the test.

RFID Test ★: The device tests whether the magnetic stripe unit can read the card No. correctly. Press ⬛ to exit the test.

Voice Test: The device automatically tests whether the voice files are complete and the voice quality is good by playing the voice files stored in the terminal. You can continue the test by touching the screen or exit it by pressing ⬛.

LCD Test: The device automatically tests the display effect of the color TFT display by displaying full color, pure white and pure black, etc. and checks whether the screen displays properly. You can continue the test by touching the screen or exit it by pressing ⬛.

Camera Test: The terminal automatically tests whether the camera works properly by checking whether the collected facial images are clear and acceptable. Press ⬛ to exit the test.

11.10 Debug setting

Click **[Apps] > [SETTINGS] > [Debug]** to enter the **ADB OVER TCP/IP SETTINGS** interface. Enable (**ON**) ADB over TCP/IP in default. You can press **[ON]** button to disable it.
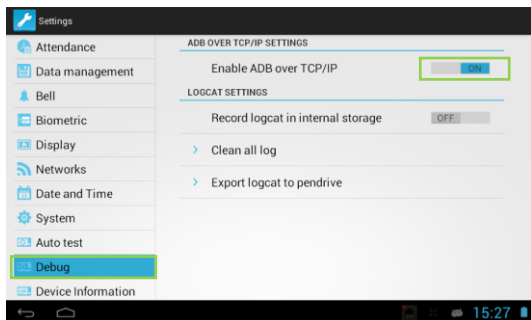
11.11 Device Information

Click **[Apps] > [SETTINGS] > [Device Information]** to enter the **Device Information** interface. Check the **Record Count**, **About**, **Version** and **Storage Information** as required.

Slide up or down to display more items.
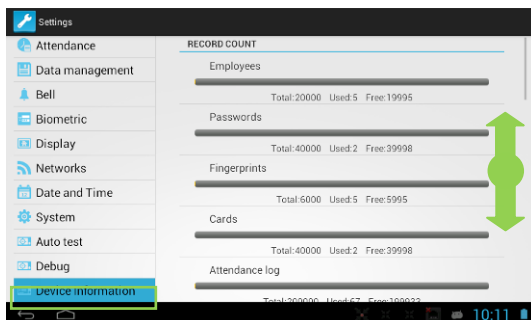
12 Widget Template Setting

Click [**Apps**] > [**Widget Template**] to enter the **Widget Template** interface.
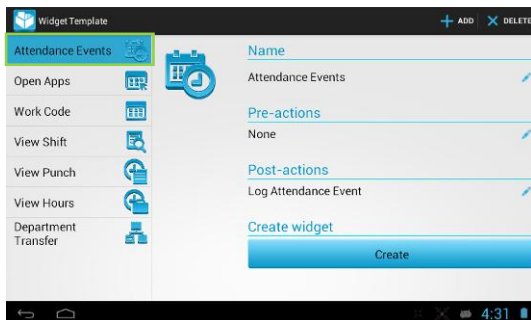
Tips: It has **six** Widget Templates in default; that is **Attendance Events**, **Open Apps**, **Work Code**, **View Shift**, **View Punch**, **View Hours** and **Department Transfer**.

You can add Widget Template or create widgets as required.

