Face Recognition Access Controller

User's Manual

V1.2.0

Foreword

General

This manual introduces the functions and operations of the Face Recognition Access Controller (hereinafter referred to as the "Device"). Read carefully before using the device, and keep the manual safe for future reference.

Safety Instructions

The following signal words might appear in the manual.

Signal Words	Meaning
⚠ DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
⚠ CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, reductions in performance, or unpredictable results.
TIPS	Provides methods to help you solve a problem or save time.
NOTE	Provides additional information as a supplement to the text.

Revision History

Version	Revision Content	Release Time
V1.2.0	Updated communication settings, access control settings and more.	November 2023
V1.1.0	Updated the manual.	October 2023
V1.0.0	First Release.	June 2023

Privacy Protection Notice

As the device user or data controller, you might collect the personal data of others such as their face, audio, fingerprints, and license plate number. You need to be in compliance with your local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures which include but are not limited: Providing clear and visible identification to inform people of the existence of the surveillance area and provide required contact information.

About the Manual

- The manual is for reference only. Slight differences might be found between the manual and the product.
- We are not liable for losses incurred due to operating the product in ways that are not in compliance with the manual.
- The manual will be updated according to the latest laws and regulations of related jurisdictions.

For detailed information, see the paper user’s manual, use our CD-ROM, scan the QR code or visit our official website. The manual is for reference only. Slight differences might be found between the electronic version and the paper version.

- All designs and software are subject to change without prior written notice. Product updates might result in some differences appearing between the actual product and the manual. Please contact customer service for the latest program and supplementary documentation.
- There might be errors in the print or deviations in the description of the functions, operations and technical data. If there is any doubt or dispute, we reserve the right of final explanation.
- Upgrade the reader software or try other mainstream reader software if the manual (in PDF format) cannot be opened.
- All trademarks, registered trademarks and company names in the manual are properties of their respective owners.
- Please visit our website, contact the supplier or customer service if any problems occur while using the device.
- If there is any uncertainty or controversy, we reserve the right of final explanation.

Important Safeguards and Warnings

This section introduces content covering the proper handling of the Device, hazard prevention, and prevention of property damage. Read carefully before using the Device, and comply with the guidelines when using it.

Transportation Requirement

⚠

Transport, use and store the Device under allowed humidity and temperature conditions.

Storage Requirement

⚠

Store the Device under allowed humidity and temperature conditions.

Installation Requirements

⚠ WARNING

- Do not connect the power adapter to the Device while the adapter is powered on.
- Strictly comply with the local electric safety code and standards. Make sure the ambient voltage is stable and meets the power supply requirements of the Device.
- Do not connect the Device to two or more kinds of power supplies, to avoid damage to the Device.
- Improper use of the battery might result in a fire or explosion.

⚠

- Personnel working at heights must take all necessary measures to ensure personal safety including wearing a helmet and safety belts.
- Do not place the Device in a place exposed to sunlight or near heat sources.
- Keep the Device away from dampness, dust, and soot.
- Install the Device on a stable surface to prevent it from falling.
- Install the Device in a well-ventilated place, and do not block its ventilation.
- Use an adapter or cabinet power supply provided by the manufacturer.
- Use the power cords that are recommended for the region and conform to the rated power specifications.
- The power supply must conform to the requirements of ES1 in IEC 62368-1 standard and be no higher than PS2. Please note that the power supply requirements are subject to the Device label.
- The Device is a class I electrical appliance. Make sure that the power supply of the Device is connected to a power socket with protective earthing.

Operation Requirements

⚠

- Check whether the power supply is correct before use.
- Do not unplug the power cord on the side of the Device while the adapter is powered on.
- Operate the Device within the rated range of power input and output.

- Use the Device under allowed humidity and temperature conditions.
- Do not drop or splash liquid onto the Device, and make sure that there is no object filled with liquid on the Device to prevent liquid from flowing into it.
- Do not disassemble the Device without professional instruction.
- This product is professional equipment.
- The Device is not suitable for use in locations where children are likely to be present.

Table of Contents

1 Overview

The access controller is an access control panel that supports unlocking through faces, passwords, fingerprint, cards, QR code, and their combinations. Based on the deep-learning algorithm, it features faster recognition and higher accuracy. It can work with management platform which meets various needs of customers.

It is widely used in parks, communities, business centers and factories, and ideal for places such as office buildings, government buildings, schools and stadiums.

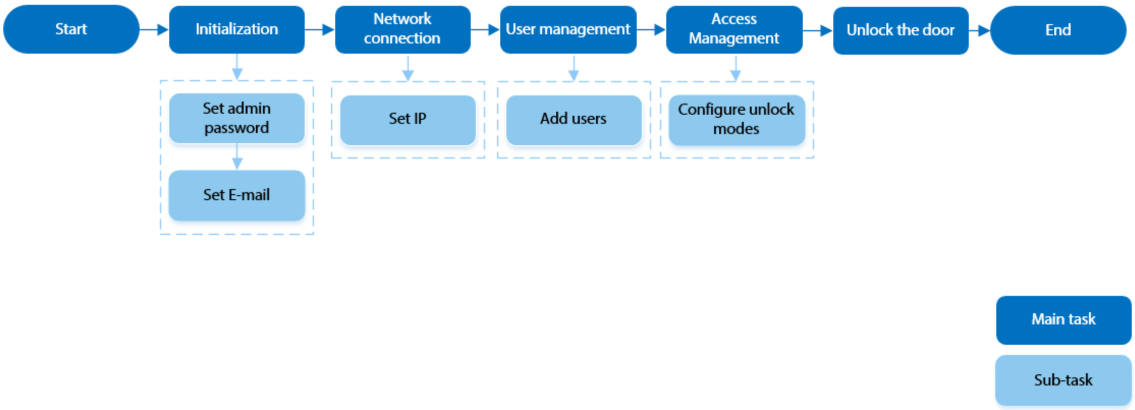
- Configurations might differ depending on the models of the product, please refer to the actual product.
- Devices with non-touch screen must connect to a mouse to perform configurations. This manual uses the device with touch screen as an example.
- Some models support connecting extension modules like QR code module, fingerprint module and more. The type of extension modules that the Device supports might differ, please refer to the actual product.

2 Local Operations

- Configurations might differ depending on the actual product.
- Models with no-touch screen needs connecting a wired USB mouse. This section uses the models with touch screen as an example.
- External expansion modules are only available on select models.
- You might see some UI texts are not displayed because of the limited space. Long press the text for 3 seconds and it will show.

2.1 Basic Configuration Procedure

Figure 2-1 Basic configuration procedure



2.2 Common Icons

Table 2-1 Description of icons

Icon	Description
⌂	Main menu icon
✓	Confirm icon
⏮	Turn to the first page of the list.
⏭	Turn to the last page of the list.
‹ or ˄	Turn to the previous page of the list.
› or ˅	Turn to the next page of the list.
←	Return to the previous menu.
ON	Turn on
OFF	Turn off
🗑	Delete
🔍	Search

2.3 Standby Screen

You can unlock the door through faces, card, passwords, and QR code. You can also make calls through the intercom function. Unlock methods might differ depending on the models of the product.

- If there is no operation in 30 seconds, the Device will go to the standby mode.
- This manual is for reference only. Slight differences might be found between the standby screen in this manual and the actual device.

Figure 2-2 Standby screen

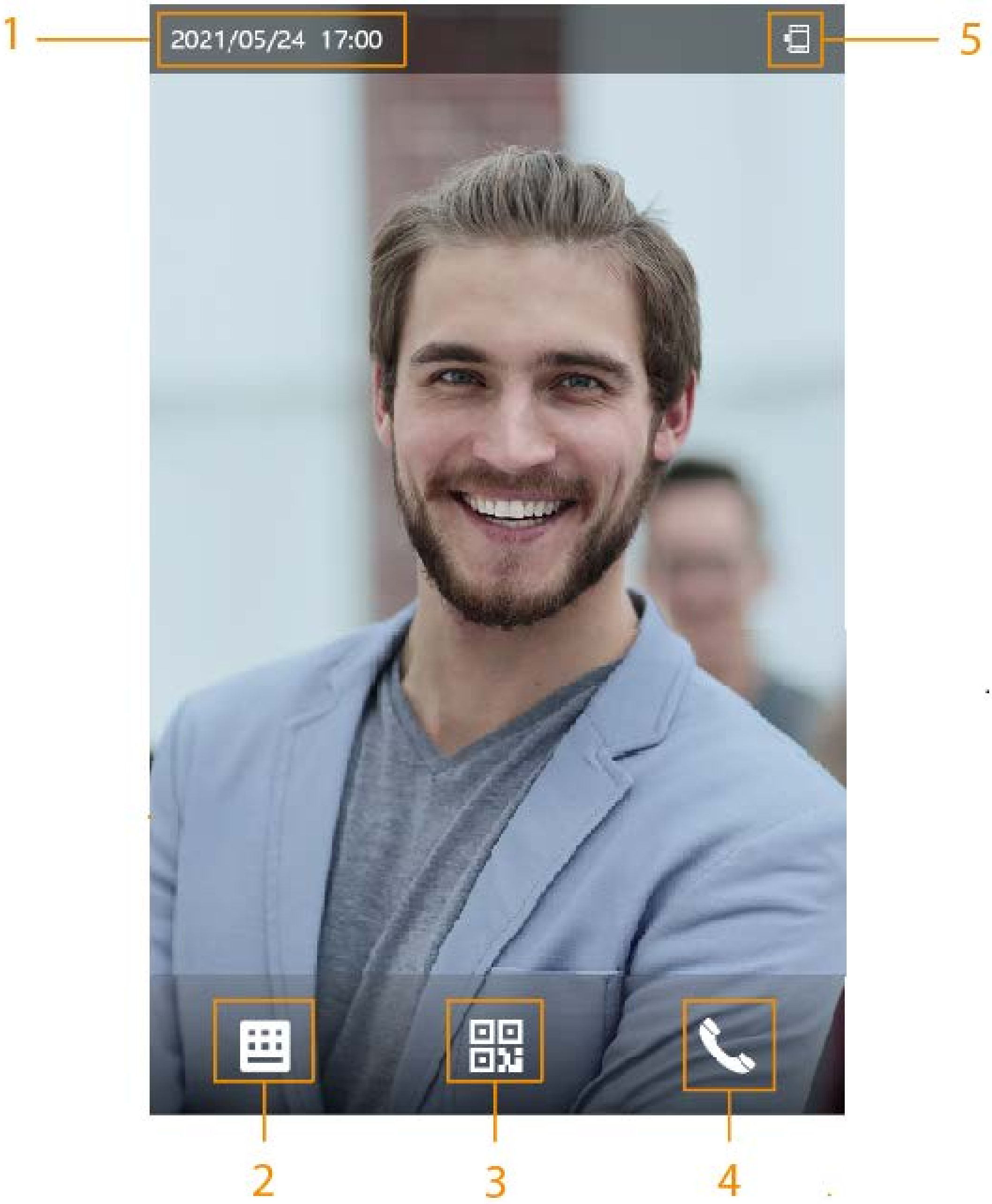


Table 2-2 Home screen description

No.	Name	Description
1	Date and time	Current date and time.
2	Password	Enter user password or administrator password or temporary password to unlock the door.
3	QR code	Tap the QR code icon and scan QR code to unlock the door. 📖 For models that have a standalone QR code module or connects a QR expansion module. The icon will be not displayed. You can simply place your QR code in front of the lens of Device or the expansion module, it will be automatically scanned.
4	Intercom	● When the Device functions as a server, it can call the VTO and VTH. ● When the management platform functions as a server, the Device can call the VTO, VTS and the management platform. ● When it works with DMSS, it can call DMSS.
5	Status display	Displays status of Wi-Fi, network, extension module, USB and more. Wi-Fi and extension modules are only available on select models.

2.4 Initialization

For the first-time use or after restoring factory defaults, you need to select a language on Device, and then set the password and email address for the admin account. You can use the admin account to enter the main menu of the Device and its webpage.

📖

- If you forget the administrator password, send a reset request to your registered e-mail address.
- The password must consist of 8 to 32 non-blank characters and contain at least two types of characters among upper case, lower case, number, and special character (excluding ' " ; : &).

2.5 Logging In

Log in to the main menu to configure the Device. Only admin account and administrator account can enter the main menu of the Device. For the first-time use, use the admin account to enter the main menu screen and then you can create the other administrator accounts.

Background Information

- admin account: Can log in to the main menu screen of the Device, but does not have door access permissions.
- Administrator account: Can log in to the main menu of the Device and has door access

permissions.

Procedure

Step 1 Press and hold the standby screen for 3 seconds.

Step 2 Select a verification method to enter the main menu.

- Face: Enter the main menu by face recognition.
- Fingerprint: Enter the main menu by using fingerprint.

  Fingerprint function is only available on select models.
- Card Punch: Enter the main menu by swiping card.
- PWD: Enter the user ID and password of the administrator account.
- admin: Enter the admin password to enter the main menu.

2.6 Unlocking Methods

You can unlock the door through faces, passwords, fingerprints, cards, and more.

2.6.1 Unlocking by Cards

Place the card at the swiping area to unlock the door.

This function is only available on select models.

2.6.2 Unlocking by Face

Verify the identity of an individual by detecting their faces. Make sure that the face is centered on the face detection frame.

2.6.3 Unlocking by User Password

Enter the user ID and password to unlock the door.

Procedure

Step 1 Tap ⌨ on the standby screen.

Step 2 Tap **Unlock by password**, and then enter the user ID and password.

Step 3 Tap **OK**.

2.6.4 Unlocking by Admin Password

Enter only the admin password to unlock the door. The door can be unlocked through admin password except for always closed door. One device allows for only one admin password.

Prerequisites

The admin password was configured. For details, see "2.7.3 Configuring the Admin Unlock

Password".

Procedure

Step 1 Tap ⌨ on the standby screen.

Step 2 Tap **Unlock through Admin Password**, and then enter the admin password.

Step 3 Tap ☑.

Admin password cannot be used to unlock when the door status is set to always closed status.

2.6.5 Unlocking by QR code

Procedure

Step 1 On the standby screen, tap ▦.

The QR code icon is displayed only after you go to **Functions** > **Face Recognition Interface Shortcut** to enable **QR code**.

Step 2 Place your QR code in front of the lens.

2.6.6 Unlocking by Fingerprint

Place you finger on the fingerprint scanner. This function is only available select models.

2.6.7 Unlocking by Temporary Password

Unlock the door by the temporary password.

Procedure

Step 1 Add the Device to DMSS.
DMSS will generate a temporary password, which allow you unlock the door before it expires.

Step 2 On the home screen, tap ⌨, and then tap **Unlock by Temporary Password**.

Step 3 Enter the temporary password, and then tap ☑

2.7 Person Management

You can add new users, view user/admin list and edit user information.

The pictures in this manual are for reference only, and might differ from the actual product.

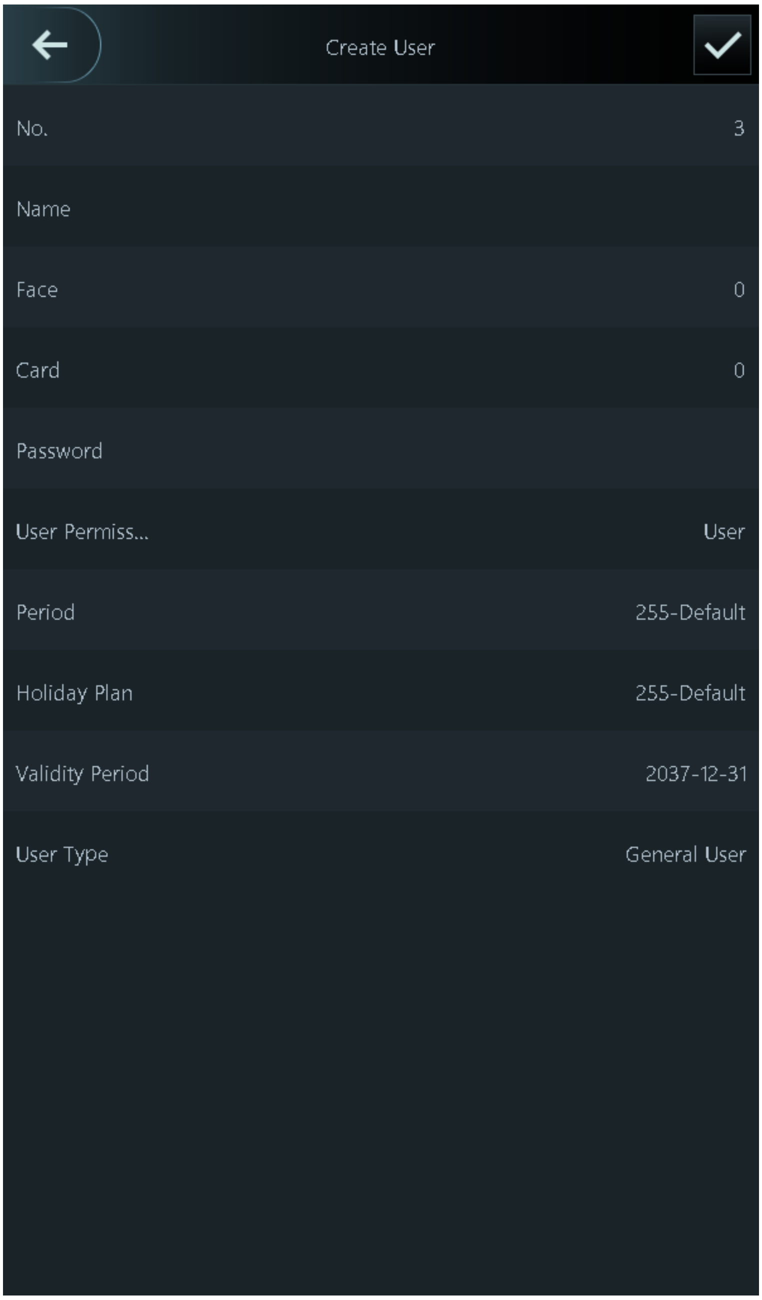
2.7.1 Adding Users

Procedure

Step 1 On the **Main Menu**, select **Person Management** > **Create User**.

Step 2 Configure the parameters on the interface.

Figure 2-3 Add new user



No.	3
Name	
Face	0
Card	0
Password	
User Permiss...	User
Period	255-Default
Holiday Plan	255-Default
Validity Period	2037-12-31
User Type	General User

Table 2-3 Parameters description

Parameter	Description
No.	The No. is like employee ID, which can be numbers, letters, and their combinations, and the maximum length of the No. is 30 characters.
Name	The name can have up to 32 characters (including numbers, symbols, and letters).
FP	Register fingerprints. A user can register up to 3 fingerprints, and you can set a fingerprint to the duress fingerprint. An alarm will be triggered when the duress fingerprint is used to unlock the door. ● Fingerprint function is only available on select models. ● We do not recommend you set the first fingerprint as the duress fingerprint. ● One user can only set one duress fingerprint. ● Fingerprint function is available if the Device supports connecting a fingerprint extension module.
Face	Position your face inside the frame, and a face image will be captured automatically. You can register again if you are not satisfied with the outcome.
Card	A user can register up to 5 cards at most. Enter your card number or swipe your card, and then the card information will be read by the access controller. You can enable the **Duress Card** function. An alarm will be triggered if a duress card is used to unlock the door. ● This function is only available on select models. ● One user can only set one duress card.
Password	Enter the user password. The maximum length of the password is 8 digits. The duress password is adding 1 based on the last digit of the unlock password. For example, if the user password is 12345, the duress password will be 12346; if the user password is 789, and then the duress password is 780. A duress alarm will be triggered when a duress password is used to unlock the door.
User Permission	● **User**: Users only have door access or time attendance permissions. ● **Admin**: Administrators can configure the Device besides door access and attendance permissions.
Period	People can unlock the door or take attendance during the defined period. For details on how to configure periods, see "3.6.7.1 Configuring Time Periods".
Holiday Plan	People can unlock the door or take attendance during the defined holiday. For details on how to configure periods, see "3.6.7.2 Configuring Holiday Plans".

Parameter	Description
Validity Period	Set a date on which the door access and attendance permissions of the person will be expired.
User Type	● **General User**: General users can unlock the door. ● **Blocklist User**: When users in the blocklist unlock the door, an blocklist alarm will be triggered. ● **Guest User**: Guests can unlock the door within a defined period or for certain amount of times. After the defined period expires or the unlocking times runs out, they cannot unlock the door. ● **Patrol User**: Patrol users can take attendance on the Device, but they do not have door permissions. ● **VIP User**: When VIP unlocks the door, service personnel will receive a notification. ● **Other User**: When they unlock the door, the door will stay unlocked for 5 more seconds. This function is not effective when remote verification is enabled. ● **Custom User 1/Custom User 2**: Same with general users.
Department	Select departments, which is useful when configuring department schedules. For how to create departments, see "2.9.1 Configuring Departments". This function is only available on select models.
Schedule Mode	● Department Schedule: Apply department schedules to the user. ● Personal Schedule: Apply personal schedules to the user. For how to configure personal or department schedules, see "2.9.4 Configuring Work Schedules". ◇ This function is only available on select models. ◇ If you set the schedule mode to department schedule here, the personal schedule you have configured for the user in **Attendance** > **Schedule Config** > **Personal Schedule** become invalid.

Step 3 Tap ☑.

2.7.2 Viewing User Information

Procedure

Step 1 On the **Main Menu**, select **Person Management** > **User List**, or select **User** > **Admin List**.

Step 2 View all added users and admin accounts.

- 🔒: Unlock through password.
- 💳: Unlock through swiping card.
- 👤: Unlock through face recognition.
- 🖐: Unlock through fingerprint.

Related Operations

On the **User** screen, you can manage the added users.

- Search for users: Tap 🔍 and then enter the username.
- Edit users: Tap the user to edit user information.
- Delete users
  - Delete one by one: Select a user, and then tap .🗑.
  - Delete in batches:
    - On the **User List** screen, tap 🗑 to delete all users.
    - On the **Admin List** screen, tap 🗑 to delete all admin users.

2.7.3 Configuring the Admin Unlock Password

You can unlock the door by only entering the admin password. This password is not limited by user types. Only one admin unlock password is allowed for one device.

Procedure

Step 1 On the **Main Menu** screen, select **User** > **Admin Unlock Password**.