12.1 Widget Template maintenance

⭕ **Add Widget Template**

1. Click [**ADD**] button to enter the **Creation wizard** interface.
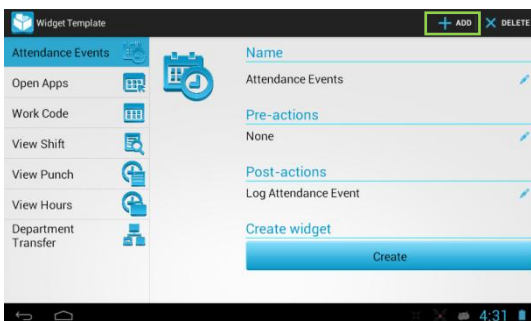
2. Read carefully and click   to continue.
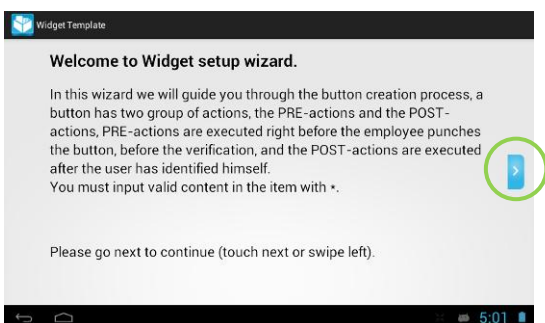
3. Input the Widget Template name and click   to continue. (Please input 1 to 24 characters.)
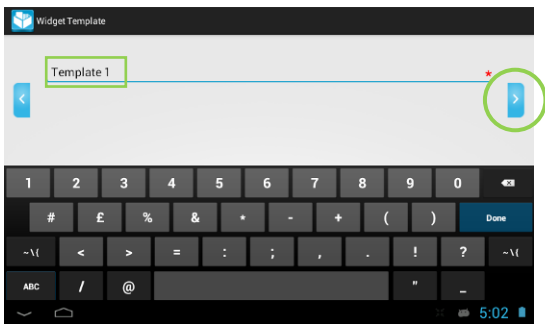
4. Select pre-action and click ▸ to continue.
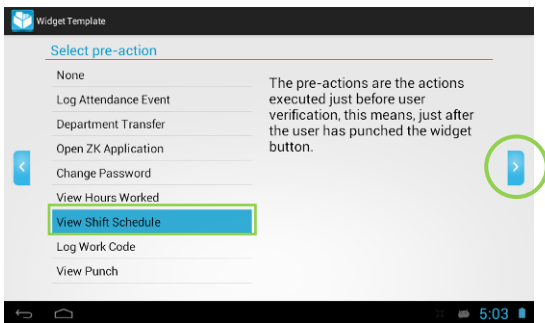
5. Select post-action and click ▸ to continue.
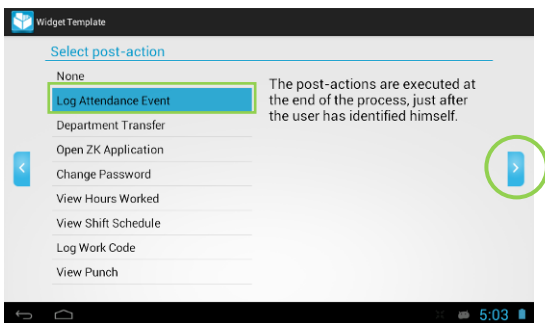
6. Click ▸ to continue.
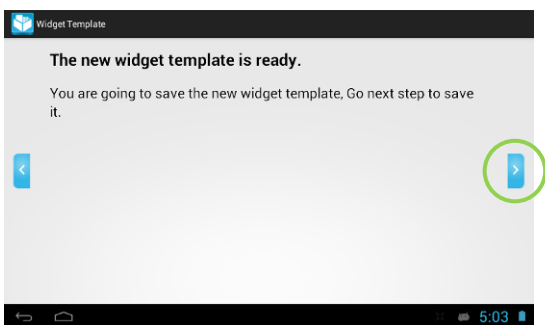
7. Click ✓ to confirm.
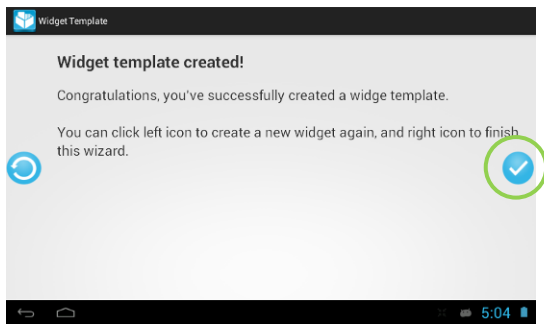
8. Display the added Widget Template.
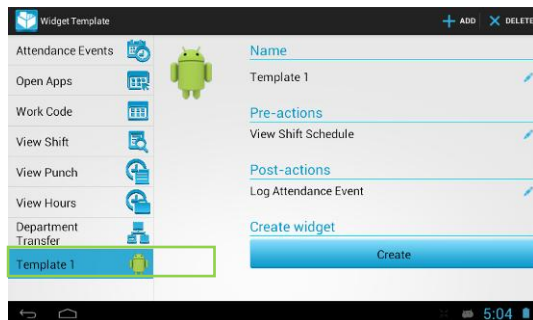
○   **Edit Widget Template**

Click ![pencil icon]   icon to enter modify interface. Then modify as required.