Step 2 Tap **Admin Unlock Password**, and then enter a password.

Step 3 Turn on the admin unlock function.

2.8 Access Control Management

You can configure settings for doors such as the unlocking mode, alarm linkage and door schedules. The available unlock modes might differ depending on the product model.

2.8.1 Configuring Unlock Combinations

Use card, fingerprint, face or password or their combinations to unlock the door. The available unlock modes might differ depending on the product model.

Procedure

Step 1 Select **Access Control Management** > **Unlock Combination**.

Step 2 Select unlock methods.

📖

To cancel your selection, tap the selected method again.

Step 3 Tap +**And** or **/Or** to configure combinations.

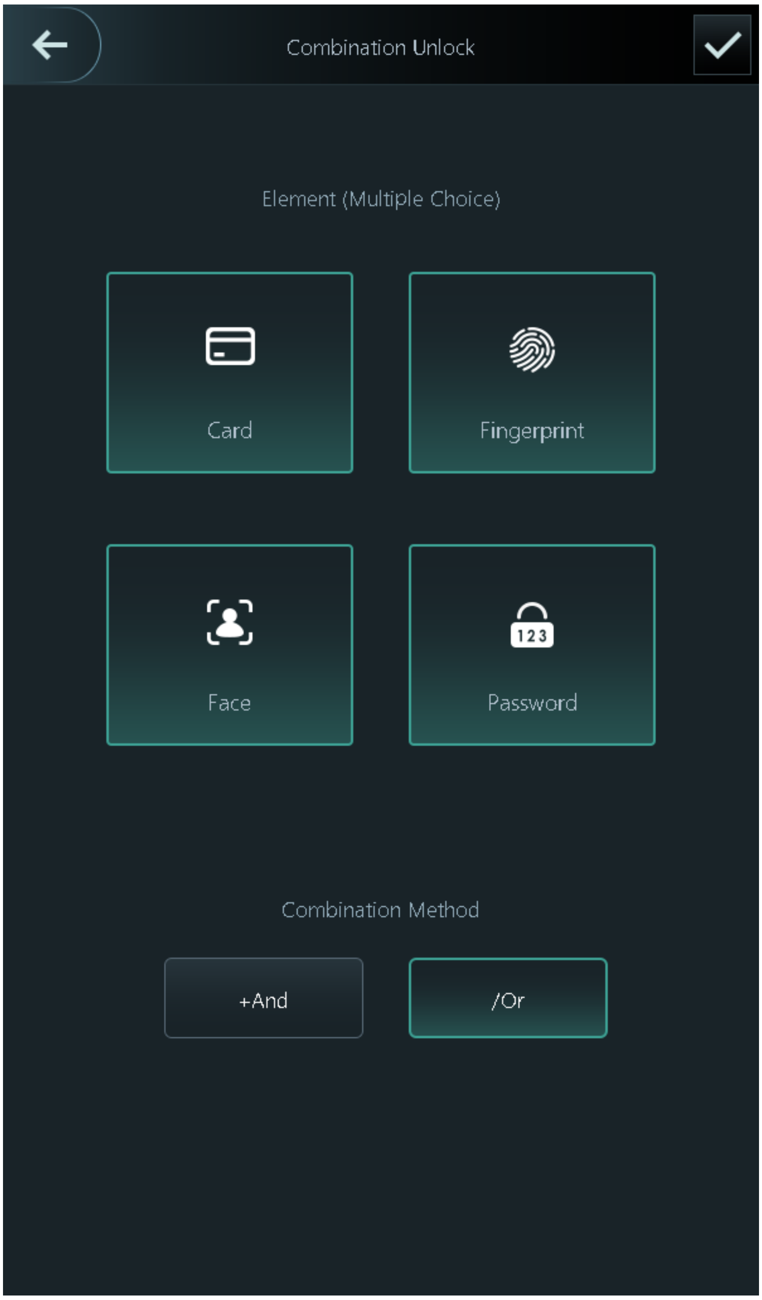
- **+And**: Verify all the selected unlock methods to open the door.

  📖

  People have to complete verification in the order of card, fingerprint, face and password.

- **/Or**: Verify one of the selected unlock methods to open the door.

Figure 2-4 Element (multiple choice)



Step 4 Tap ☑ to save changes.

2.8.2 Configuring Alarms

An alarm will be triggered when the entrance or exit is abnormally accessed.

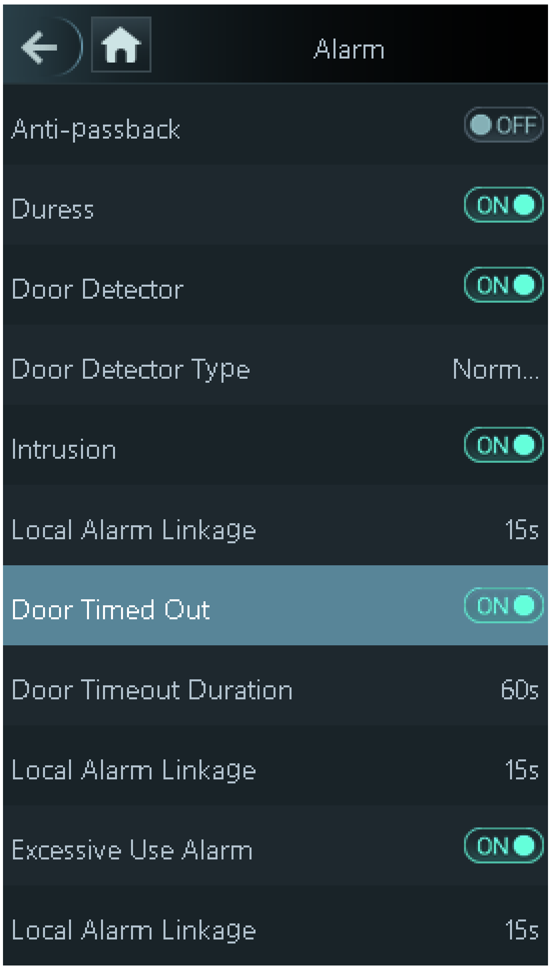
Procedure

Step 1 Select **Access Control Management** > **Alarm**.

Step 2 Enable the alarm type.

Alarm types might differ depending on the models of the product.

Figure 2-5 Alarm



Alarm

Anti-passback OFF

Duress ON

Door Detector ON

Door Detector Type Norm...

Intrusion ON

Local Alarm Linkage 15s

Door Timed Out ON

Door Timeout Duration 60s

Local Alarm Linkage 15s

Excessive Use Alarm ON

Local Alarm Linkage 15s

Table 2-4 Description of alarm parameters

Parameter	Description
Anti-passback	Users need to verify their identities both for entry and exit; otherwise an alarm will be triggered. This helps prevent card holders from being able to give their card to other people to allow them access. When anti-passback is enabled, the card holder must leave the secured area through an exit reader before the system will grant them access again. People need to swipe their card at the "in" reader to enter a secured area and swipe it at the "out" reader to get out of it. As long as the sequence is "in, out, in, out , ect", the system will work fine. ● If a person enters after being verified, but exits without being verified, an alarm will be triggered if they attempt to enter again, and they will be denied access. ● If a person enters without being verified, but exits after being verified, an alarm will be triggered if they attempt to enter again, and they will be denied access. 📖 If the Device can only connect one lock, verifying on the Device means a "in" direction, and verifying on the external card reader means an "out" direction by default. You can modify the settings on the management platform.
Duress	An alarm will be triggered when a duress card, duress password or duress fingerprint is used to unlock the door.
Door Detector	With the door detector wired to your device, alarm can be triggered when doors are opened or closed abnormally. The door detector includes 2 types, including NC detector and NO detector. ● Normally Closed: The sensor is in a shorted position when the door or window is closed. ● Normally Open: An open circuit is created when the window or door is actually closed.
Door Detector Type	
Intrusion	If the door is opened abnormally, an intrusion alarm will be triggered and last for a defined time. 📖 The door detector and intrusion need to be enabled at the same time.
Local Alarm Linkage	
Door Timed Out	When the door remains unlocked for longer than the defined timeout duration, the door timeout alarm will be triggered and last for the defined time. 📖 The door detector and door timed out function need to be enabled at the same time.
Door Timeout Duration	
Local Alarm Linkage	
Excessive Use Alarm	If the wrong password or card is used 5 times in a row within 60 seconds, the alarm for excessive use of illegal card will be triggered and lasts for a defined time.
Local Alarm Linkage	

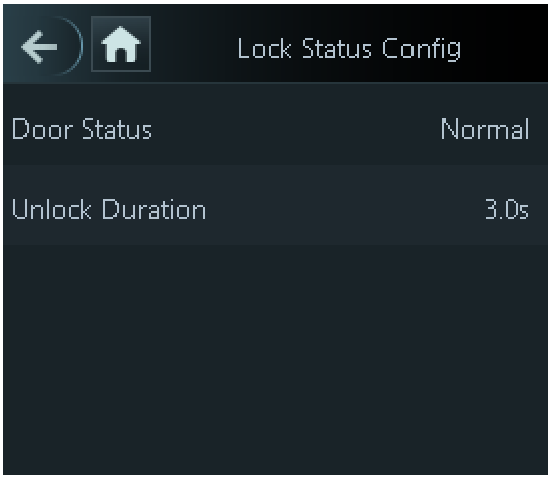
2.8.3 Configuring the Door Status

Procedure

Step 1 On the **Main Menu** screen, select **Access Control Management** > **Lock Status Config**.

Step 2 Set door status.

Figure 2-6 Lock status



Lock Status Config

Door Status Normal

Unlock Duration 3.0s

Table 2-5 Parameters description

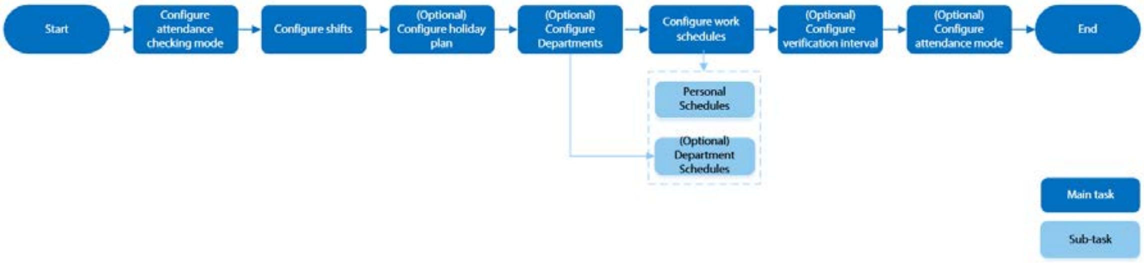
Parameter	Description
Door Status	- **Normally Open**: The door remains unlocked all the time. - **Normally Closed**: The door remains locked all the time. - **Normal**: If **Normal** is selected, the door will be locked and unlocked according to your settings.
Unlock Duration	After a person is granted access, the door will remain unlocked for a defined time for them to pass through.

2.9 Attendance Management

Time attendance supports attendance management both on the Device or and Smart PSS Lite. This section only uses configuring attendance on the Device as an example.

This function is only available on select models (devices of 4.3 inch series).

Figure 2-7 Configuration flow chart of time attendance



Start
Configure attendance checking mode
Configure shifts
(Optional) Configure holiday plan
(Optional) Configure Departments
Configure work schedules
Personal Schedules
(Optional) Department Schedules
(Optional) Configure verification interval
(Optional) Configure attendance mode
End
Main task
Sub-task

2.9.1 Configuring Departments

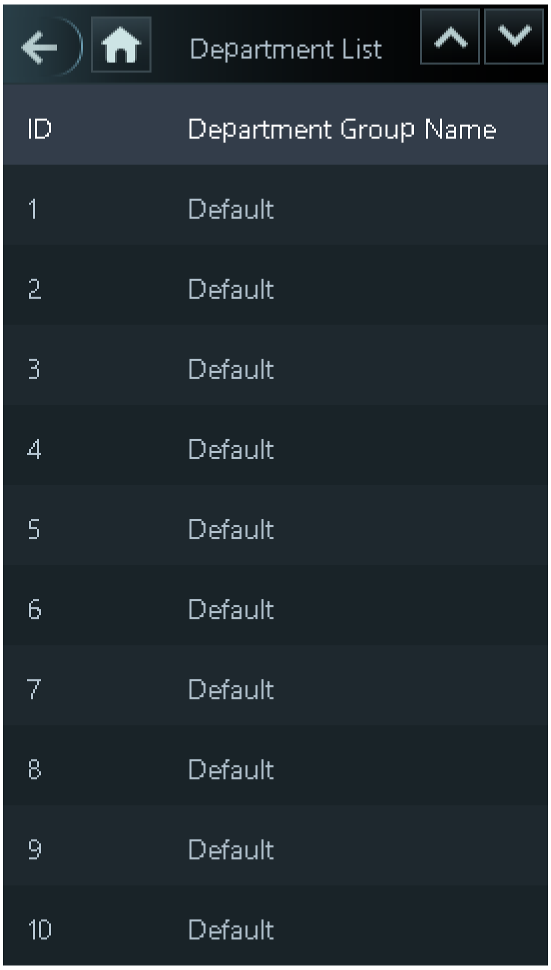
Procedure

Step 1 Select **Attendance** > **Department Settings**.

Step 2 Select a department, and then rename it.

There are 20 default departments. We recommend you rename them.

Figure 2-8 Create departments



ID	Department Group Name
1	Default
2	Default
3	Default
4	Default
5	Default
6	Default
7	Default
8	Default
9	Default
10	Default

Step 3 Tap ☑.

2.9.2 Configuring Shifts

Configure shifts to define time attendance rules. Employees need to come to work at the time scheduled for their shift to start, and leave at the end time, except when they choose to work overtime.

Procedure

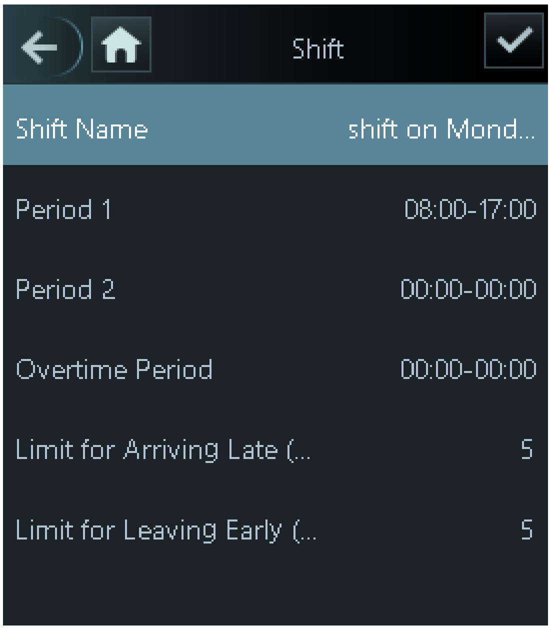
Step 1 Select **Attendance** > **Shift Config**.

Step 2 Select a shift.

Tap ⌄ to view more shifts. You can configure up to 24 shifts.

Step 3 Configure the parameters of the shift.

Figure 2-9 Create shifts



Shift Name shift on Mond...

Period 1 08:00-17:00

Period 2 00:00-00:00

Overtime Period 00:00-00:00

Limit for Arriving Late (... 5

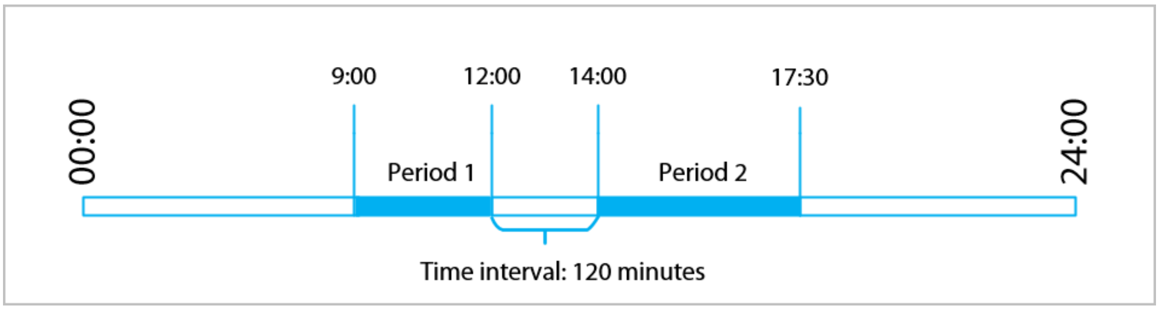
Limit for Leaving Early (... 5

Table 2-6 Shift parameters description

Parameter	Description
Shift Name	Enter the name of the shift.
Period 1	Specify a time range when people can clock in and clock out for the workday. If you only set one attendance period, employees need to clock in and out by the designated times to avoid an anomaly appearing on their attendance record. For example, if you set 08:00 to 17:00, employees must clock in by 08:00 and clock out from 17:00 onwards. If you set 2 attendance periods, the 2 periods cannot overlap. Employees need to clock in and clock out for both periods.
Period 2	
Overtime Period	Employees who clock in or out during the defined period will be considered as working beyond their normal work hours.
Limit for Arriving Late (min)	A certain amount of time can be granted to employees to allow them to clock in a bit late and clock out a bit early. For example, if the regular time to clock in is 08:00, the tolerance period can be set as 5 minutes for employees who arrive by 08:05 to not be considered as late.
Limit for Leaving Early (min)	

- When the time interval between 2 periods is an even number, you can divide the time interval by 2, and assign the first half of the interval to the first period, which will be the clock out time. The second half of the interval should be assigned to the second period as the clock in time.

Figure 2-10 Time interval (Even number)

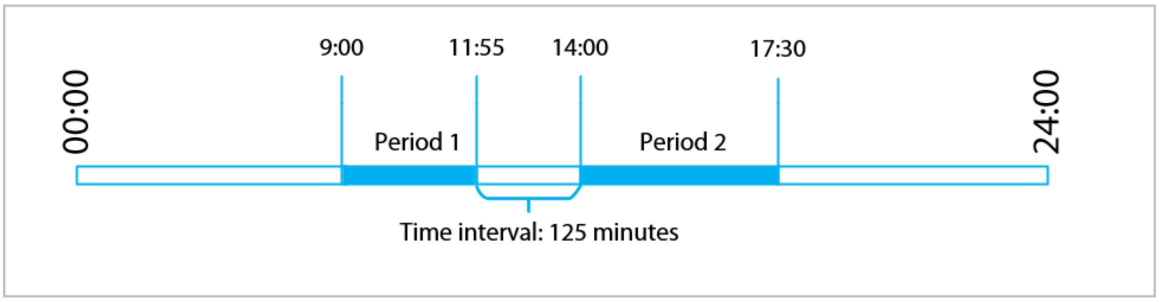


For example: If the interval is 120 minutes, then the clock-out time for period 1 is from 12:00 to 12:59, and the clock-in time for period 2 is from 13:00 to 14:00.

If a person clocks out multiple times during period 1, the latest time will be valid, and if they clock in multiple times during period 2, the earliest time will be valid.

- When the time interval between 2 periods is an odd number, the smallest portion of the interval will be assigned to the first period, which will be the clock out time. The largest portion of the interval will be assigned to the second period as the clock in time.

Figure 2-11 Time interval (even number)



For example: If the interval is 125 minutes, then the clock-out time for period 1 is from 11:55 to 12:57, and the clock-in time for period 2 is from 12:58 to 14:00. Period 1 has 62 minutes, and period 2 has 63 minutes.

If a person clocks out multiple times during period 1, the latest time will be valid, and if they clock in multiple times during period 2, the earliest time will be valid.

All attendance times are precise down to the second. For example, if the normal clock-in time is set to 8:05 AM, the employee who clocks in at 8:05:59 AM will not be considered as arriving late. But, the employee that arrives at 8:06 AM will be marked as late by 1 minute.

Step 4 Tap ☑.

2.9.3 Configuring Holiday Plans

Configure holiday plans to set periods for attendance to not be tracked.

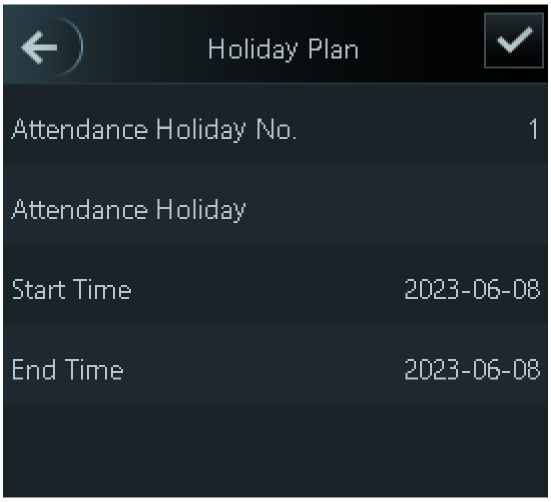
Procedure

Step 1 Select **Attendance** > **Shift Config** > **Holiday**.

Step 2 Click + to add holiday plans.

Step 3 Configure the parameters.

Figure 2-12 Create holiday plans



Holiday Plan

Attendance Holiday No. 1

Attendance Holiday

Start Time 2023-06-08

End Time 2023-06-08

Table 2-7 Parameters description

Parameter	Description
Attendance Holiday No.	The number of the holiday.
Attendance Holiday	The name of the holiday.
Start Time	The start and end time of the holiday.
End Time	

Step 4 Tap ✓.