○   **Delete Widget Template**

Tips: The operation of delete **Widget Template** is same as delete employee, please see 5.6 Delete Employee.

12.2 Create Widget

1. Click and select Widget Template, and then click **[Create]** button to pop-up the **Pick the desired layout appearance** box.
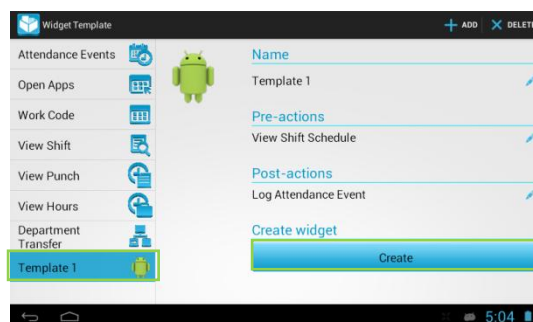
2. Click and pick the desired layout appearance, then pop-up the **Edit name and icon** box.
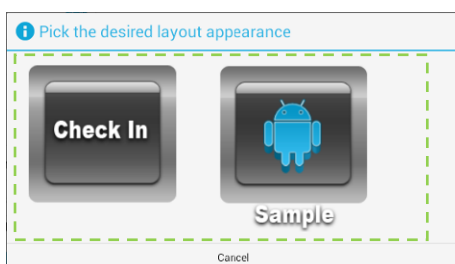
3. Input **widget name**, then click **[Pick the icon]** button to pop-up the **Choose Attendance event** box.
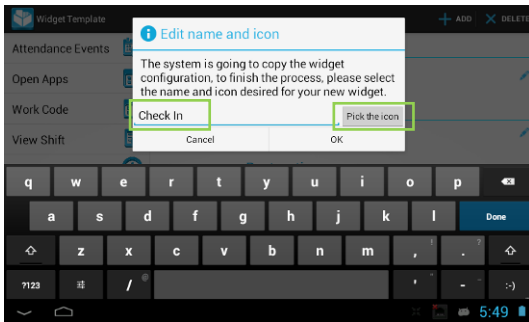
Widget Name (Please input 1 to 24 characters.)

4. Choose **Attendance Work** and **Status** as required, and then click **[OK]** button to confirm.
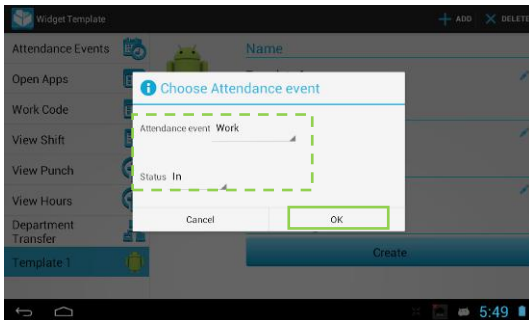
5. Click **[OK]** button to confirm and close the prompt box.
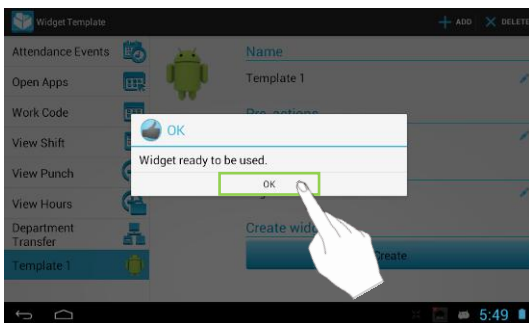
13 Widgets Setting

The device support custom design widgets that satisfy both of the following criteria:

- ◈ Set the **Theme** as **Custom Theme**.
- ◈ Set the **Allow widgets creation/edition** function as **ON**.

The detail operations please see 11.5.2 Theme and Widgets Setting.

❍ **The specific operation method of custom design widgets**

1. Click **[Apps] > [WIDGETS]** to enter the **WIDGETS Setting** interface. Slide left or right to display more items.

2. Touch and hold to pick up a widget to remove it to the desktop. Unclasp finger to enter the **Widget Container Configuration** interface.
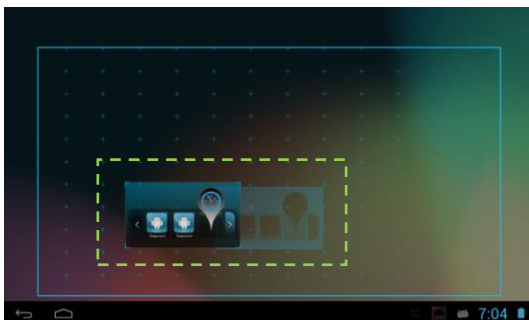
3. Click and select widgets (multiple), and then click **[Place on desktop]** button to place them on desktop.
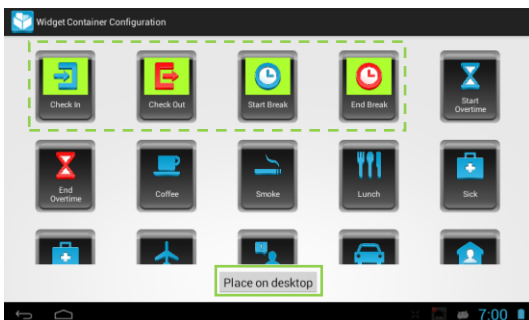
4. Display the custom design widgets.
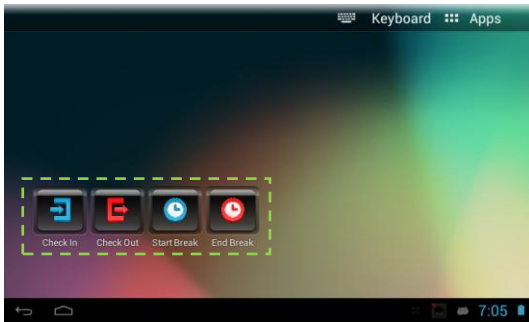
Tips: You can add other widgets as required. The widgets layout can't exceed the home screen.

Take the following figure as example:
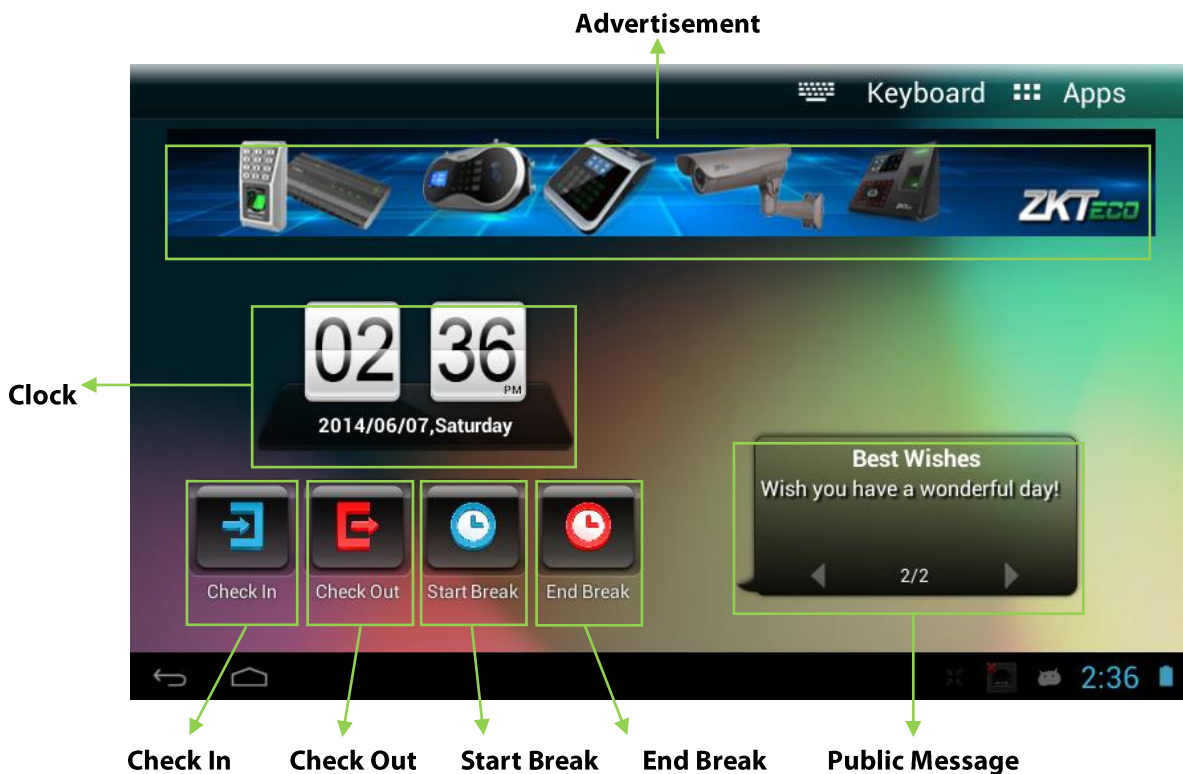
○ **Delete Widget**