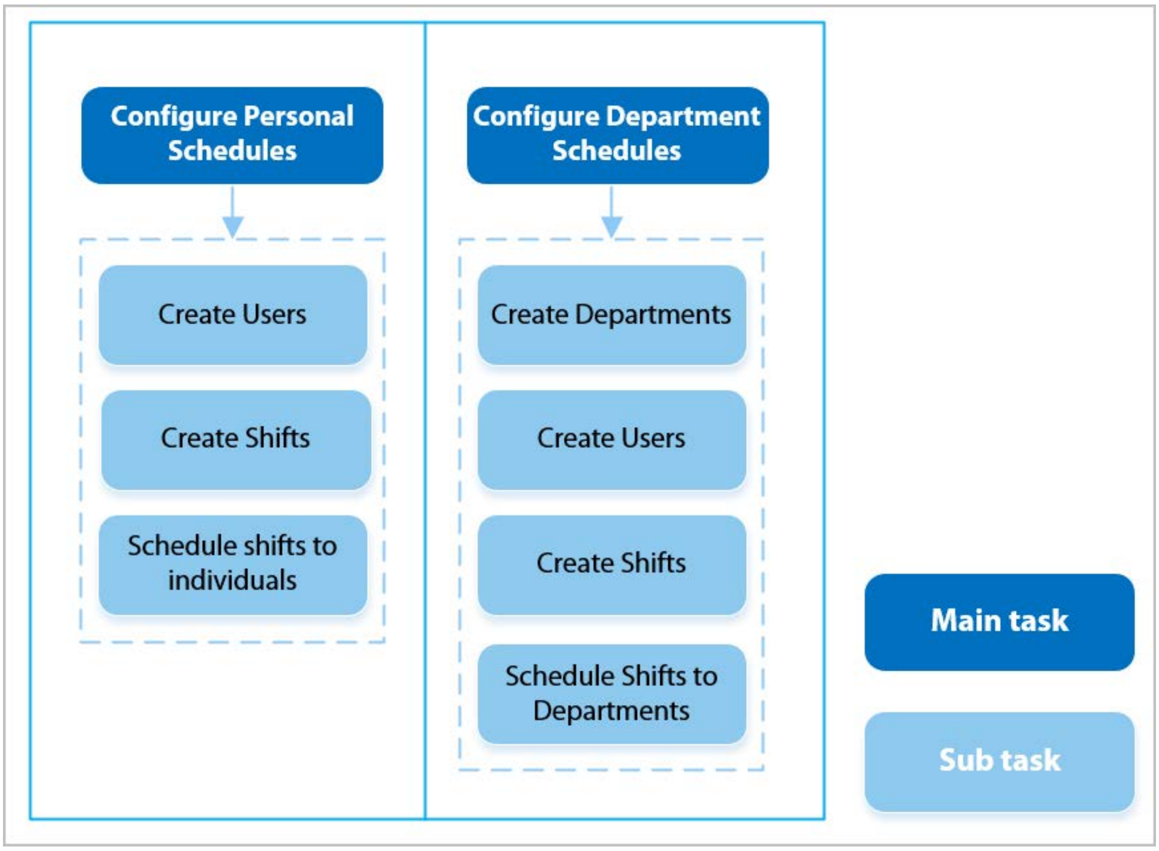
2.9.4 Configuring Work Schedules

A work schedule generally refers to the days per month and the hours per day that an employee is expected to be at their job. You can create different types of work schedules based on different individuals or departments, and then employees must follow the established work schedules.

Background Information

Refer to the flowchart to configure personal schedules or department schedules.

Figure 2-13 Configuring work schedules



Configure Personal Schedules
Create Users
Create Shifts
Schedule shifts to individuals
Configure Department Schedules
Create Departments
Create Users
Create Shifts
Schedule Shifts to Departments
Main task
Sub task

Procedure

Step 1 Select **Attendance** > **Schedule Config**.

Step 2 Set work schedules for individuals.

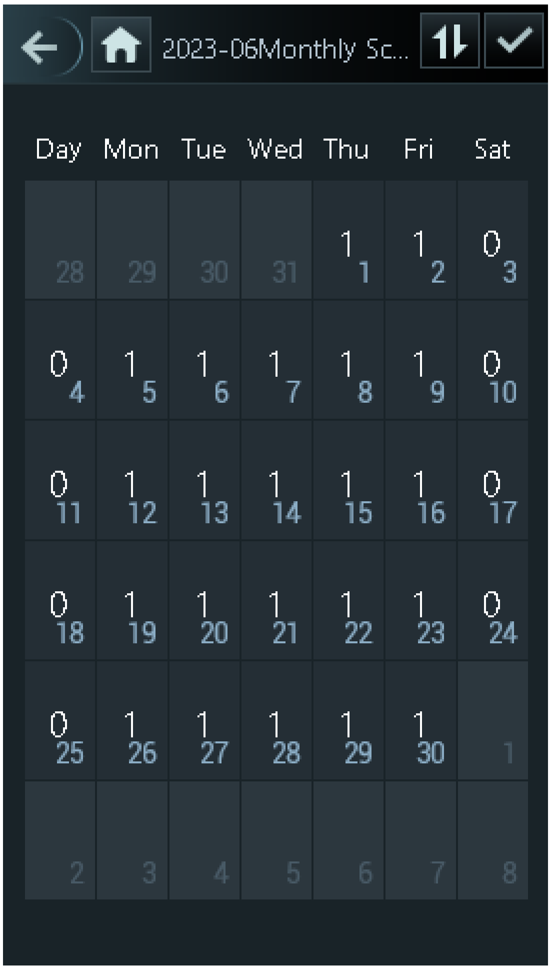
1. Tap **Personal Schedule**.
2. Enter the user ID, and then tap ☑.
3. On the calendar, select a day, and then select a shift.

   The shift is scheduled for the day.

You can only set work schedules for the current month and the next month.

- 0 indicates break.
- 1 to 24 indicates the number of the per-defined shifts. For how to configure shifts, see "2.9.2 Configuring Shifts".
- 25 indicates business trip.
- 26 indicates leave of absence.

Figure 2-14 Schedule shifts to individuals



Day	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	1 1	1 2	0 3
0 4	1 5	1 6	1 7	1 8	1 9	0 10
0 11	1 12	1 13	1 14	1 15	1 16	0 17
0 18	1 19	1 20	1 21	1 22	1 23	0 24
0 25	1 26	1 27	1 28	1 29	1 30	1
2	3	4	5	6	7	8

4. Tap ☑.

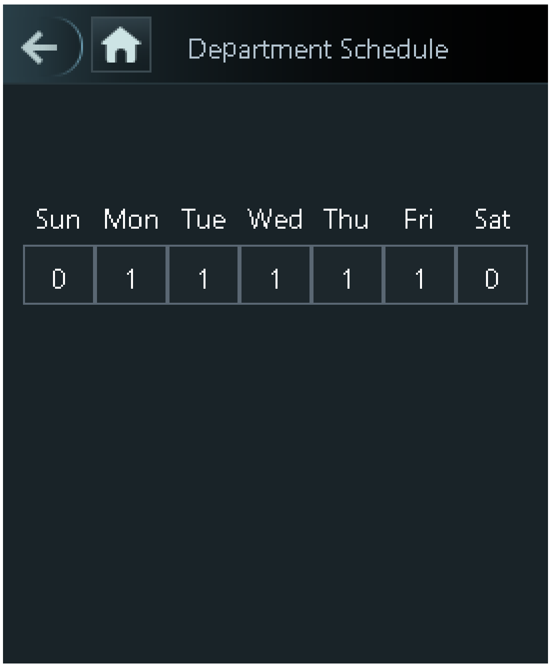
Step 3 Set works schedules for departments.

1. Tap **Department Schedule**.
2. Tap a department, and then select shifts for a week.

   Shifts are scheduled for the week.

- 0 indicates rest.
- 1 to 24 indicates the number of the per-defined shifts. For how to configure shifts, see "2.9.2 Configuring Shifts".
- 25 indicates business trip.
- 26 indicates leave of absence.

Figure 2-15 Schedule shifts to a department



Sun	Mon	Tue	Wed	Thu	Fri	Sat
0	1	1	1	1	1	0

The defined work schedule is in a week cycle and will be applied to all employees in the department.

Step 4 Tap ☑.

2.9.5 Configuring the Verification Time Interval

When an employee clocks in and out multiple times within a set period, the earliest time will be valid.

Procedure

Step 1 Select **Attendance** > **Verification Interval (sec)**.

Step 2 Enter the time interval, and then tap ☑.

2.9.6 Configuring Attendance Modes

When you clock in or clock out, you can set the attendance modes to define the attendance status.

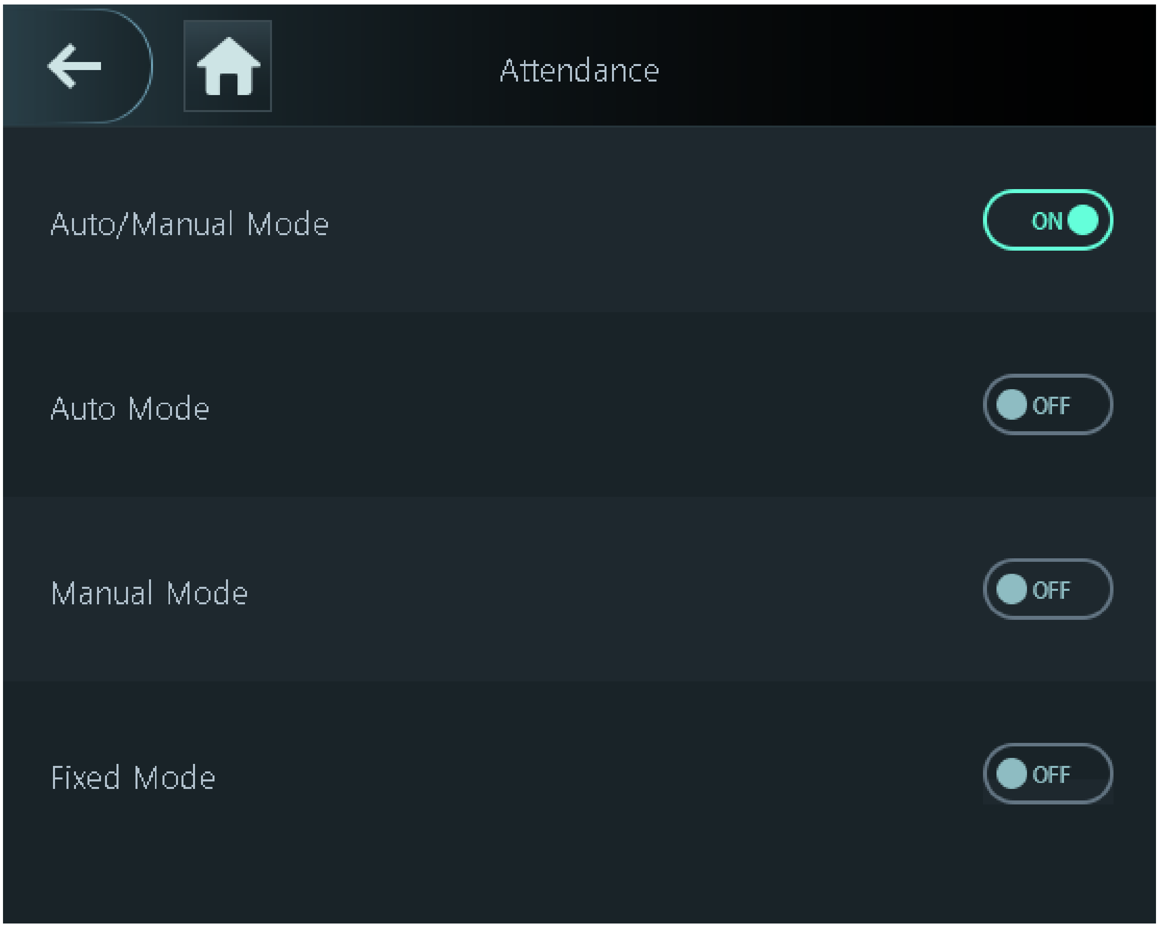
Procedure

Step 1 On the main menu screen, click **Attendance**.

Step 2 Enable **Local or Remote**, and then set the attendance mode.

The attendance records will also be synchronized to the management platform.

Figure 2-16 Attendance mode



Attendance

Auto/Manual Mode ON

Auto Mode OFF

Manual Mode OFF

Fixed Mode OFF

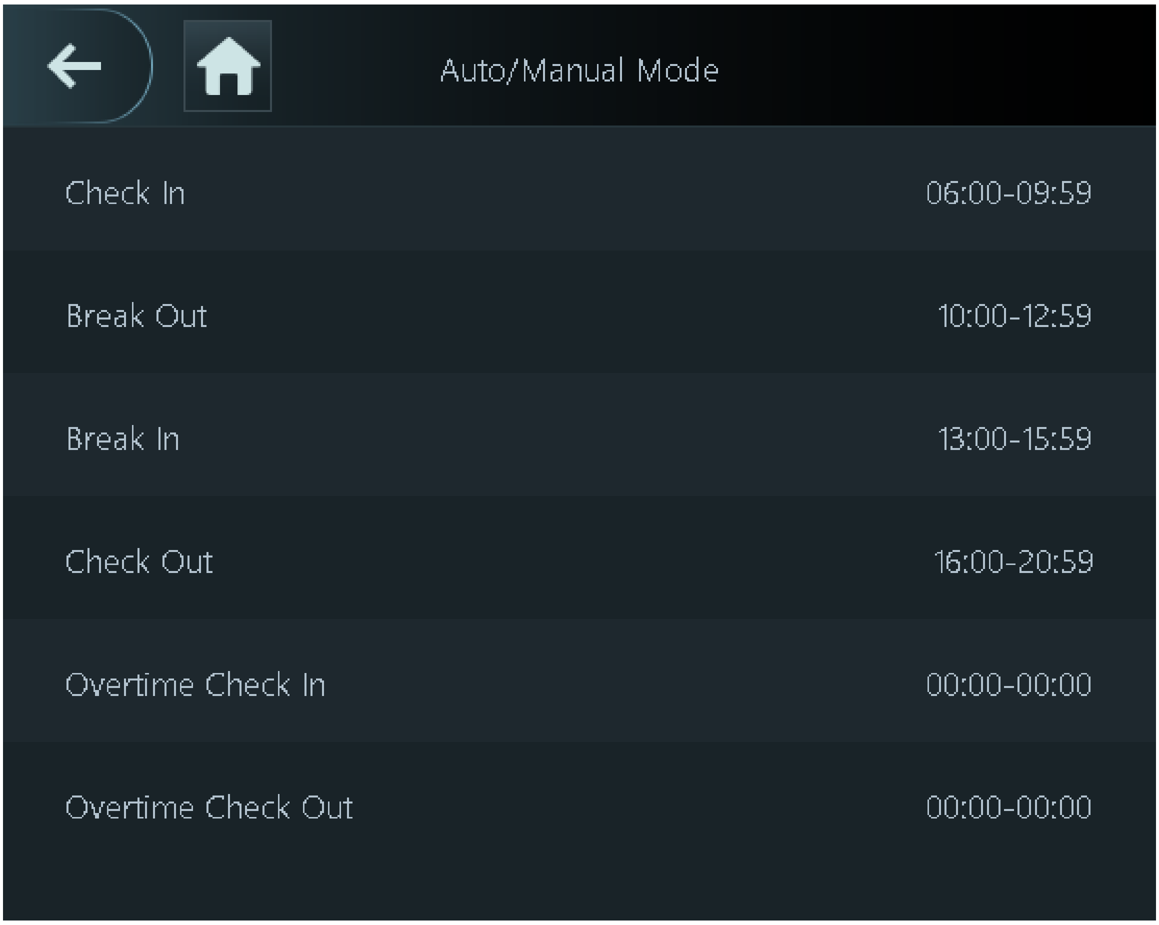
Table 2-8 Attendance mode

Parameter	Description
Auto/Manual Mode	The screen displays the attendance status automatically after you clock in or out, but you can also manually change your attendance status.
Auto Mode	The screen displays your attendance status automatically after you clock in or out.
Manual Mode	Manually select your attendance status when you clock in or out.
Fixed Mode	When you clock in or out, the screen will display the per-defined attendance status all the time.

Step 3 Select an attendance mode.

Step 4 Configure the parameters for the attendance mode.

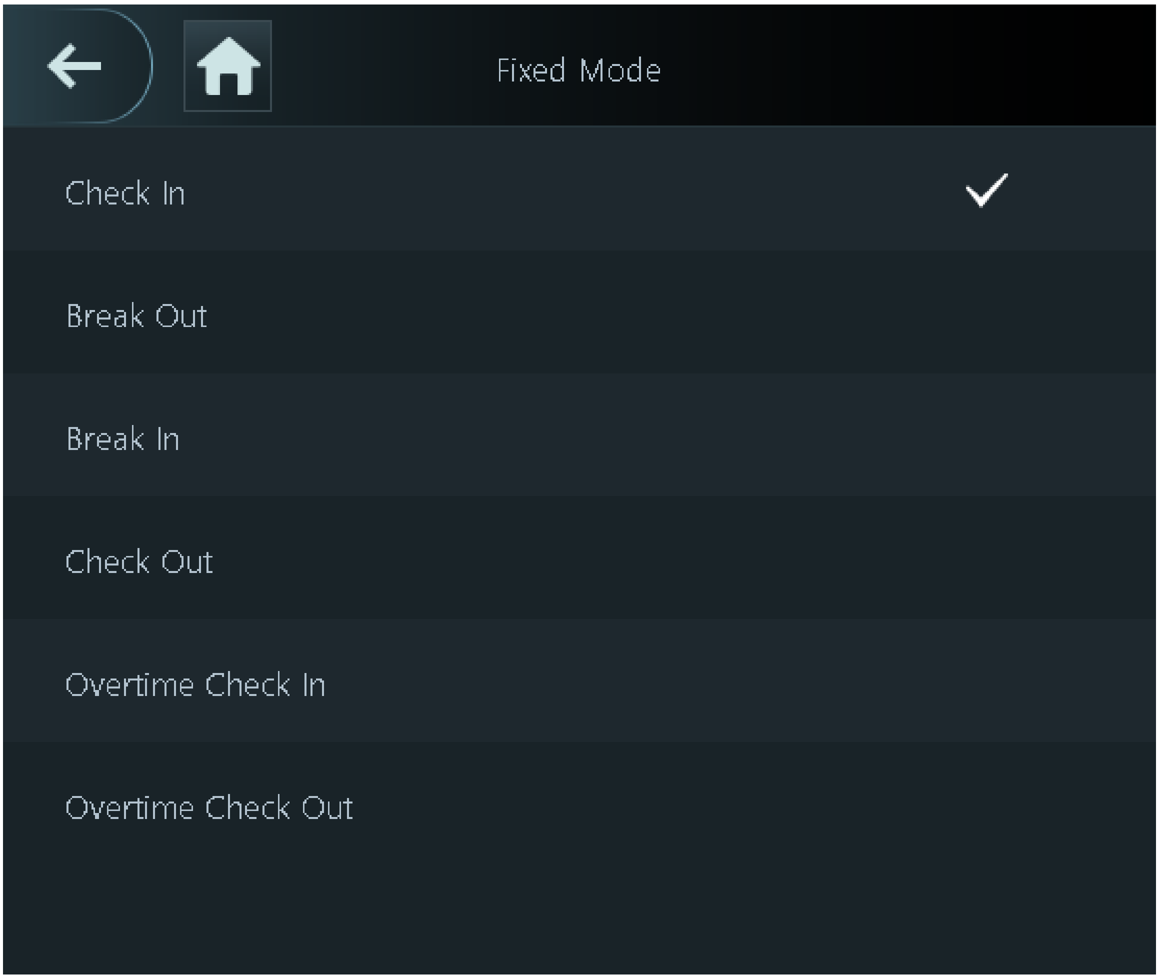
Figure 2-17 Auto Mode/manual mode



Auto/Manual Mode

Check In	06:00-09:59
Break Out	10:00-12:59
Break In	13:00-15:59
Check Out	16:00-20:59
Overtime Check In	00:00-00:00
Overtime Check Out	00:00-00:00

Figure 2-18 Fixed mode



Fixed Mode

- Check In ✓
- Break Out
- Break In
- Check Out
- Overtime Check In
- Overtime Check Out

Table 2-9 Attendance mode parameters

Parameters	Description
Check In	Clock in when your normal workday starts.
Break Out	Clock out when your break starts.
Break In	Clock in when your break ends.
Check Out	Clock out when your normal workday starts.
Overtime Check In	Clock in when your overtime period starts.
Overtime Check Out	Clock out when your overtime period ends.

2.10 Communication Settings

Configure the network, serial port and Wiegand port to connect the Device to the network.

The serial port and the Wiegand port might differ depending on the models of Device.

2.10.1 Configuring Network

2.10.1.1 Configuring the IP Address

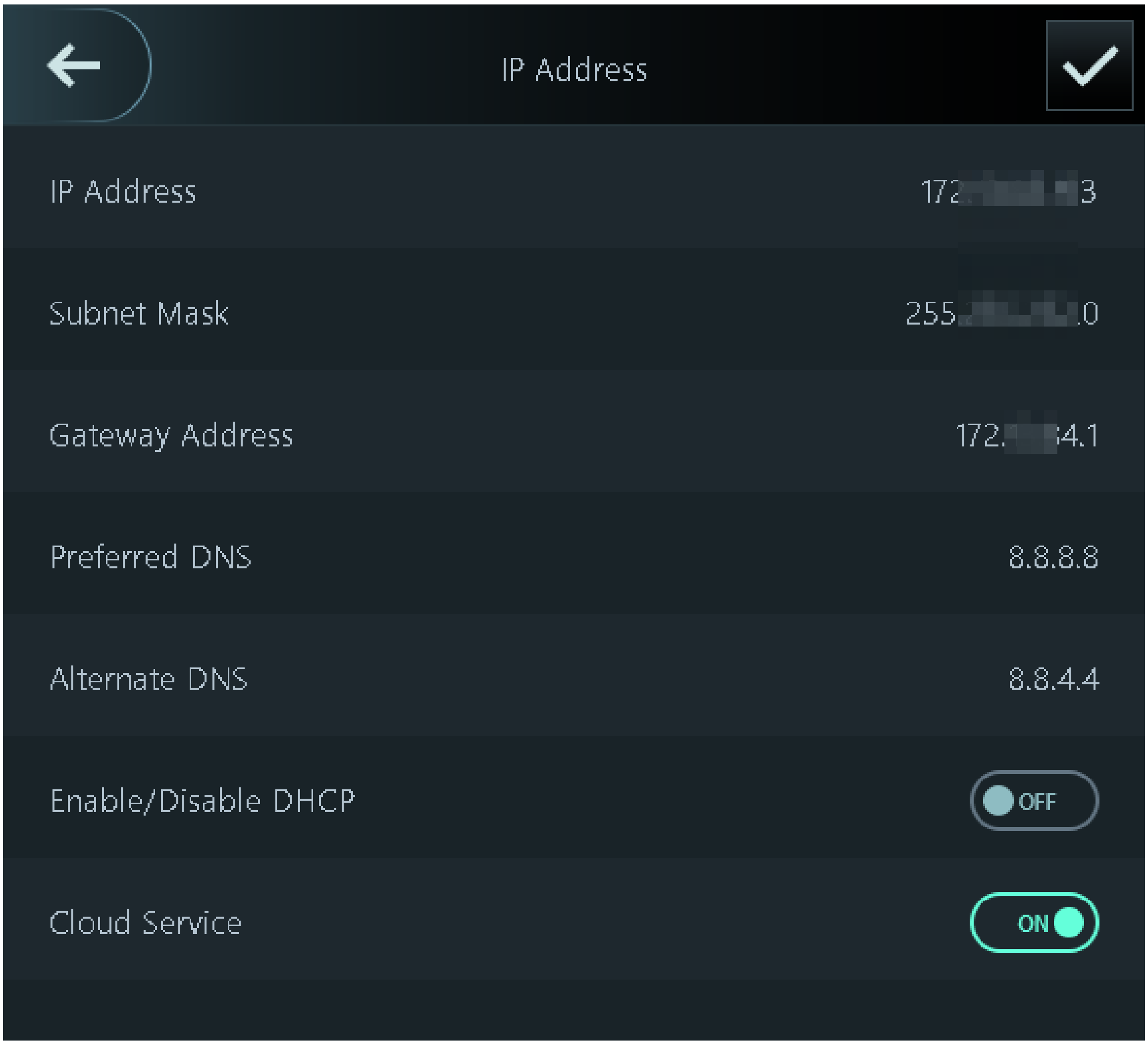
Set an IP address for the Device to connect it to the network. After that, you can log in to the webpage and the management platform to manage the Device.

Procedure

Step 1 On the **Main Menu**, select **Communication Settings** > **Network** > **IP Address**.

Step 2 Set the IP Address.

Figure 2-19 IP address configuration



IP Address

IP Address 172[redacted]3

Subnet Mask 255[redacted]0

Gateway Address 172.[redacted]4.1

Preferred DNS 8.8.8.8

Alternate DNS 8.8.4.4

Enable/Disable DHCP OFF

Cloud Service ON

Table 2-10 IP configuration parameters

Parameter	Description
IP Address/Subnet Mask/Gateway Address	The IP address, subnet mask, and gateway IP address must be on the same network segment.
Preferred DNS	The IP of the DNS server.

Parameter	Description
Alternate DNS	The alternate IP of the DNS server.
Enable/Disable DHCP	It stands for Dynamic Host Configuration Protocol. When DHCP is turned on, the Device will automatically be assigned an IP address, subnet mask, and gateway.
Cloud Service	Manage devices without applying for DDNS, set port mapping and deploy transit servers.

2.10.1.2 Configuring Active Registration

Add the device to a management platform, so that you can manage it on the platform.

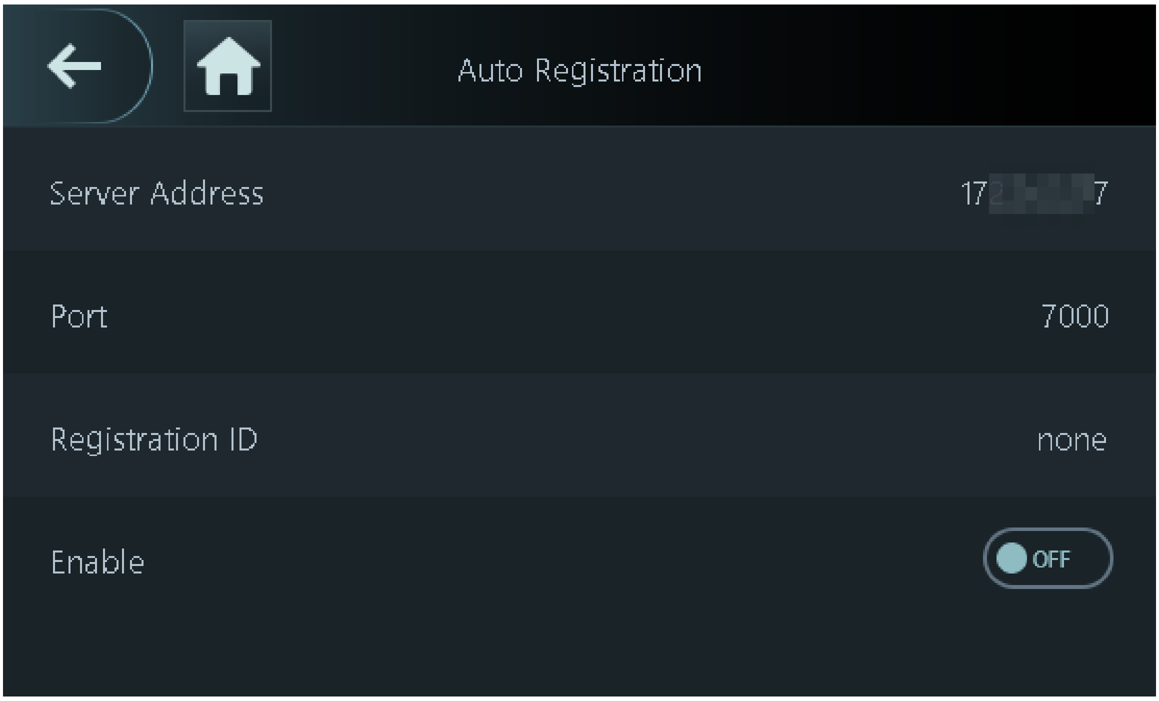
Procedure

Step 1 On the **Main Menu**, select **Communication Settings** > **Network** > **Auto Registration**.

⚠

To avoid exposing the system to security risks and data loss, control the management platform permissions.

Figure 2-20 Active registration



Server Address 17[redacted]7

Port 7000

Registration ID none

Enable OFF

Step 2 Turn on the automatic registration function and set the parameters.

Table 2-11 Auto registration

Parameter	Description
Server Address	The IP address of the management platform.
Port	The port No. of the management platform.

Parameter	Description
Registration ID	Enter the device ID (user defined). When you add the Device to the management platform, the registration ID you enter on the management platform must conform to the defined registration ID on the Device.

2.10.1.3 Configuring Wi-Fi

You can connect the Device to the network through the Wi-Fi network.

Background Information

This function is only available on select models.

Procedure

Step 1 On the **Main Menu**, select **Communication Settings** > **Network** > **Wi-Fi**.

Step 2 Turn on Wi-Fi.

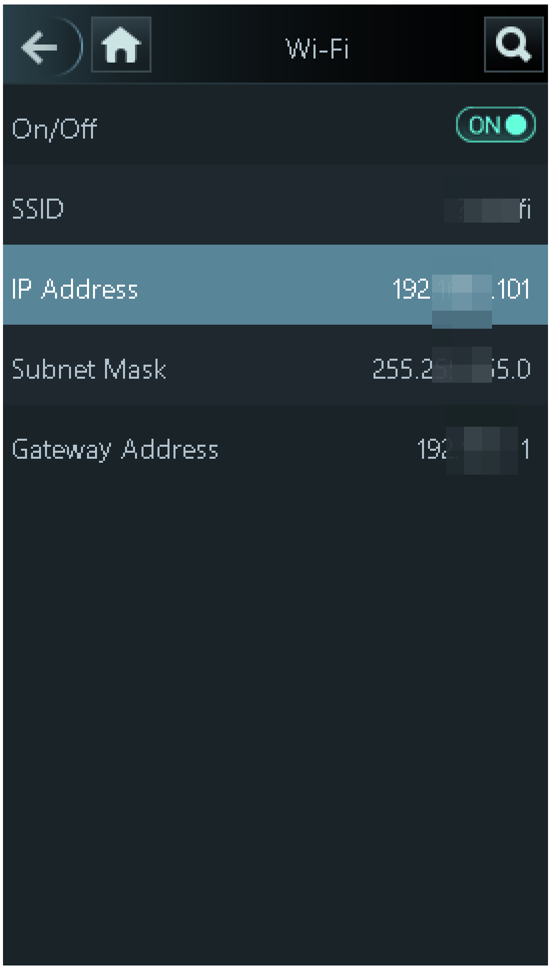
- The Wi-Fi function is only available on select models.
- Wi-Fi AP and Wi-Fi function cannot be enabled at the same time.
- After Wi-Fi is enabled, wait about 1 minutes to connect Wi-Fi.

Step 3 Tap 🔍 to search available wireless networks.

Step 4 Select a wireless network and enter the password.

If the system does not find a Wi-Fi network, tap **SSID** to enter the name of the Wi-Fi.

Figure 2-21 Connect to Wi-Fi



Wi-Fi

On/Off ON

SSID [redacted]fi

IP Address 192[redacted].101

Subnet Mask 255.2[redacted]5.0

Gateway Address 19[redacted]1

2.10.1.4 Configuring Wi-Fi AP

This function is only available on select models.

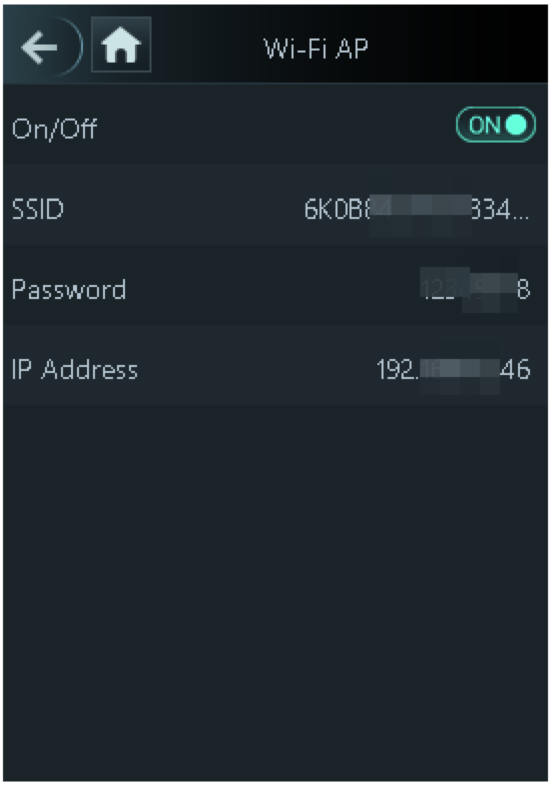
Procedure

Step 1 On the **Main Menu**, select **Communication Settings** > **Network** > **Wi-Fi AP**.

Step 2 Turn on Wi-Fi AP.

Wi-Fi AP and Wi-Fi function cannot be enabled at the same time.

Figure 2-22 Connect to Wi-Fi AP



Wi-Fi AP

On/Off ON

SSID 6K0B[redacted]334...

Password [redacted]8

IP Address 192.[redacted]46

Result

Use your computer to connect to Wi-Fi AP of the Device to access its webpage.

2.10.2 Configuring Serial Port

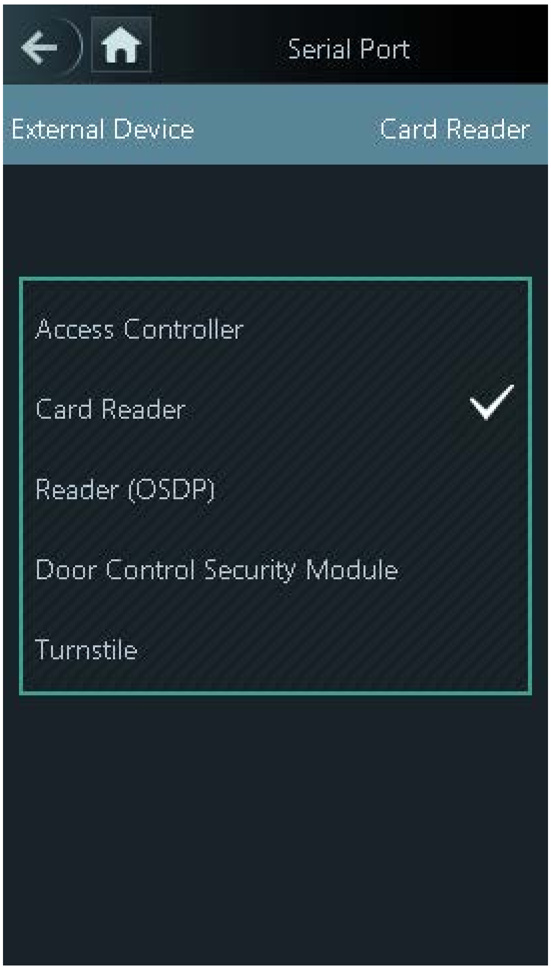
This function is only available on select models.

Procedure

Step 1 On the **Main Menu**, select **Communication Settings** > **Serial Port**.

Step 2 Select an external device.

Figure 2-23 External device type



Serial Port

External Device Card Reader

Access Controller

Card Reader ✓

Reader (OSDP)

Door Control Security Module

Turnstile

Table 2-12 Port description

External device	Description
Access Controller	The Device functions as a card reader and sends data to other external access controllers to control access. Output Data type: ● Card Number: Outputs data based on the card number when users swipe their cards to unlock doors; outputs data based on user's first card number when users use other unlock methods. ● No.: Outputs data based on the user ID.
Card Reader	The Device functions as a access controller, and connects to a external card reader.
Reader (OSDP)	The Device is connected to a card reader based on the OSDP protocol.
Door Control Security Module	After the security module is enabled, the door exit button, lock control and fire linkage of the Device become not effective, but the door exit button and lock control that connects to the security module become effective.
Turnstile	When the Device is connected to a turnstile, and the access controller board of the turnstile is connected to an external QR code module or card swiping module, the board will transmit the verification data to the turnstile.

2.10.3 Configuring Wiegand

The Device allows for both Wiegand input and output mode.

📖

This function is only available on select models.

Procedure

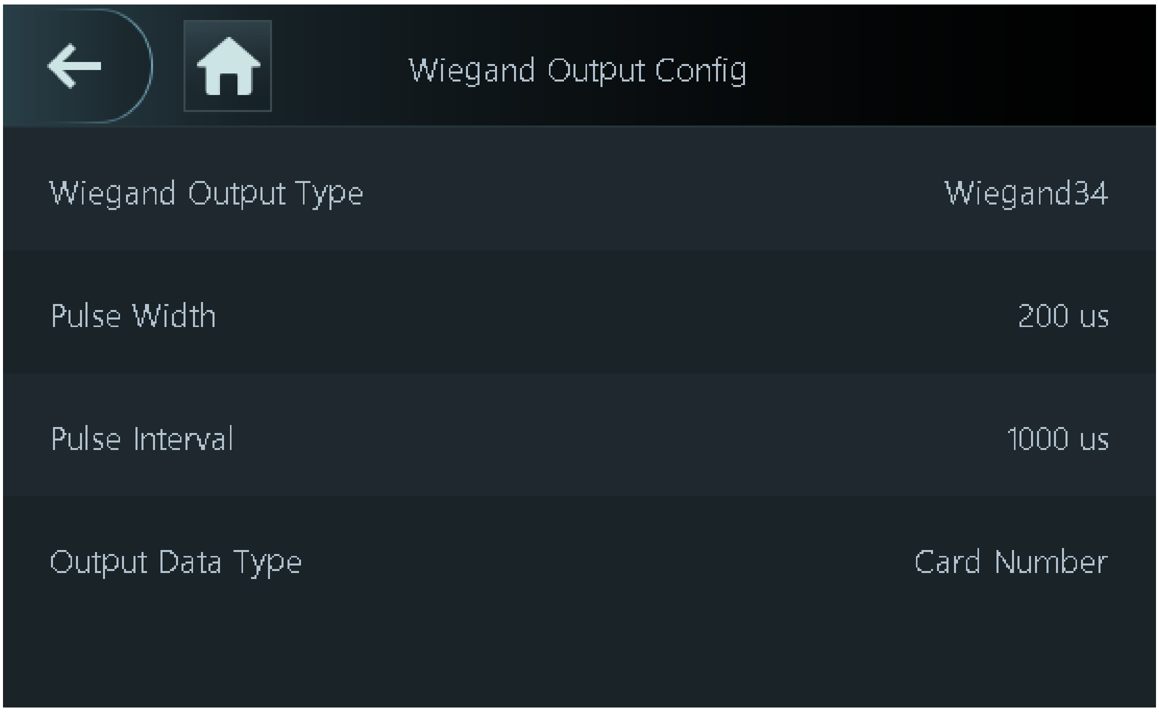
Step 1 On the webpage, select **Communication Settings** > **Wiegand**.

Step 2 Select a Wiegand.

- Select **Wiegand Input** when you connect an external card reader to the Device.

  📖

  When the Device connects to a third-party device through the Wiegand input port, and the card number read by the Device is in the reverse order from the actual card number. In this case, you can turn on **Card No. Inversion** function.
- Select **Wiegand Output** when the Device functions as a card reader, and you need to connect it to a controller or another access terminal.



Wiegand Output Config

Wiegand Output Type: Wiegand34

Pulse Width: 200 us

Pulse Interval: 1000 us

Output Data Type: Card Number

Figure 2-24 Wiegand output

Table 2-13 Description of Wiegand output

Parameter	Description
Wiegand Output Type	Select a Wiegand format to read card numbers or ID numbers. ● **Wiegand26**: Reads 3 bytes or 6 digits. ● **Wiegand34**: Reads 4 bytes or 8 digits. ● **Wiegand66**: Reads 8 bytes or 16 digits.
Pulse Width	Enter the pulse width and pulse interval of Wiegand output.
Pulse Interval	

Parameter	Description
Output Data Type	Select the type of output data. ● **No.**: The system outputs data based on the user ID. The data format is hexadecimal or decimal. ● **Card Number**: The system outputs data based on user's first card number.

2.11 System Settings

2.11.1 Configuring Time

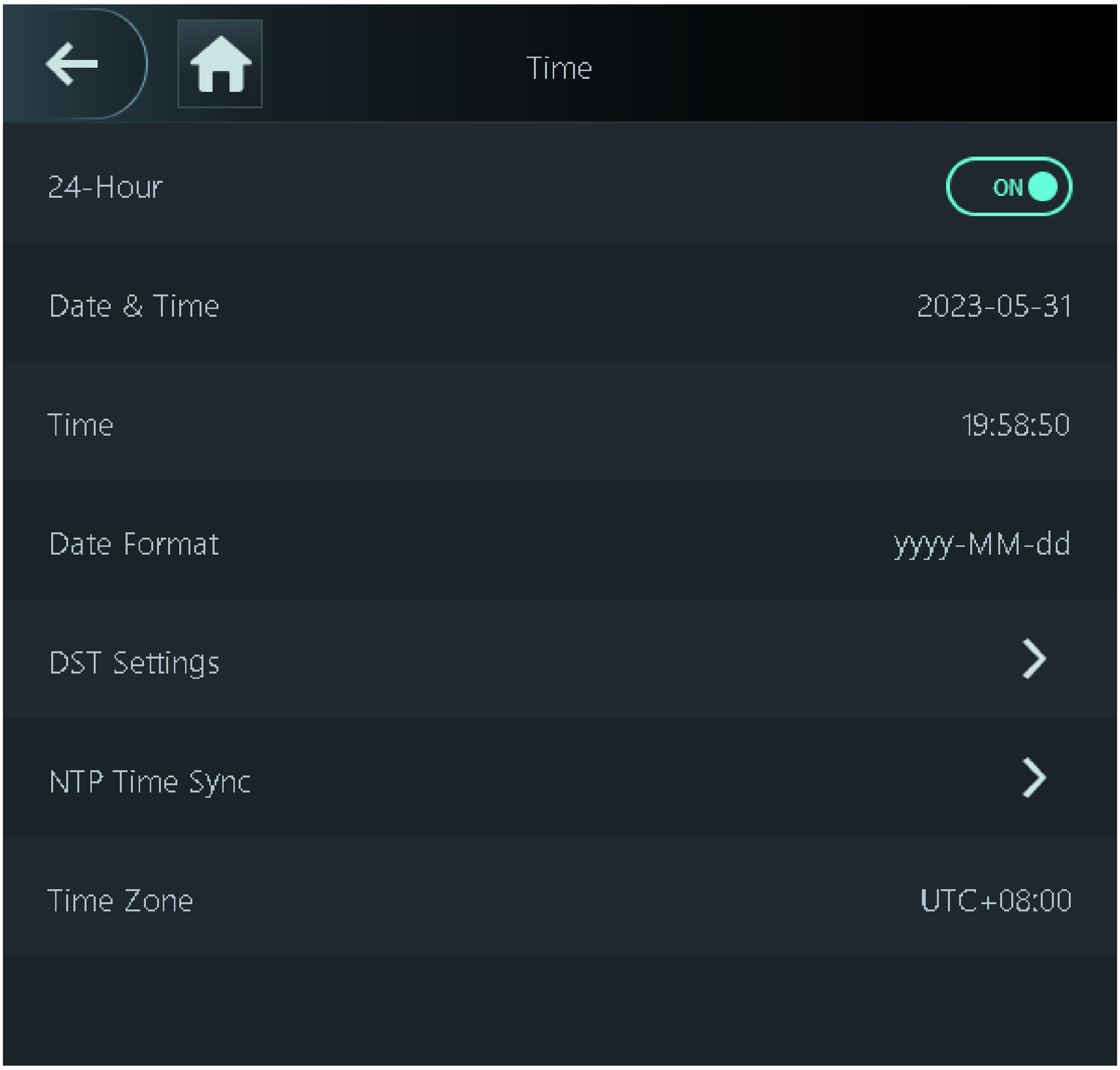
Configure system time, such as date, time, and NTP.

Procedure

Step 1 On the **Main Menu**, select **System Settings** > **Time**.

Step 2 Configure system time.

Figure 2-25 Time



Time

24-Hour ON

Date & Time 2023-05-31

Time 19:58:50

Date Format yyyy-MM-dd

DST Settings >

NTP Time Sync >

Time Zone UTC+08:00

Table 2-14 Description of time parameters

Parameter	Description
24-hour System	The time is displayed in 24-hour format.
Date & Time	Set up the date.
Time	Set up the time.
Date Format	Select a date format.
DST Setting	1. Tap **DST Setting** and enable it. 2. Select **Date** or **Week** from the **DST** Type list. 3. Enter the start time and end time. 4. Tap ✓.
NTP Time Sync	A network time protocol (NTP) server is a machine dedicated as the time sync server for all client computers. If your computer is set to sync with a time server on the network, your clock will show the same time as the server. When the administrator changes the time (for daylight savings), all client machines on the network will also be updated. 1. Tap **NTP Check**, and then enable it. 2. Configure the parameters. ● **Server Address**: Enter the IP address of the NTP server, and the Device will automatically sync time with the NTP server. ● **Port**: Enter the port of the NTP server. ● **Interval**: Enter the time synchronization interval.
Time Zone	Select the time zone.