1. Touch and hold to pick up the widget. Then the delete icon ⊠ wills pop-up.
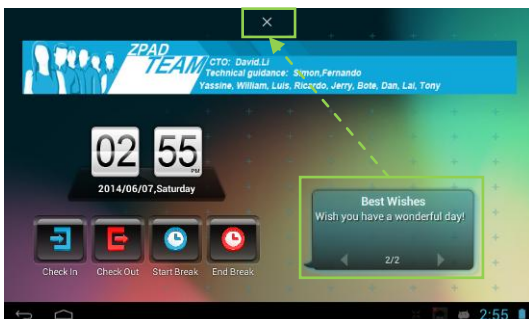
2. Touch and hold the widget, and move it on the ⊠ icon. When the widget turns red, unclasp finger to delete it.

Appendixes

Appendix 1 Text Input Instruction

The device supports the input of characters, numbers and symbols. Click the input item to pop-up the input keyboard, shown as following figure:

Numerals and Symbols Input

Space Key

Delete Input

Caps Lock
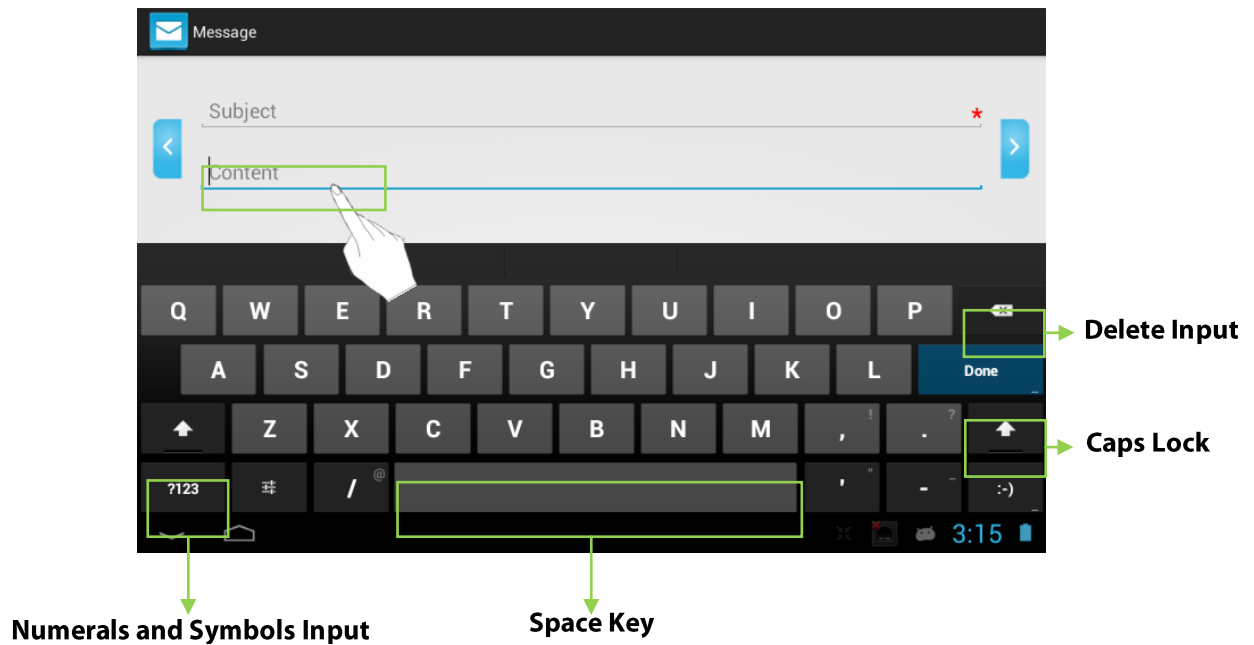
Appendix 2 Personal check attendance logs