2.11.2 Configuring Face Parameters

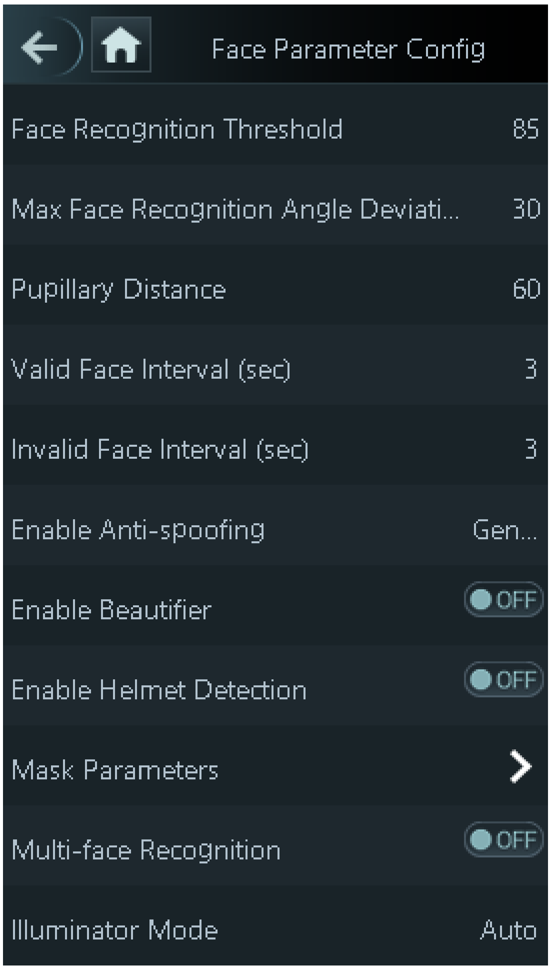
Face parameters might differ depending on the models of the Device.

Procedure

Step 1 On the main menu, select **System Settings** > **Face Parameter Config**.

Step 2 Configure the face parameters, and then tap ✓.

Figure 2-26 Face parameter (01)



Face Parameter Config

Face Recognition Threshold	85
Max Face Recognition Angle Deviati...	30
Pupillary Distance	60
Valid Face Interval (sec)	3
Invalid Face Interval (sec)	3
Enable Anti-spoofing	Gen...
Enable Beautifier	OFF
Enable Helmet Detection	OFF
Mask Parameters	>
Multi-face Recognition	OFF
Illuminator Mode	Auto

Table 2-15 Description of face parameters

Name	Description
Face Recognition Threshold	Adjust the accuracy level of face recognition. Higher threshold means higher accuracy and lower false recognition rate.
Max Face Recognition Angle Deviation	Set the largest angle that a face can be posed in for face detection. The larger the value, the larger the range for the face angle. If the angle a face is positioned in is not within the defined range, it might not be detected properly.
Pupillary Distance	A certain number of pixels are required between the eyes for recognition to be successful. The default number is 45 pixels. This number changes based on the size of the face and the distance between the face and the lens. If an adult is 1.5 meters away from the lens, the pupillary distance is usually 50 - 70 px.
Valid Face Interval (sec)	When the same face remains in front of the lens after the first successful recognition, the Device will perform recognition again for the face after a defined interval.
invalid Face Interval (sec)	When the same face remains in front of the lens after the first failed recognition, the Device will perform recognition again for the face after a defined interval.
Enable Anti-spoofing	This prevents people from being able to use photos, videos, mask and other substitutes to gain unauthorized access.
Enable Beautifier	Beautify captured face images.

Name	Description
Enable Helmet Detection	Detects safety helmets. The door will not unlock for persons that are not wearing their helmet.
Mask Parameters	● Mask mode: ◇ **Do Not Detect**: Mask is not detected during face recognition. ◇ **Mask Reminder**: Mask is detected during face recognition. If the person is not wearing a mask, the system will remind them to wear a mask, but they will still be allowed access. ◇ **No Authorization without Wearing Face Mask**: Mask is detected during face recognition. If a person is not wearing a mask, the system will remind them to wear masks, and access will be denied. ● Mask Recognition Threshold: The higher the threshold, the more accurate face recognition will be when a person is wearing a mask, and there will be a lower false recognition rate.
Multi-face Recognition	Detects 4 to 6 face images at a time. Combination unlock cannot be used with this, and the door will be unlocked when one of the people are successfully verified. The number of face images which are supported might differ depending on the model of the product.
Illuminator Mode	● Auto: The illuminator is turned on in low-light conditions. ● Disable: The illuminator is turned off all the time. This function is only available on select models.

2.11.3 Setting the Volume

You can adjust the volume of the speaker and microphone.

Procedure

Step 1 On the **Main Menu**, select **System Settings** > **Volume Settings**.

Step 2 Select **Beep Volume** or **Microphone Volume**, and then tap + or − to adjust the volume.

2.11.4 Configuring the Language

Change the language on the Device. On the **Main Menu**, select **System Settings** > **Language**, select the language for the Device.

2.11.5 Screen Settings

Configure when the display should turn off and the logout time.

Procedure

Step 1 On the **Main Menu**, select **System** > **Screen Settings**.

Step 2 Tap **Logout Time** or **Screen Off Settings**, and then tap + or − to adjust the time.

- Logout Time: The system goes back to the standby screen after a defined time of inactivity.
- Screen Off Settings: The system goes back to the standby screen and then the screen turns off after a defined time of inactivity. For example, if the logout time is set to 15 seconds, and the screen off time is set to 30 seconds, the system goes back to the standby screen after 15 seconds, and then the screen will turn off after another 15 seconds.

  The logout time must be less than the screen off time.

2.11.6 (Optional) Configuring Fingerprint Parameters

Configure fingerprint detection accuracy. The higher the value, the higher the similarity threshold and accuracy is.

Background Information

This function is only available on select models, and some supports being connected to a fingerprint extension module.

Procedure

Step 1 On the **Main Menu**, select **System Settings** > **Fingerprint Parameter Settings**.

Step 2 Tap + or − to adjust the value.

2.11.7 Restoring Factory Defaults

Procedure

Step 1 On the **Main Menu**, select **System Settings** > **Factory Defaults**.

Step 2 Restore factory defaults if necessary. Restore the factory default settings if necessary.

- **Factory Defaults**: Resets all configurations and data except for IP settings and the type of the extension module.
- **Restore to Default Settings (except for user information and logs)**: Resets all the configurations except for user information and logs.

2.11.8 Restarting the Device

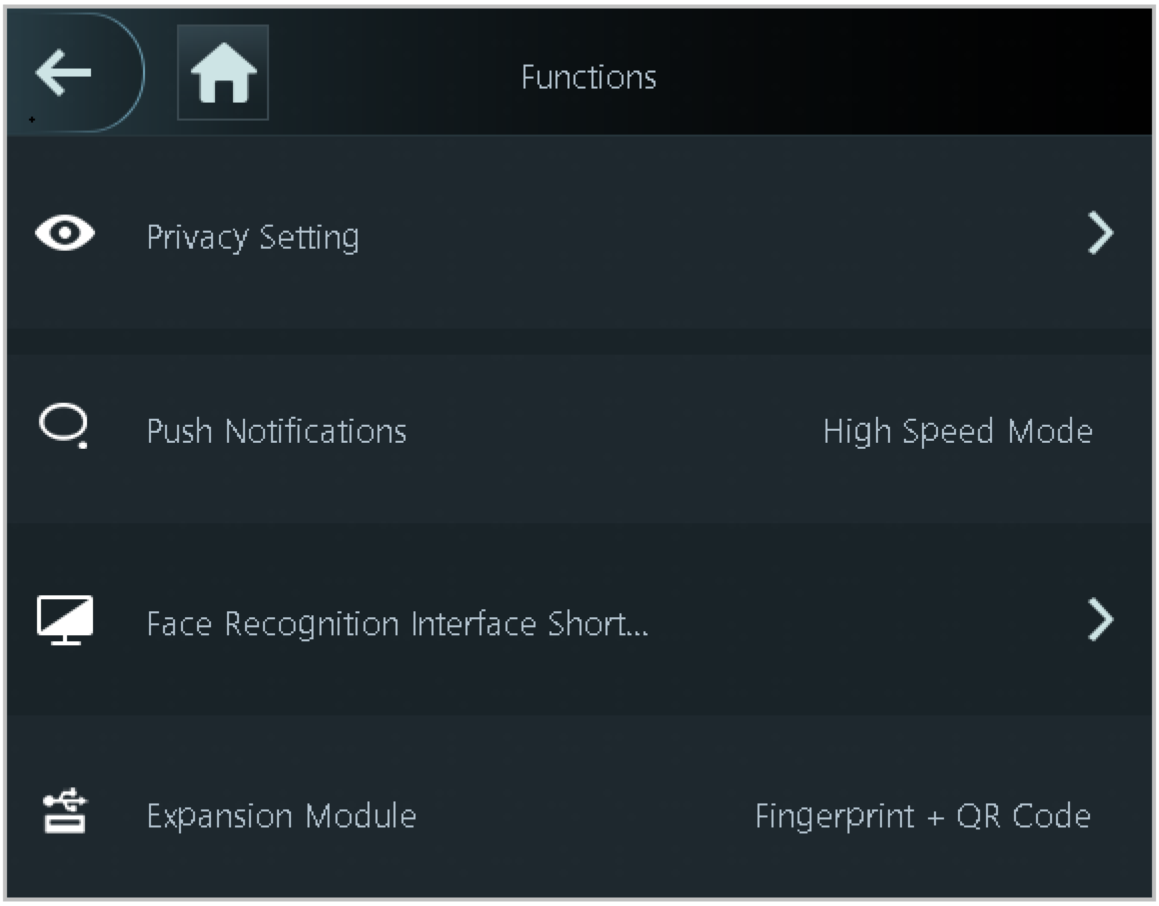
On the **Main Menu**, select **System Settings** > **Restart**, and the Device will be restarted.

2.12 Functions Settings

On the **Main Menu** screen, select **Functions**.

The functions might differ depending on the model of the product.

Figure 2-27 Functions



Push Notifications High Speed Mode

Expansion Module Fingerprint + QR Code

Table 2-16 Function description

Parameter	Description
Private Setting	● Password Reset: The password can be reset when you turn on this function. ● Enable HTTPS: Hypertext Transfer Protocol Secure (HTTPS) is a protocol for secure communication over a computer network. When HTTPS is enabled, HTTPS will be used to access CGI commands; otherwise HTTP will be used. When HTTPS is enabled, the Device will automatically restart. ● Enable CGI: Common Gateway Interface (CGI) offers a standard protocol for web servers to execute programs similar to how console applications run on a server that dynamically generates webpage. The CGI is enabled by default. ● Enable SSH: Secure Shell (SSH) is a cryptographic network protocol for operating network services securely over an unsecured network. The data transmitted will be encrypted after this function is enabled. ● Fingerprint Image: The fingerprint image is displayed when you unlock through fingerprint. This function is only available on select models. ● Capture: Face images will be captured automatically when people unlock the door. ● Clear All Snapshots: Delete all automatically captured photos.
Push Notifications	Displays the notification on the screen when a person is verifying their identity on the Device. ● High Speed Mode: The system prompts **Successfully verified** or **Not authorized** on the screen. ● Simple Mode: Displays user ID, name and verification time after access is granted, and displays **Not authorized** and the authorization time after access is denied. ● Standard: Displays the user's registered face image, user ID, name and verification time after access is granted, and displays **Not authorized** and the verification time after access is denied. ● Contrast Mode: Displays the captured face image and a registered face image of a user, user ID, name and authorization time after access is granted, and displays **Not authorized** after access is denied.

Parameter	Description
Face Recognition Interface Shortcut	Select identity verification methods on the standby screen. ● Password: It's icon is displayed on the standby screen. ● QR code: It's icon is displayed on the standby screen. This function is only available on select models. ● Doorbell: It's icon is displayed on the standby screen. ◇ Local Device Ringer: Tap the ring bell icon on the standby screen, Device will ring. ◇ Ringtone Config: Select a ringtone ◇ Ringtone Time (sec): Set ring time (1-30 seconds). The default value is 3. ◇ Alarm: Tap the ring bell icon, and the external alarm device rings. This function is only available on select models. ● Call: It's icon is displayed on the standby screen. ● Call Type: ◇ Call Room: Tap the call icon on the standby mode and enter the room number to make a call. ◇ Call Management Center: Tap the call icon on the standby mode, and then call the management center. ◇ Custom call room: Tap the call icon on the standby screen to call the pre-defined room. You can call DMSS only in this call type. ● SIP Server: You can turn on SIP to set the Device to SIP server.
Expansion Module	Select an expansion module, and the Device will restart. ● is displayed on the right corner on the standby screen, which means it was successfully set. ● is displayed on the right corner on the standby screen, which means setup failed. ● Expansion module is only available on select models. ● Expansion module does not support hot swapping. ● The configuration for the expansion module remains unchanged even after the system is restored to its factory settings.

2.13 USB Management

You can use a USB to update the Device, and export or import user information or attendance records through USB.

- Make sure that a USB is inserted to the Device before you export data or update the system. To avoid failure, do not pull out the USB or perform any operation of the Device during the process.
- You can use a USB to export the information from an access controller to another access controller. Face images are not allowed to be imported through USB.
- Importing/exporting attendance records is only available on select models.

2.13.1 Exporting to USB

You can export data from the Device to a USB. The exported data is encrypted and cannot be edited.

Procedure

Step 1 On the **Main Menu**, select **USB Management** > **USB Export**.

Step 2 Select the data type you want to export, and then tap **OK**.

- When the data is exported in Excel, it can be edited.
- The USB disk supports the format in FAT32, and the storage capacity is 4 GB—128 GB. Personnel information, facial features, card data, fingerprint data are encrypted when exporting.

2.13.2 Importing from USB

You can import data from USB to the Device.

Procedure

Step 1 On the **Main Menu**, select **USB Management** > **USB Import**.

Step 2 Select the data type that you want to export, and then tap **OK**.

2.13.3 Updating the System

Update the system of the Device through USB.

Procedure

Step 1 Rename the update file to "update.bin", put it in the root directory of the USB, and then insert the USB to the Device.

Step 2 On the **Main Menu**, select **USB Management** > **USB Update**.

Step 3 Tap **OK**.

The Device will restart when the updating completes.

Do not power off the Device during the update.

2.14 Record Management

On the main menu, select **Record Management** > **Search for Unlock Records**. The unlock records are displayed. You can search for record by user ID.

2.15 System Information

You can view data capacity and device version.

2.15.1 Viewing Data Capacity

On the **Main Menu**, select **System Info** > **Data Capacity**, you can view storage capacity of each data type.

2.15.2 Viewing Device Version

On the **Main Menu**, select **System Info** > **Device Version**, you can view the device version, such as serial No., software version and more.

3 Web Operations

On the webpage, you can also configure and update the Device.

📖

Web configurations differ depending on models of the Device.

3.1 Initialization

Initialize the Device when you log in to the webpage for the first time or after the Device is restored to the factory defaults.

Prerequisites

Make sure that the computer used to log in to the webpage is on the same LAN as the Device.

Procedure

Step 1 Open a browser, go to the IP address (the default address is 192.168.1.108) of the Device.

📖

We recommend you use the latest version of Chrome or Firefox.

Step 2 Select a language on Device.

Step 3 Set the password and email address according to the screen instructions.

📖

- The password must consist of 8 to 32 non-blank characters and contain at least two types of the following characters: upper case, lower case, numbers, and special characters (excluding ' " ; : &). Set a high-security password by following the password strength prompt.
- Keep the password safe after initialization and change the password regularly to improve security.

3.2 Logging In

Procedure

Step 1 Open a browser, enter the IP address of the Device in the **Address** bar, and press the Enter key.

Step 2 Enter the user name and password.

📖

- The default administrator name is admin, and the password is the one you set up during initialization. We recommend you change the administrator password regularly to increase security.
- If you forget the administrator login password, you can click **Forget password?** For details,

Step 3 Click **Login**.

3.3 Resetting the Password

Reset the password through the linked e-mail when you forget the admin password.

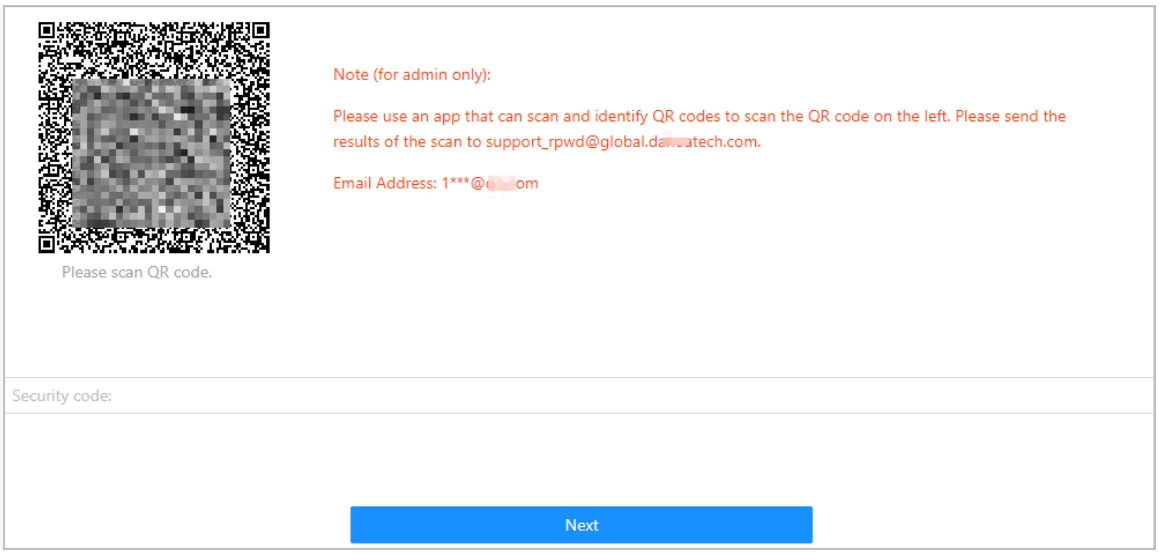
Procedure

Step 1 On the login page, click **Forgot password**.

Step 2 Read the on-screen prompt carefully, and then click **OK**.

Step 3 Scan the QR code, and you will receive a security code.

Figure 3-1 Reset password



Please scan QR code.

Note (for admin only):

Please use an app that can scan and identify QR codes to scan the QR code on the left. Please send the results of the scan to support_rpwd@global.da[redacted]atech.com.

Email Address: 1***@[redacted]om

Security code:

- Up to two security codes will be generated when the same QR code is scanned. If the security code becomes invalid, refresh the QR code and scan again.
- After you scan the QR code, you will receive a security code in your linked e-mail address. Use the security code within 24 hours after you receive it. Otherwise, it will become invalid.
- If the wrong security code is entered 5 times in a row, the administrator account will be frozen for 5 minutes.

Step 4 Enter the security code.

Step 5 Click **Next**.

Step 6 Reset and confirm the password.

The password should consist of 8 to 32 non-blank characters and contain at least two of the following types of characters: upper case, lower case, number, and special character (excluding ' " ; : &).

Step 7 Click **OK**.

3.4 Home Page

The home page is displayed after you successfully log in.

Figure 3-2 Home page

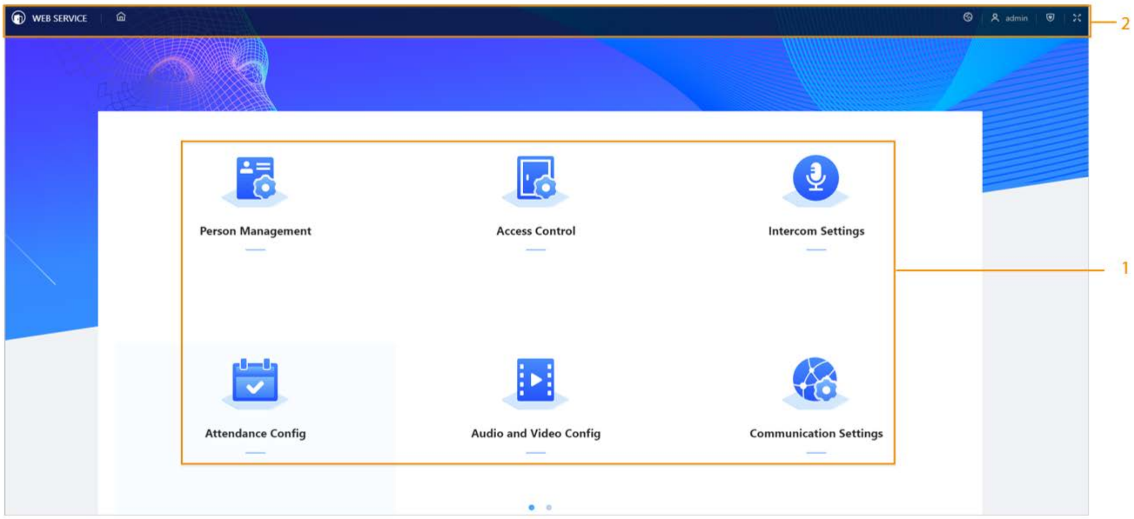


Table 3-1 Home page description

No.	Description
1	Main menu.
2	● ⌂: Enter the home page. ● ⛶: Display in full screen. ● 🛡: Enter the **Security** page. ● admin: Log out or restart the device. ● 🌐: Select a language on the device.