In order to facilitate employees query attendance record. You can add **Log Widget** on the home screen; this widget will display the current 50 attendance logs.

Notice: You should create **Log Widget** on the desktop first. For detail, please see 13 Widgets Setting.

Appendix 3 View Shift

In order to facilitate employees query Shift schedule. You can add **View Shift Widget** on the home screen; click this widget before attendance, after attendance succeeds the **View shift schedule** box will pop-up.

The specific operation process show as below:

1. Click **View Shift widget** on the initial interface. Pop-up the *View Shift Bar* and prompt *Please identify yourself*.

2. Press finger or punch card ★ to verify. After successful verification, the **View shift schedule** box wills pop-up.

Notice: You should create **View Shift Widget** on the desktop first. For detail, please see 13 Widgets Setting.

Appendix 4 Wallpaper Setting

The device support custom chooses Wallpaper. The specific operation process has shown as below:

1. Touch and hold finger on the blank space of initial interface. The **Choose wallpaper from** box wills pop-up.

2. The device support chooses wallpaper from four ways: **Gallery**, *Live Wallpaper*, *com. Android. Wallpapers* and *com. Zktechnol Wallpapers*.

Tips: Click the icon to choose as required, here take *com. Zktechnol Wallpapers* as example.
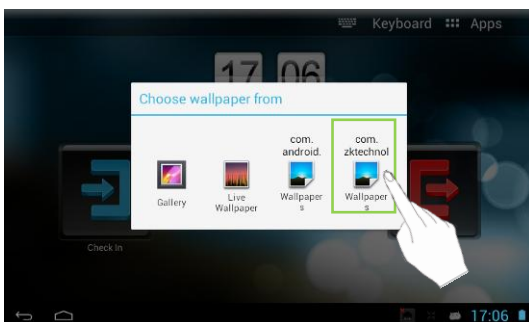
3. Slide left or right to select wallpaper, and then click **[Set wallpaper]** button to confirm wallpaper setting and return to the initial interface automatically.
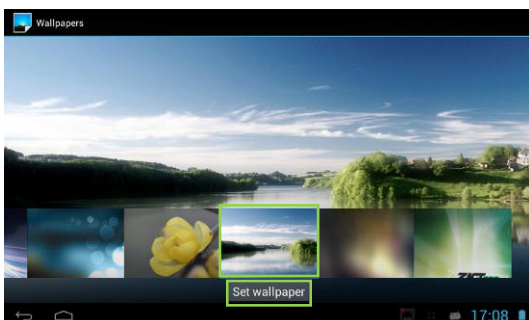
Display the custom setting wallpaper.

Appendix 5 FAQ

1. Are the fingerprints collected by a Linux attendance check device supported?

A: 10.0 algorithm-specific fingerprints are supported.

2. Can fingerprints be synchronized between different devices?

A: Yes. The users registered on device A and related fingerprints and attendance data can be automatically synchronized to other Android attendance check devices when the devices are connected by middleware.

3. Is attendance photographing supported?

A: Yes.

4. Can the user data stored on a Linux attendance check device be imported to an Android attendance check device by using a USB flash drive?

A: No. The fingerprints stored on a Linux attendance check device can be uploaded to an Android attendance check device by using software.

5. Can attendance events be customized?

A: Yes. Perform customization in **Attendance events** and use Widgets to reference the customized attendance events. For detail, please see 13 Widgets Setting.