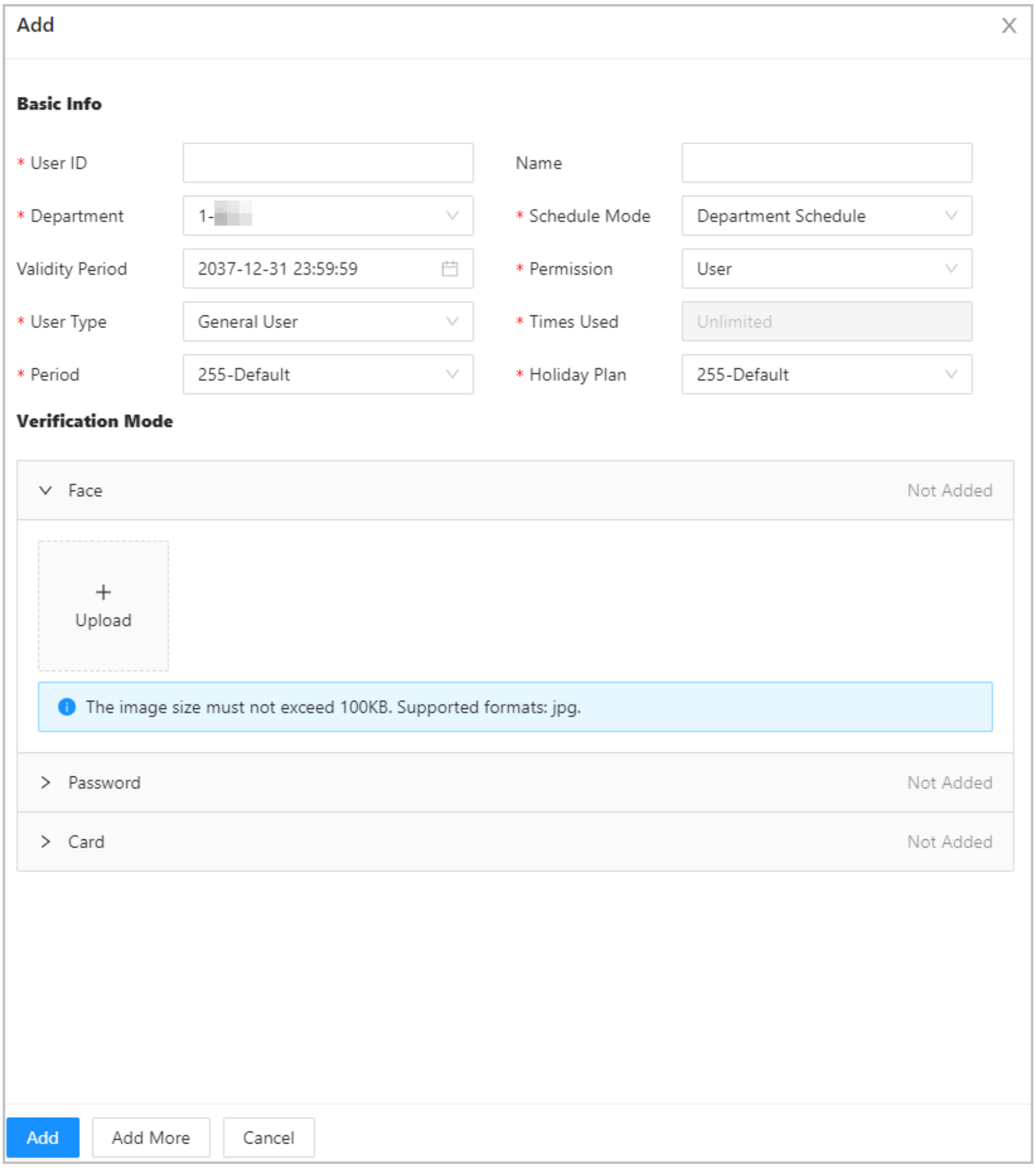
3.5 Person Management

Procedure

Step 1 On the home page, select **Person Management**, and then click **Add**.

Step 2 Configure user information.

Figure 3-3 Add users



Add

Basic Info

* User ID:

Name:

* Department: 1-[redacted]

* Schedule Mode: Department Schedule

Validity Period: 2037-12-31 23:59:59

* Permission: User

* User Type: General User

* Times Used: Unlimited

* Period: 255-Default

* Holiday Plan: 255-Default

Verification Mode

Face — Not Added

Upload

The image size must not exceed 100KB. Supported formats: jpg.

Password — Not Added

Card — Not Added

Table 3-2 Parameters description

Parameter	Description
User ID	The User ID. is like employee ID, which can be numbers, letters, and their combinations, and the maximum length of the number. is 30 characters.
Name	The name can have up to 32 characters (including numbers, symbols, and letters).
Department	Add users to a department. If a department schedule is

Parameter	Description
Schedule Mode	assigned to the person, they will follow the established department schedule. For how to create department, see "2.9.1 Configuring Departments". ● Department Schedule: Assign department schedule to the user. For details, see "2.9.4 Configuring Work Schedules". ● Personal Schedule: Assign personal schedule to the user. For details, see "2.9.4 Configuring Work Schedules". ◇ This function is only available on select models. ◇ If you set the schedule mode to department schedule here, the personal schedule you have configured for the user in **Attendance** > **Schedule Config** > **Personal Schedule** is invalid.
Validity Period	Set a date on which the door access and attendance permissions of the person will be expired.
Permission	● **User**: Users only have door access or time attendance permissions. ● **Admin**: Administrators can configure the Device besides door access and attendance permissions.
User Type	● **General User**: General users can unlock the door. ● **Blocklist User**: When users in the blocklist unlock the door, service personnel will receive a notification. ● **Guest User**: Guests can unlock the door within a defined period or for certain amount of times. After the defined period expires or the unlocking times runs out, they cannot unlock the door. ● **Patrol User**: Patrol users can take attendance on the Device, but they do not have door permissions. ● **VIP User**: When VIP unlock the door, service personnel will receive a notice. ● **Other User**: When they unlock the door, the door will stay unlocked for 5 more seconds. ● Custom User 1/Custom User 2: Same with general users.
Time Used	Set an unlock limit for guest users. After the unlock times run out, they cannot unlock the door.
Period	People can unlock the door or take attendance during the defined period.
Holiday Plan	People can unlock the door or take attendance during the defined period.

Parameter	Description
Face	Click **Upload** to upload a face image. Each person can only add up to 2 face images. You can view or delete the face image after you upload it. The face image is in jpg format and must be less than 100 KB.
Card	This function is only available on select models. ● Enter the card number manually. 1. Click **Add**. 2. Enter the card number, and then click **Add**. ● Read the number automatically through a card reader. 1. Make sure that the card reader is connected to your computer. 2. Click **Read Card**, and then swipe cards on the card reader. A 60-second countdown is displayed to remind you to swipe cards, and the system will read the card number automatically. If the 60-second countdown expires, click **Read Card** again to start a new countdown. 3. Click **Add**. A user can register up to 5 cards at most. Enter your card number or swipe your card, and then the card information will be read by the access controller. You can enable the **Duress Card** function. An alarm will be triggered if a duress card is used to unlock the door. ● ▣: Set duress card. ● ▣: Change card number. One user can only set one duress card.
Password	Enter the user password. The maximum length of the password is 8 digits. The duress password is the unlock password + 1. For example, if the user password is 12345, the duress password will be 12346. A duress alarm will be triggered when a duress password is used to unlock the door.

Parameter	Description
FP	Register fingerprints. A user can register up to 3 fingerprints, and you can set a fingerprint to the duress fingerprint. An alarm will be triggered when the duress fingerprint is used to unlock the door. ● Fingerprint function is only available on select models. ● We do not recommend you set the first fingerprint as the duress fingerprint. ● One user can only sets one duress fingerprint. ● Fingerprint function is available if the Device supports connecting a fingerprint module.

Step 3 Click **OK**.

Related Operations

- Import user information: Click **Export Template**, and download the template and enter user information in it. Place face images and the template in the same filepath, and then click **Import User Info** to import the folder.

  Up to 10,000 users can be imported at a time.
- Clear: Clear all users.
- Refresh: Refresh the user list.

3.6 Configuring Access Control

3.6.1 Configuring Access Control Parameters

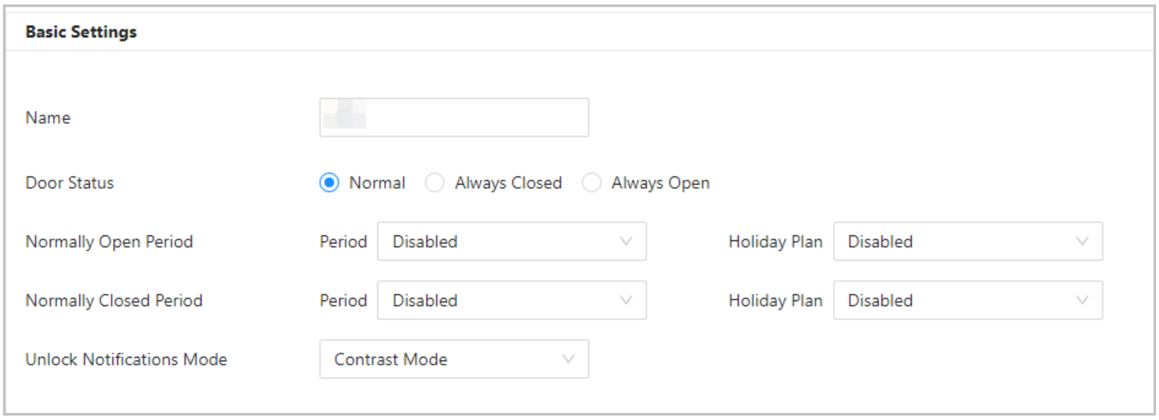
3.6.1.1 Configuring Basic Parameters

Procedure

Step 1 Select **Access Control** > **Access Control Parameters**.

Step 2 In **Basic Settings**, configure basic parameters for the access control.

Figure 3-4 Basic parameters



Basic Settings

Name			
Door Status	● Normal ○ Always Closed ○ Always Open		
Normally Open Period	Period: Disabled	Holiday Plan: Disabled	
Normally Closed Period	Period: Disabled	Holiday Plan: Disabled	
Unlock Notifications Mode	Contrast Mode		

Table 3-3 Basic parameters description

Parameter	Description
Name	The name of the door.
Door Status	Set the door status. ● Normal: The door will be unlocked and locked according to your settings. ● Always Open: The door remains unlocked all the time. ● Always Closed: The door remains locked all the time.
Normally Open Period	When you select **Normal**, you can select a time template from the drop-down list. The door remains open or closed during the defined time. For details on how to configure periods and holiday plans, see "3.6.7 Configuring Schedules". ● When normally open period conflicts with normally closed period, normally open period takes priority over normally closed period. ● When period conflict with holiday plan, holiday plans takes priority over periods.
Normally Closed Period	
Unlock Notification	Displays the notification on the screen when a person verifying their identity on the Device. ● High Speed Mode: The system prompts **Successfully verified** or **Not authorized** on the screen. ● Simple Mode: Displays user ID, name and verification time after access granted; displays **Not authorized** and authorization time after access denied. ● Standard: Displays user's registered face image, user ID, name and verification time after access granted; displays **Not authorized** and verification time after access denied. ● Contrast Mode: Displays the captured face image and a registered face image of a user, user ID, name and authorization time after access granted; displays **Not authorized** and authorization time after access denied.

Step 3 Click **Apply**.

3.6.1.2 Configuring Unlock Methods

You can use multiple unlock methods to unlock the door, such as fingerprint, card, and password. You can also combine them to create your own personal unlock method.

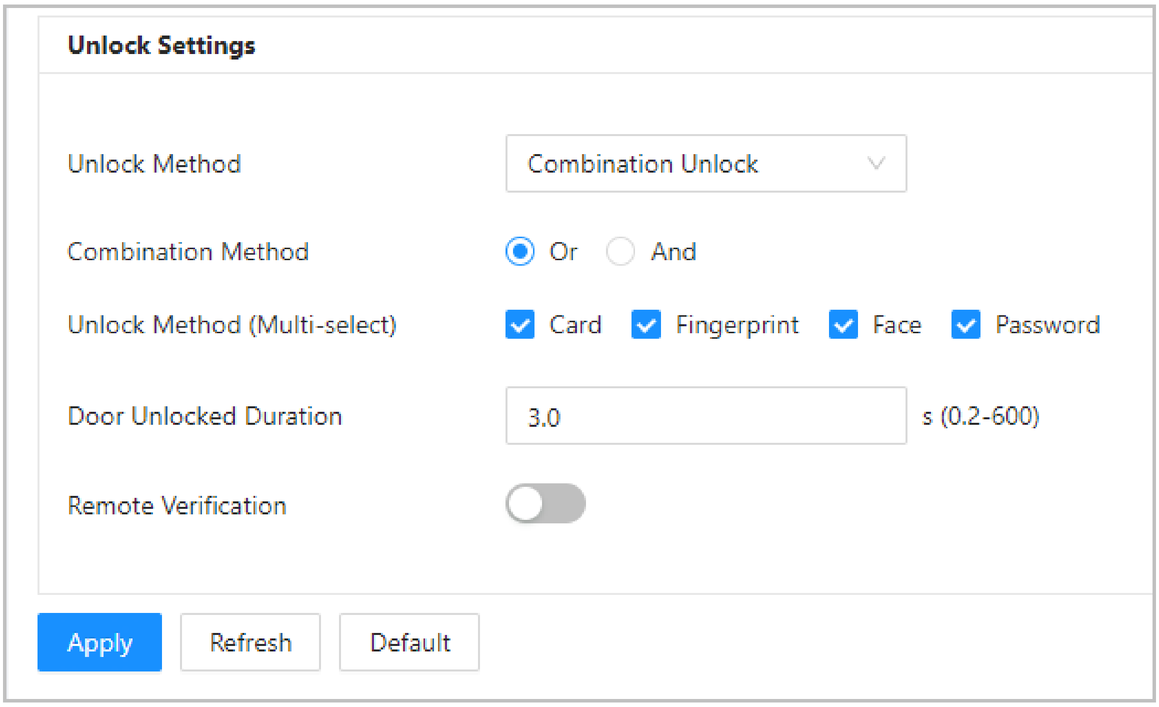
Procedure

Step 1 Select **Access Control** > **Access Control Parameters**.

Step 2 In **Unlock Settings**, select an unlock mode.

- Combination unlock
  1. Select **Combination Unlock** from the **Unlock Mode** list.
  2. Select **Or** or **And**.
     - Or: Use one of the selected unlock methods to open the door.
     - And: Use all the selected unlock methods to open the door.
  3. Select unlock methods, and then configure other parameters.

Figure 3-5 Unlock settings



Unlock Settings

Unlock Method: Combination Unlock

Combination Method: ● Or ○ And

Unlock Method (Multi-select): ☑ Card ☑ Fingerprint ☑ Face ☑ Password

Door Unlocked Duration: 3.0 s (0.2-600)

Remote Verification

Table 3-4 Unlock settings description

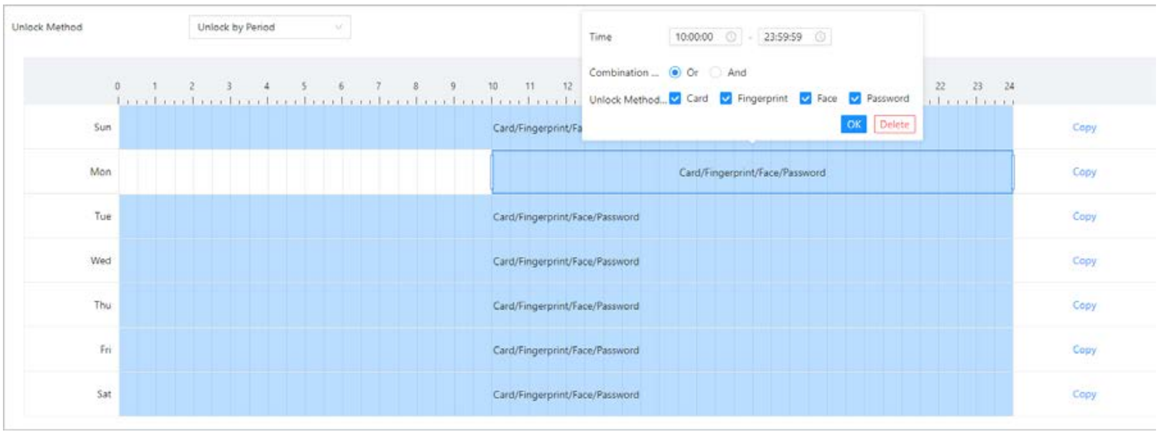
Parameter	Description
Unlock Method (Multi-select)	Unlock methods might differ depending on the models of product.
Door Unlock Duration	After a person is granted access, the door will remain unlocked for a defined time for them to pass through. It ranges from 0.2 s to 600 seconds.
Unlock Timeout	When the door detector and the unlock timeout alarm are enabled, a timeout alarm will be triggered if the door remains unlocked longer than the defined unlock time.
Remote Verification	Open the door remotely.

- Unlock by period
  1. In the **Unlock Mode** list, select **Unlock by Period**.
  2. Drag the slider to adjust time period for each day.

You can also click **Copy** to apply the configured time period to other days.

3. Select an unlock method for the time period, and then configure other parameters.

Figure 3-6 Unlock by period



Unlock Method: Unlock by Period

Time: 10:00:00 - 23:59:59

Combination ...: ● Or ○ And

Unlock Method...: ☑ Card ☑ Fingerprint ☑ Face ☑ Password

0 1 2 3 4 5 6 7 8 9 10 11 12 22 23 24
Sun
Mon
Tue
Wed
Thu
Fri
Sat
Card/Fingerprint/Fa
Card/Fingerprint/Face/Password
Card/Fingerprint/Face/Password
Card/Fingerprint/Face/Password
Card/Fingerprint/Face/Password
Card/Fingerprint/Face/Password
Card/Fingerprint/Face/Password
Copy
OK
Delete

- Unlock by multiple users.

1. In the **Unlock Mode** list, select **Unlock by multiple users**.
2. Click **Add** to add groups.
3. Select unlock method, valid number and user list.
   - ◇ If only one group is added, the door unlocks only after the number of people in the group who grant access equals the defined valid number.
   - ◇ If more than one groups are added, the door unlocks only after the number of people in each group who grant access equals the defined valid number.

- ◇ You can add up to 4 groups.
- ◇ The valid number indicates the number of people in each group who need to verify their identities on the Device before the door unlocks. For example, if the valid number is set to 3 for a group, any 3 people in the group need to verify their identities to unlock the door.

Step 3 Click **Apply**.

3.6.2 Configuring Alarms

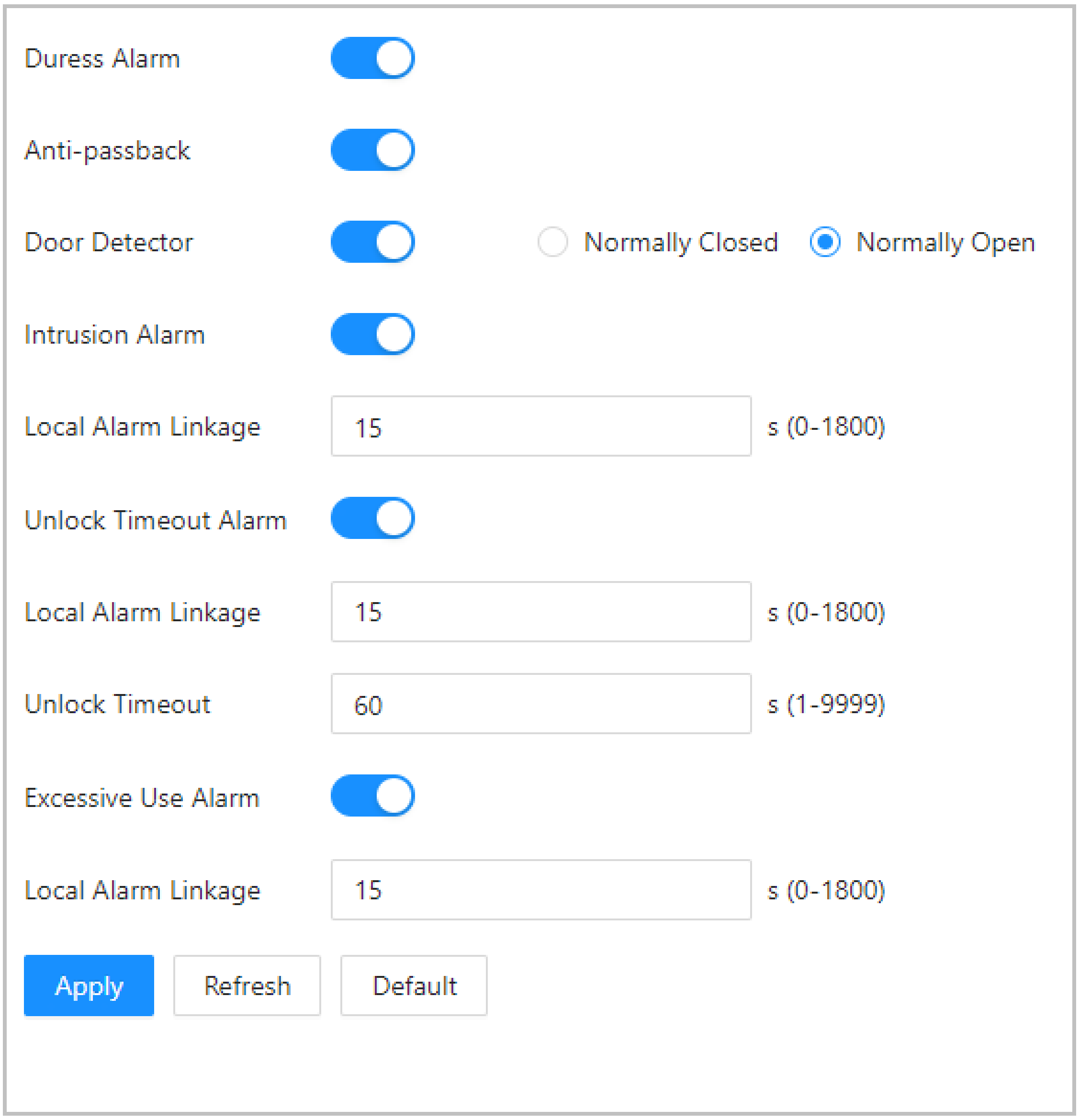
An alarm will be triggered when an abnormal access event occurs.

Procedure

Step 1 Select **Access Control** > **Alarm** > **Alarm**.

Step 2 Configure alarm parameters.

Figure 3-7 Alarm



Duress Alarm: On

Anti-passback: On

Door Detector: On ○ Normally Closed ● Normally Open

Intrusion Alarm: On

Local Alarm Linkage: 15 s (0-1800)

Unlock Timeout Alarm: On

Local Alarm Linkage: 15 s (0-1800)

Unlock Timeout: 60 s (1-9999)

Excessive Use Alarm: On

Local Alarm Linkage: 15 s (0-1800)

Table 3-5 Description of alarm parameters

Parameter	Description
Duress Alarm	An alarm will be triggered when a duress card, duress password or duress fingerprint is used to unlock the door.

Parameter	Description
Anti-passback	Users need to verify their identities both for entry and exit; otherwise an alarm will be triggered. It helps prevents a card holder from passing an access card back to another person to gain entry. When anti-passback is enabled, the card holder must leave the secured area through an exit reader before system will grant another entry. ● If a person enters after authorization and exits without authorization, an alarm will be triggered when they attempt to enter again, and access is denied at the same time. ● If a person enters without authorization and exits after authorization, an alarm will be triggered when they attempt to enter again, and access is denied at the same time. If the Device can only connect one lock, verifying on the Device means entry direction, and verifying on the external card reader means exit direction by default. You can modify the setting on the management platform.
Door Detector	With the door detector wired to your device, alarm can be triggered when doors are opened or closed abnormally. The door detector includes 2 types, including NC detector and NO detector. ● Normally Closed: The sensor is in a shorted position when the door or window is closed. ● Normally Open: An open circuit is created when the window or door is actually closed.
Local Alarm Linkage	If the door is opened abnormally, an intrusion alarm will be triggered and last for a defined time. The door detector and intrusion need to be enabled at the same time.
Intrusion	
Door Timeout Duration	When the door remains unlocked for longer than the defined timeout duration, the door timeout alarm will be triggered and last for the defined time. The door detector and door timed out function need to be enabled at the same time.
Local Alarm Linkage	
Door Timed Out	
Local Alarm Linkage	If the wrong password or card is used 5 times in a row within 60 seconds, the alarm for excessive use of illegal card will be triggered and lasts for a defined time.
Excessive Use Alarm	

Step 3 Click **Apply**.

3.6.3 Configuring Alarm linkages (Optional)

You can configure alarm linkages.

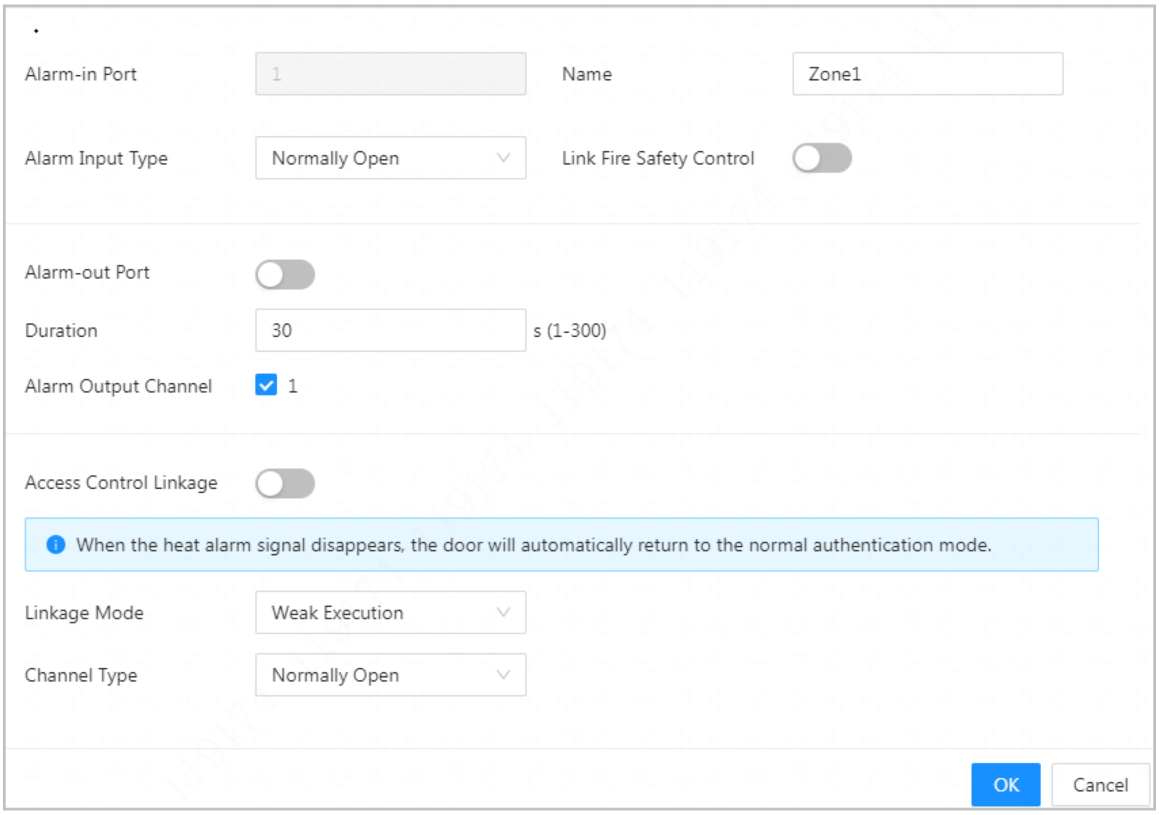
Procedure

Step 1 Select **Access Control** > **Alarm** > **Alarm Linkage Setting**.

- If the Device is added to a management platform, the alarm settings will be synchronized to the platform.
- This function is only available on models that have alarm input and alarm output ports.
- The number of alarm input and output ports differs depending on models of the product.

Step 2 Click ✎ to configure alarm.

Figure 3-8 Alarm linkage



Alarm-in Port	1	Name	Zone1
Alarm Input Type	Normally Open	Link Fire Safety Control	○
Alarm-out Port	○		
Duration	30	s (1-300)	
Alarm Output Channel	☑ 1		
Access Control Linkage	○		

When the heat alarm signal disappears, the door will automatically return to the normal authentication mode.

Linkage Mode	Weak Execution
Channel Type	Normally Open

Step 3 Create a name for the alarm zone.

Step 4 Enable **Link Fire Safety Control**, and select a type for the alarm input device.

- Normally Closed: The alarm input is in a normally closed (NC) circuit state when the alarm has not been tripped. Opening a normally closed circuit sets off the alarm.
- Normally Open: The alarm input device is in a normally open (NO) circuit state when the alarm has not been tripped. Closing the circuit sets off the alarm.

Step 5 If you want to link access control when fire alarm is triggered, enable **Access Control Linkage**.

This function takes effect only after **Link Fire Safety Control** is enabled.

Step 6 Select a linkage mode.

- Strong Execution: When the fire alarm signal disappears, the door remains the current status. Please manually changes to its previous door status settings if you want to.
- Weak Execution: When the fire alarm signal disappears, the door automatically returns to its previous door status.

Step 7 Select a channel type.

- Normally Open: The door automatically opens when fire alarm is triggered.
- Normally Closed: The door automatically closes when fire alarm is triggered.

Step 8 Click **OK**.

3.6.4 Configuring Face Detection

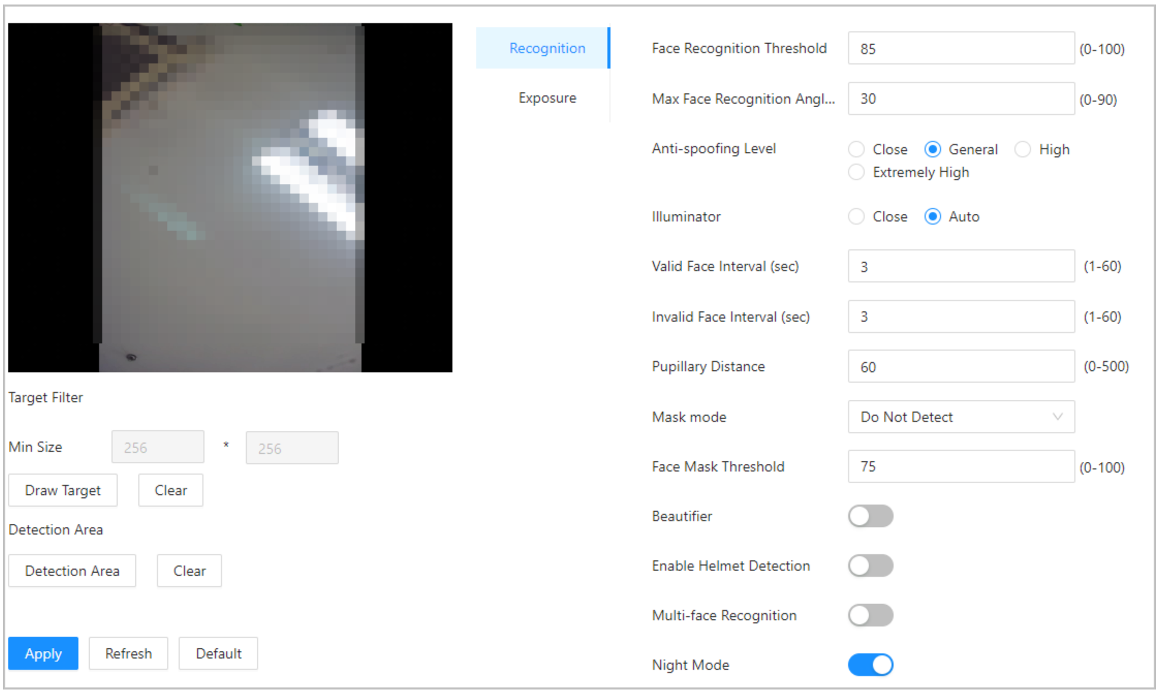
Configure face detection parameters. Face parameters might differ depending on models of the product.

Procedure

Step 1 Log in to the webpage.

Step 2 Select **Access Control** > **Face Detection**.

Figure 3-9 Face detection parameters



Min Size 256 * 256

Face Recognition Threshold 85 (0-100)

Max Face Recognition Angl... 30 (0-90)

Anti-spoofing Level ○ Close ● General ○ High ○ Extremely High

Illuminator ○ Close ● Auto

Valid Face Interval (sec) 3 (1-60)

Invalid Face Interval (sec) 3 (1-60)

Pupillary Distance 60 (0-500)

Mask mode Do Not Detect

Face Mask Threshold 75 (0-100)

Beautifier ○

Enable Helmet Detection ○

Multi-face Recognition ○

Night Mode ●

Step 3 Configure the parameters.

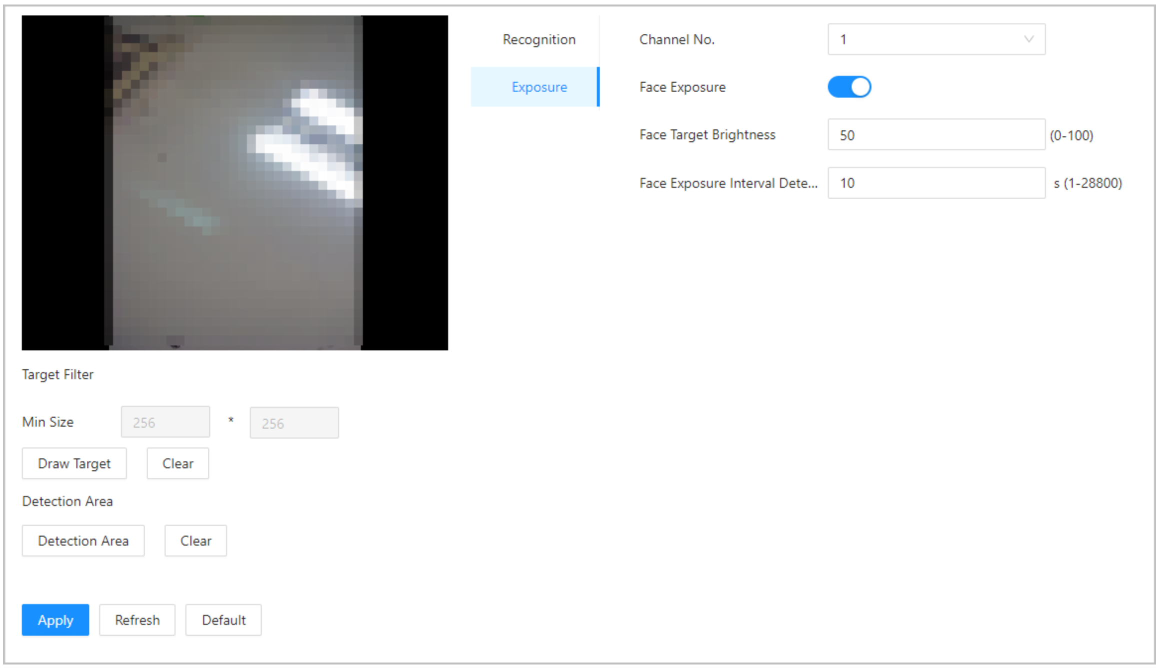
Table 3-6 Description of face parameters

Name	Description
Face Recognition Threshold	Adjust the accuracy level of face recognition. Higher threshold means higher accuracy and lower false recognition rate.
Max Face Recognition Angle Deviation	Set the largest angle that a face can be posed in for face detection. The larger the value, the larger the range for the face angle. If the angle a face is positioned in is not within the defined range, it might not be detected properly.
Anti-spoofing Level	This prevents people from being able to use photos, videos, mask and other substitutes to gain unauthorized access.

Name	Description
Illuminator	● Auto: The illuminator is turned on in low-light conditions. ● Disable: The illuminator is turned off all the time. 📖 This function is only available on select models.
Valid Face Interval (sec)	When the same face remains in front of the lens after the first successful recognition, the Device will perform recognition again for the face after a defined interval.
Invalid Face Interval (sec)	When the same face remains in front of the lens after the first failed recognition, the Device will perform recognition again for the face after a defined interval.
Pupillary Distance	A certain number of pixels are required between the eyes for recognition to be successful. The default number is 45 pixels. This number changes based on the size of the face and the distance between the face and the lens. If an adult is 1.5 meters away from the lens, the pupillary distance is usually 50 - 70 px.
Mask Mode	● **Do Not Detect**: Mask is not detected during face recognition. ● **Mask Reminder**: Mask is detected during face recognition. If the person is not wearing a mask, the system will remind them to wear a mask, but they will still be allowed access. ● **No Authorization without Wearing Face Mask**: Mask is detected during face recognition. If a person is not wearing a mask, the system will remind them to wear masks, and access will be denied.
Face Mask Threshold	The higher the threshold, the more accurate face recognition will be when a person is wearing a mask, and there will be a lower false recognition rate.
Beautifier	Beautify captured face images.
Enable Helmet Detection	Detects safety hats. The door will not unlock if the a person does not wear a helmet.
Multi-face Recognition	Detects 4 to 6 face images at a time. Combination unlock cannot be used with this, and the door will be unlocked when one of the people are successfully verified. 📖 The number of face images which are supported might differ depending on the model of the product.
Night Mode	In dark environment, the standby screen displays white background image to improve the brightness when verifying face or QR code.

Step 4 Configure the exposure parameters.

Figure 3-10 Exposure parameters



Channel No. 1

Face Exposure ●

Face Target Brightness 50 (0-100)

Face Exposure Interval Dete... 10 s (1-28800)

Min Size 256 * 256

Table 3-7 Exposure parameters description

Parameter	Description
Channel No.	● Channel 1 is the white light mode. ● Channel 2 is the infrared light mode.
Face Exposure	After the face exposure function is enabled, the face will be exposed at the defined brightness to detect the face image clearly.
Face Target Brightness	
Face Exposure Interval Detection	The face will be exposed only once in a defined interval.

Step 5 Draw the face detection area.

1) Click **Detection Area**.
2) Right-click to draw the detection area, and then release the left button of the mouse to complete drawing.

The face in the defined area will be detected.

Step 6 Draw the target size.

1) Click **Draw Target**.
2) Draw the face recognition box to define the minimum size of detected face.

   Only when the size of the face is larger than the defined size, the face can be detected by the Device.

Step 7 Draw the detection area.

Step 8 Click **OK**.

3.6.5 Configuring Card Settings

Background Information

This function is only available on select models.

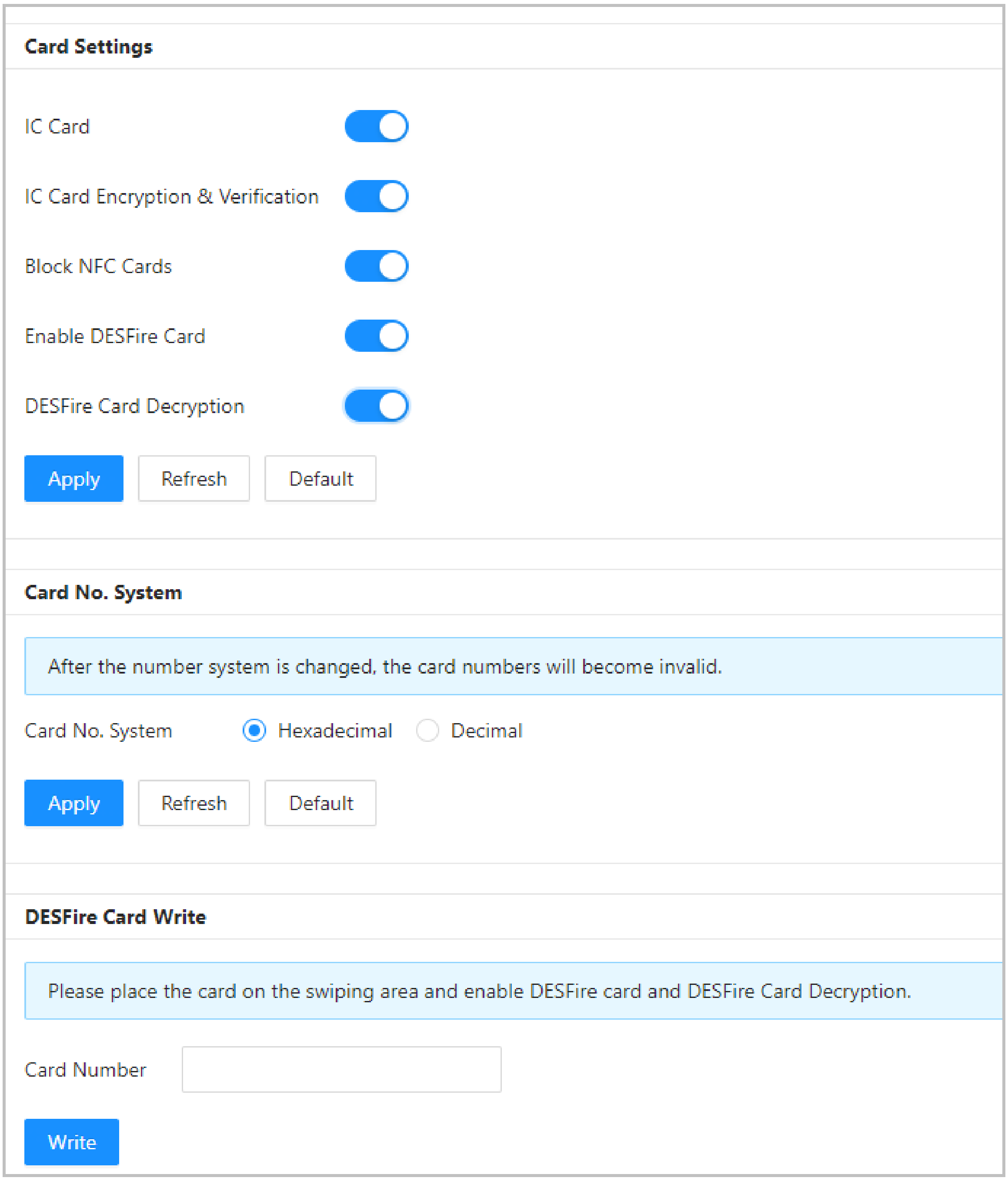
Procedure

Step 1 Log in to the webpage.

Step 2 Select **Access Control** > **Card Settings**.

Step 3 Configure the card parameters.

Figure 3-11 Card parameters



Card Settings

IC Card: enabled

IC Card Encryption & Verification: enabled

Block NFC Cards: enabled

Enable DESFire Card: enabled

DESFire Card Decryption: enabled

Card No. System

After the number system is changed, the card numbers will become invalid.

Card No. System ● Hexadecimal ○ Decimal

DESFire Card Write

Please place the card on the swiping area and enable DESFire card and DESFire Card Decryption.

Card Number

Table 3-8 Card parameters description

Item	Parameter	Description
Card Settings	IC Card	The IC card can be read when this function is enabled. 📖 This function is only available on select models.
	IC Card Encryption & Verification	The encrypted card can be read when this function is enabled. 📖 Make sure **IC Card** is enabled.
	Block NFC Cards	Prevent unlocking through duplicated NFC card after this function is enabled. 📖 ● This function is only available on models that support IC cards. ● Make sure **IC Card** is enabled. ● NFC function is only available on select models of phones.
	Enable Desfire Card	The Device can read the card number of Desfire card when this function is enabled. 📖 ● This function is only available on models that support IC cards. ● Only supports hexadecimal format.
	Desfire Card Decryption	Information in the Desfire card can be read when **Enable Desfire Card** and **Desfire Card Decryption** are enabled at the same time. 📖 ● This function is only available on models that support IC cards. ● Make sure that Desfire card is enabled.
Card No. System	Card No. System	Select decimal format or hexadecimal format for the card number when Wiegand card reader is connected. The card No. system is the same for both card number input and output.
DESFire Card Write	Card Number	Place the card on the reader, enter the card number, and then click **Write** to write card number to the card. 📖 ● Desfire card function must be enabled. ● Only supports hexadecimal format. ● Supports up to 8 characters.