6. Is cross-day shift time setting supported?

A: Yes.

Appendix 6 Widgets Instruction

◯ **Standard Widgets**
✦ *Check In:* To check in when starting the working schedule.
✦ *Check Out:* To check out when finishing the working schedule.
✦ *Start Break:* To check in when coming back from any break such as having breakfast, going out for smoking, relax time, etc.
✦ *End Break:* To check out when going out to break time.
✦ *Start Overtime:* To check in when starting an overtime Schedule.
✦ *End Overtime:* To check out when finishing an overtime schedule.
◯ **Events Icons**

The terminal has defined icons for certain events to control special attendance situations such as leaving for sickness, working outside the company or personal issue.

✦ *Lunch:* To control the lunch time of employees.
✦ *Sick:* Valid when an employee has to stop the workday by some kind of disease and also if the employee arrives late to work for the same reason.
✦ *Personal Issue:* To monitor the attendance records of the employees in all those matters that is not related to work.

✦ *Work outside:* To control the attendance records when any employee has to perform their jobs functions outside the office or company.

Statement on Human Rights and Privacy

Dear Customers:

Thank you for choosing the hybrid biometric products designed and manufactured by us. As a world-renowned provider of biometric technologies and services, we pay much attention to the compliance with the laws related to human rights and privacy in every country while constantly performing research and development.

We hereby make the following statements:

1. All of our fingerprint recognition devices for civil use only collect the characteristic points of fingerprints instead of the fingerprint images, and therefore no privacy issues are involved.

2. The characteristic points of fingerprints collected by our products cannot be used to restore the original fingerprint images, and therefore no privacy issues are involved.

3. We, as the equipment provider, shall not be held legally accountable, directly or indirectly, for any consequences arising due to the use of our products.

4. For any dispute involving the human rights or privacy when using our products, please contact your employer directly.

Our other police fingerprint equipment or development tools will provide the function of collecting the original fingerprint image of citizens.   As for whether such a type of fingerprint collection constitutes an infringement of your privacy, please contact the government or the final equipment provider. We, as the original equipment manufacturer, shall not be held legally accountable for any infringement arising thereof.

Note: The law of the People's Republic of China has the following regulations regarding the personal freedom:

1. Unlawful arrest, detention or search of citizens of the People's Republic of China is prohibited; infringement of individual privacy is prohibited.

2. The personal dignity of citizens of the People's Republic of China is inviolable.

3. The home of citizens of the People's Republic of China is inviolable.

4. The freedom and privacy of correspondence of citizens of the People's Republic of China are protected by law.

At last we stress once again that biometrics, as an advanced recognition technology, will be applied in a lot of sectors including e-commerce, banking, insurance and legal affairs. Every year people around the globe suffer from great loss due to the insecurity of passwords. The fingerprint recognition actually provides adequate protection for your identity under a high security environment.

Environment-Friendly Use Description

The Environment Friendly Use Period (EFUP) marked on this product refers to the safety period of time in which the product is used under the conditions specified in the product instructions without leakage of noxious and harmful substances.

The EFUP of this product does not cover the consumable parts that need to be replaced on a regular basis such as batteries and so on. The EFUP of batteries is 5 years.

Names and Concentration of Toxic and Hazardous Substances or Elements

Parts Name	Toxic and Hazardous Substances or Elements					
	Pb	Hg	Cd	Cr6+	PBB	PBDE
Chip resistor	×	○	○	○	○	○
Chip capacitor	×	○	○	○	○	○
Chip inductor	×	○	○	○	○	○
Chip diode	×	○	○	○	○	○
ESD components	×	○	○	○	○	○
Buzzer	×	○	○	○	○	○
Adapter	×	○	○	○	○	○
Screws	○	○	○	×	○	○

○: Indicates that this toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.

×: Indicates that this toxic or hazardous substance contained in at least one of the homogeneous materials for this part is above the limit requirement in SJ/T11363-2006.

Note: 80% of the parts in this product are manufactured with non-hazardous environment-friendly materials. The hazardous substances or elements contained cannot be replaced with environment-friendly materials at present due to technical or economical constraints.