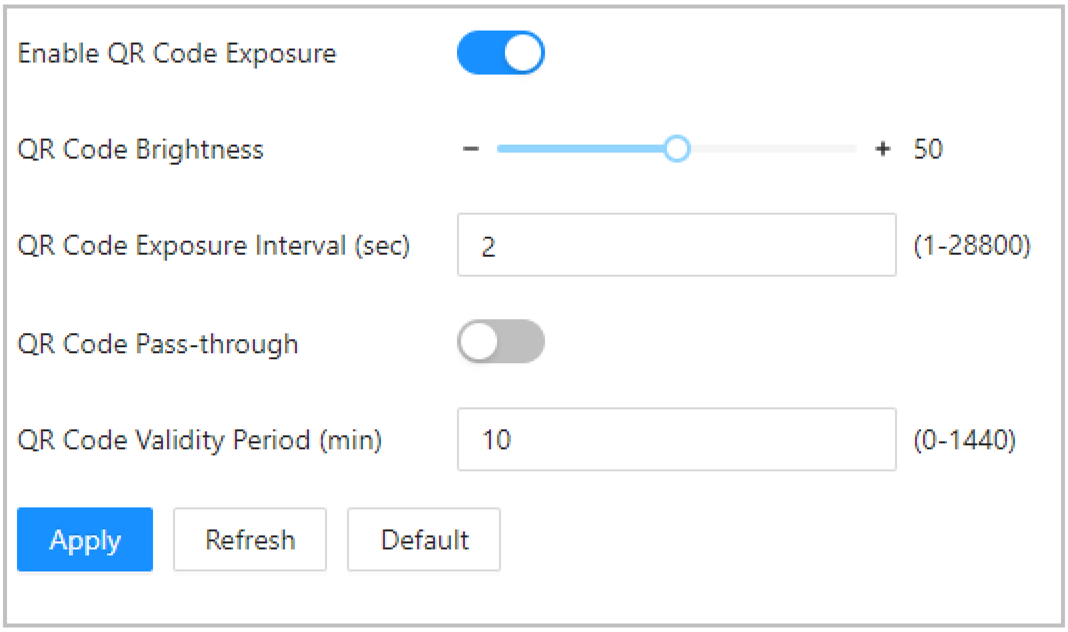
Step 4 Click **Apply**.

3.6.6 Configuring QR Code

Procedure

Step 1 On the webpage, select **Access Control** > **Card Settings**.

Figure 3-12 QR code



Enable QR Code Exposure: on

QR Code Brightness: 50

QR Code Exposure Interval (sec): 2 (1-28800)

QR Code Pass-through: off

QR Code Validity Period (min): 10 (0-1440)

Table 3-9 QRR code parameters

Parameters	Description
Enable QR Code Exposure	The QR code will be exposed at the defined brightness, and the QR code can be detected and read clearly.
QR Code Brightness	
QR Code Exposure Interval (sec)	The QR code will be exposed only once during the defined interval.
QR Code Pass-through	When the Device is connected to a third-party platform, scan the OR code on the Device and the QR code is directly sent to the third-party platform.
QR Code Validity Period (min)	After the QR code is generated, and the validity of your QR codes will last for a defined time before it expires.

3.6.7 Configuring Schedules

Configure time sections and holiday plans, and then you can define when a user has the permissions to unlock doors.

3.6.7.1 Configuring Time Periods

You can configure up to 128 periods (from No.0 through No.127) of time periods. In each period, you need to configure door access schedules for a whole week. People can only unlock the door during the scheduled time.

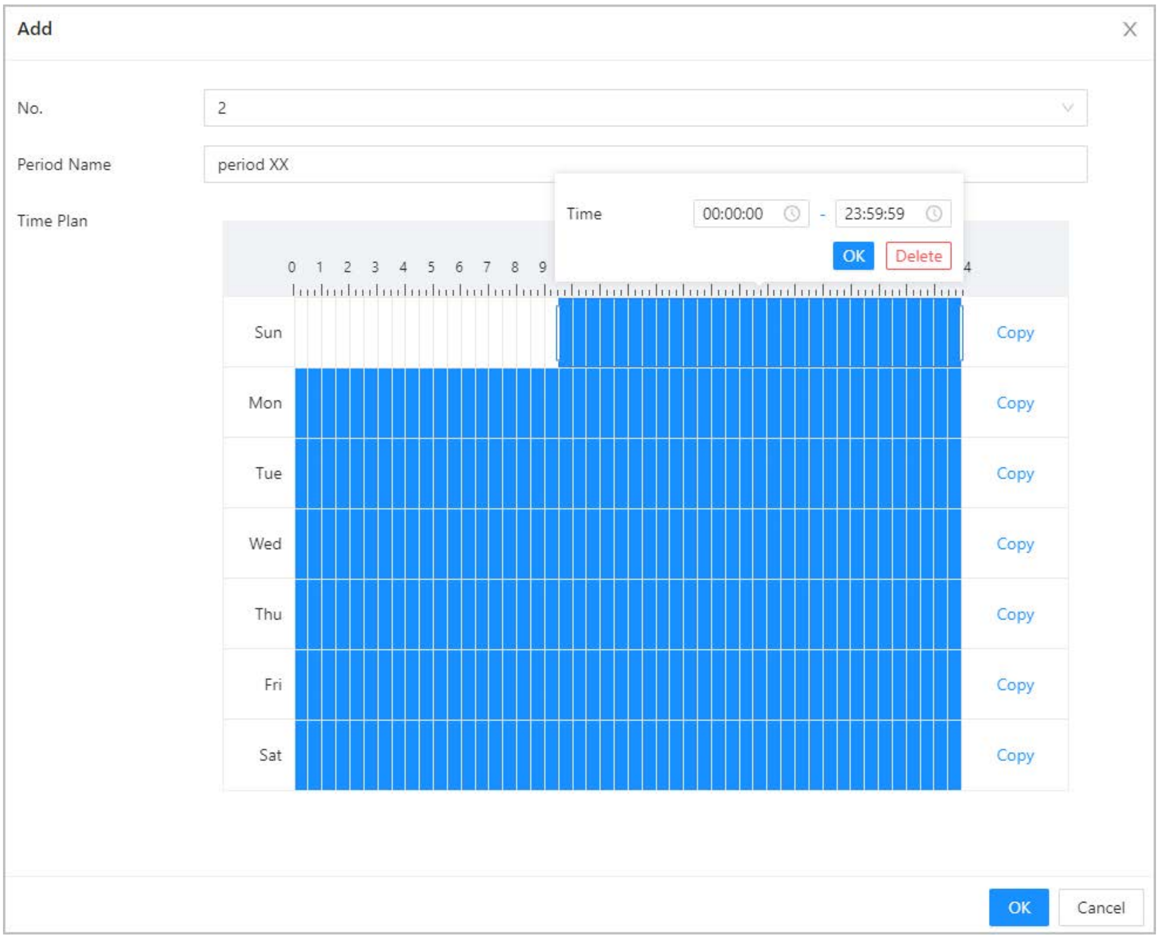
Procedure

Step 1 Log in to the webpage.

Step 2 Select **Access Control** > **Period Config** > **Period**.

Step 3 Click **Add**.

Figure 3-13 Configure time periods



Add

No. 2

Period Name period XX

Time Plan

Time 00:00:00 - 23:59:59

Step 4 Drag the time slider to configure time for each day.

Step 5 (Optional) Click **Copy** to copy the configuration to the rest of days.

Step 6 Click **OK**.

3.6.7.2 Configuring Holiday Plans

You can configure up to 128 holiday groups (from No.0 through No.127), and for each holiday group, you can add up to 16 holidays in it. After that, you can assign the configured holiday groups to the holiday plan. Users can only unlock the door in the defined time in the holiday plan.

Procedure

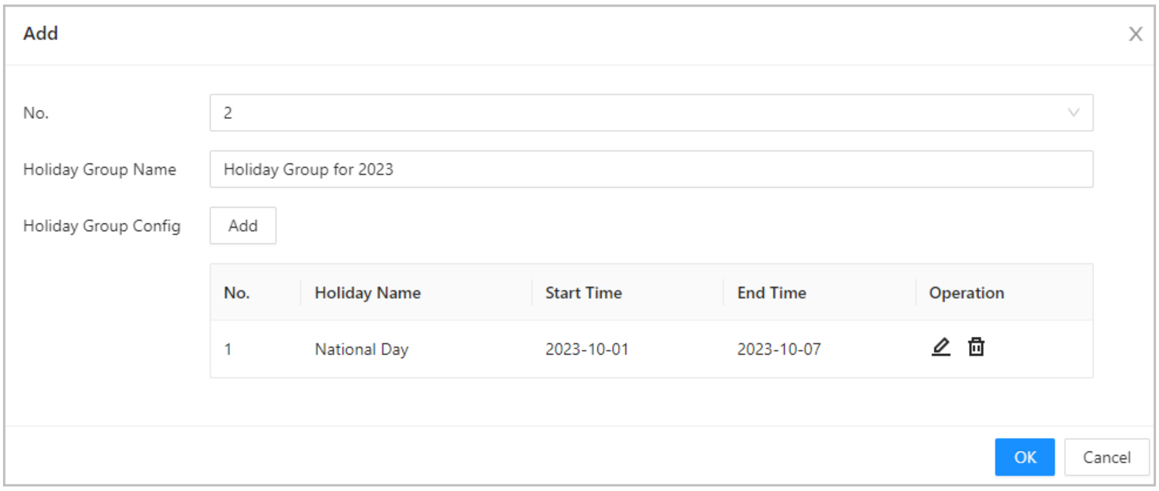
Step 1 Log in to the webpage.

Step 2 Select **Access Control** > **Period Config** > **Holiday Plan**.

Step 3 Click **Holiday Management**, and then click **Add**.

Step 4 Select a number for the holiday group, and then enter a name for the group.

Figure 3-14 Add a holiday group



Add

No.: 2

Holiday Group Name: Holiday Group for 2023

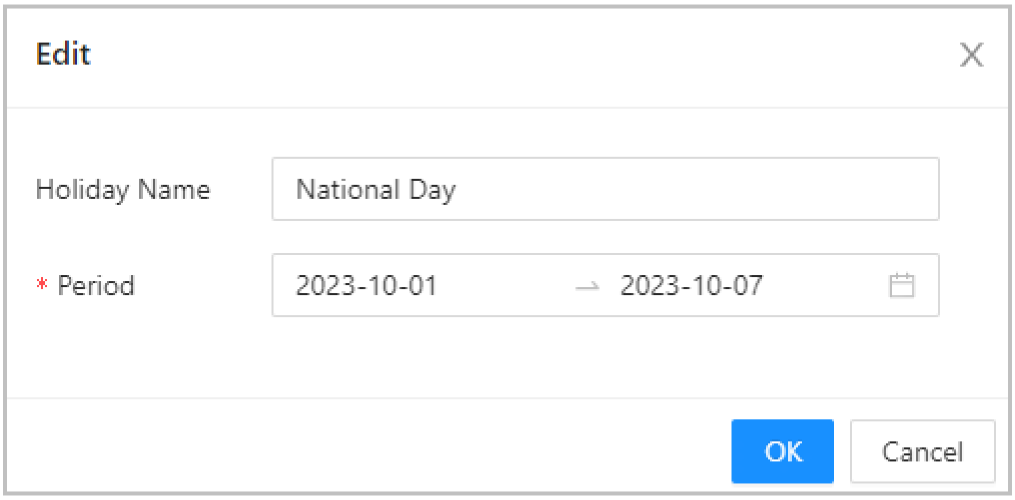
Holiday Group Config: Add

No.	Holiday Name	Start Time	End Time	Operation
1	National Day	2023-10-01	2023-10-07	✎ 🗑

Step 5 Click **Add**, and then add a holiday in a holiday group.

Step 6 Click **OK**.

Figure 3-15 Add a holiday to a holiday group



Edit

Holiday Name: National Day

* Period: 2023-10-01 → 2023-10-07

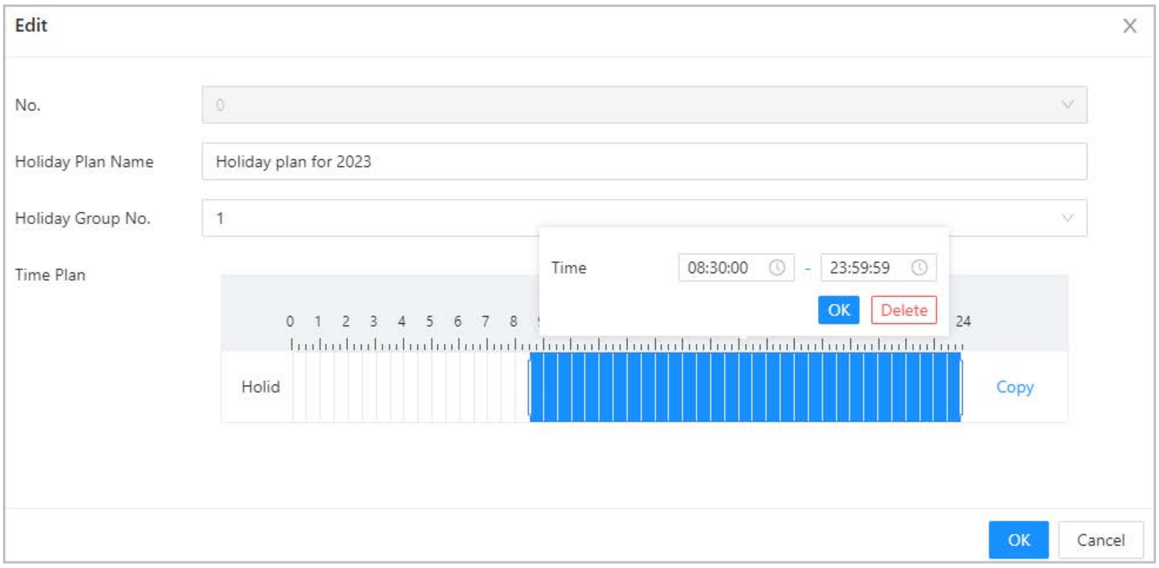
Step 7 Click **Plan Management**, and then click **Add**.

Step 8 Select a number for the holiday plan, and then enter a name for it.

Step 9 Select a holiday group, and then drag the slider to configure time for each day.

Supports adding up to 4 time sections on a day.

Figure 3-16 Add holiday plan


Edit

No. 0

Holiday Plan Name: Holiday plan for 2023

Holiday Group No.: 1

Time Plan

Time 08:30:00 - 23:59:59

Step 10 Click **OK**.

3.6.8 Privacy Settings

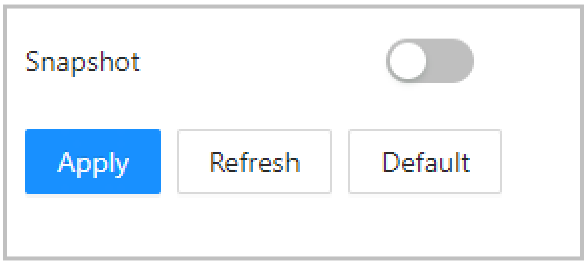
Procedure

Step 1 On the webpage, select **Access Control** > **Privacy Settings**.

Step 2 Enable snapshot function.

Face images will be captured automatically when people unlock the door.

Figure 3-17 Enable snapshot


Snapshot

Step 3 Click **Apply**.

3.6.9 Configuring Expansion Modules

For Device that supports connecting expansion modules, configure the type of the module that the Device supports.

Background Information

- The type the expansion module might differ depending on models of the Device.
- The settings of expansion module remain after restoring the Device to factory defaults.

Procedure

Step 1 On the webpage, select **Access Control** > **Expansion Module**.

Step 2 Select the type of the module that the Device supports.

Step 3 Click **Apply**.

The configurations become effective after Device is restarted.

- is displayed on the right corner of the Device is the setting is effective.
- is displayed on the right corner of the Device, which means the type of the expansion module you configured does not match the actual expansion module that is connected to Device.
- If **None** is selected and no expansion module is connected to the Device, the expansion module icon will not be displayed.

3.6.10 Configuring Port Functions

Some ports can function as different ports, you can set them to different ports based on the actual needs.

Background Information

- This function is only available on select models.
- Ports might differ depending on the models of the product.

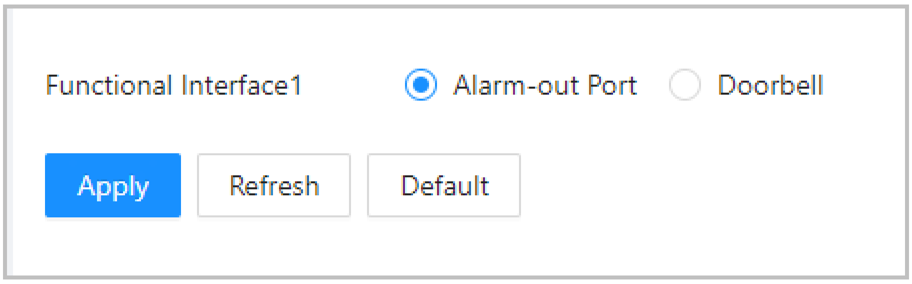
Procedure

Step 1 On the webpage, select **Access Control** > **Port Config**.

Step 2 Select the type of the port.

Step 3 Click **Apply**.

Figure 3-18 Configure ports



Functional Interface1 ● Alarm-out Port ○ Doorbell

3.7 Configuring Intercom

The Device can function as a door station to realize video intercom.

Intercom function is only available on select models.

3.7.1 Using the Device as the SIP Server

3.7.1.1 Configuring SIP Server

When the Device functions as the SIP server, it can connect up to 500 access control devices and

VTHs.

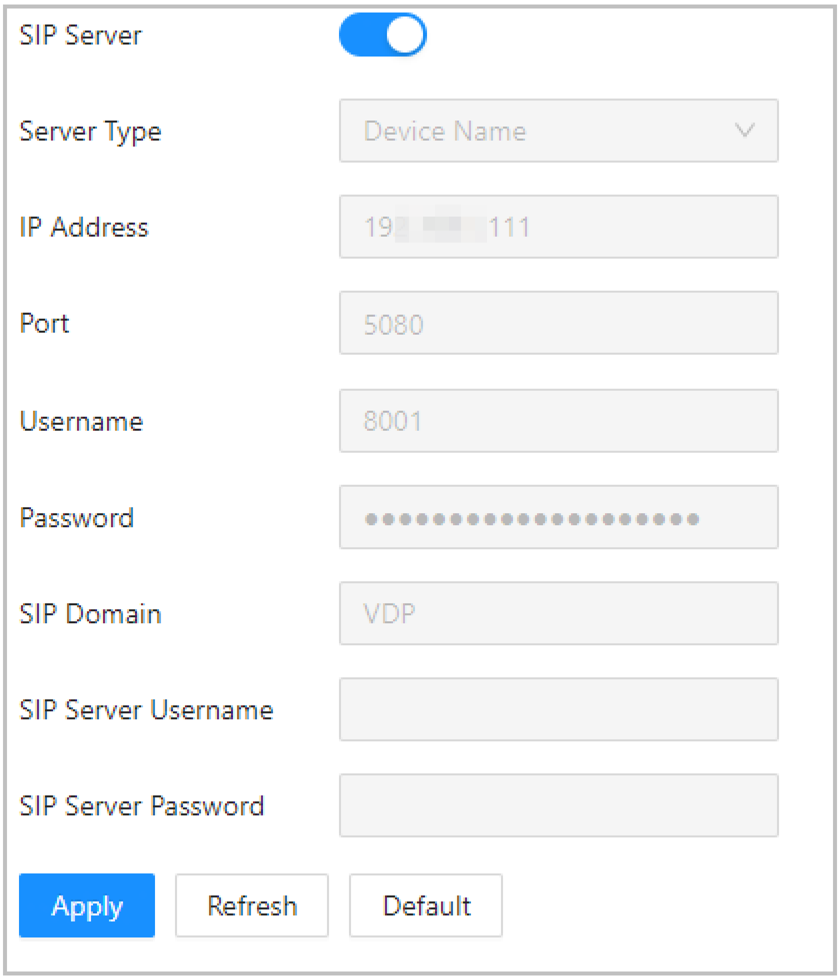
Procedure

Step 1 Select **Intercom Settings** > **SIP Server**.

Step 2 Turn on **SIP Server**.

The device settings will be automatically restored to factory defaults if the SIP server status changes.

Figure 3-19 Use the Device as the SIP server



SIP Server: on

Server Type: Device Name

IP Address: 19[redacted]111

Port: 5080

Username: 8001

Password: ••••••••••••••••••••

SIP Domain: VDP

SIP Server Username:

SIP Server Password:

Step 3 Click **Apply**.

3.7.1.2 Configuring Local Parameters

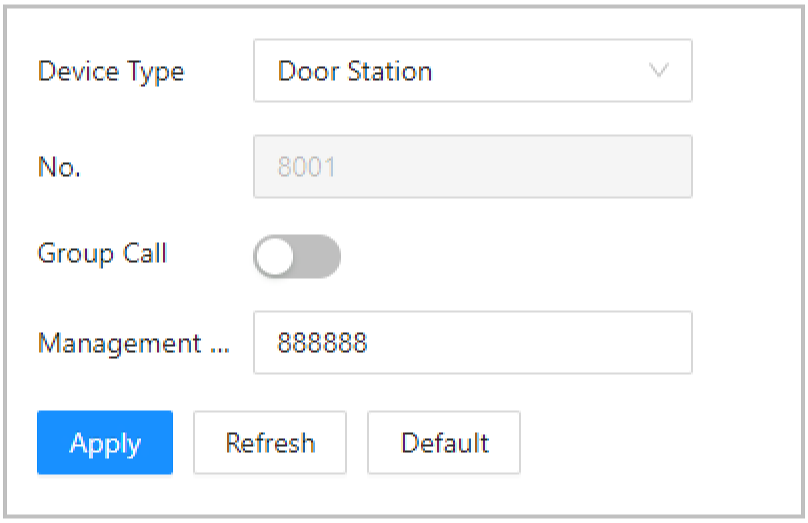
When the Device functions as the SIP server, configure the parameters of the Device.

Procedure

Step 1 Select **Intercom Settings** > **Local Device Config**.

Step 2 Configure the parameters.

Figure 3-20 Basic parameters



Device Type: Door Station

No.: 8001

Group Call

Management ...: 888888

Table 3-10 Basic parameters description

Parameter	Description
Device Type	Select **Door Station**.
No.	Cannot be set.
Group Call	When you turn on the group call function, the door station calls the main VTH and the extensions at the same time. The setup is effective after the door station restarts.
Management Center	The default call number of the management center is 888888+VTS No. For the VTS No, go to the **Project Setting** > **General** of the management center.

Step 3 Click **Apply**.

3.7.1.3 Adding the VTO

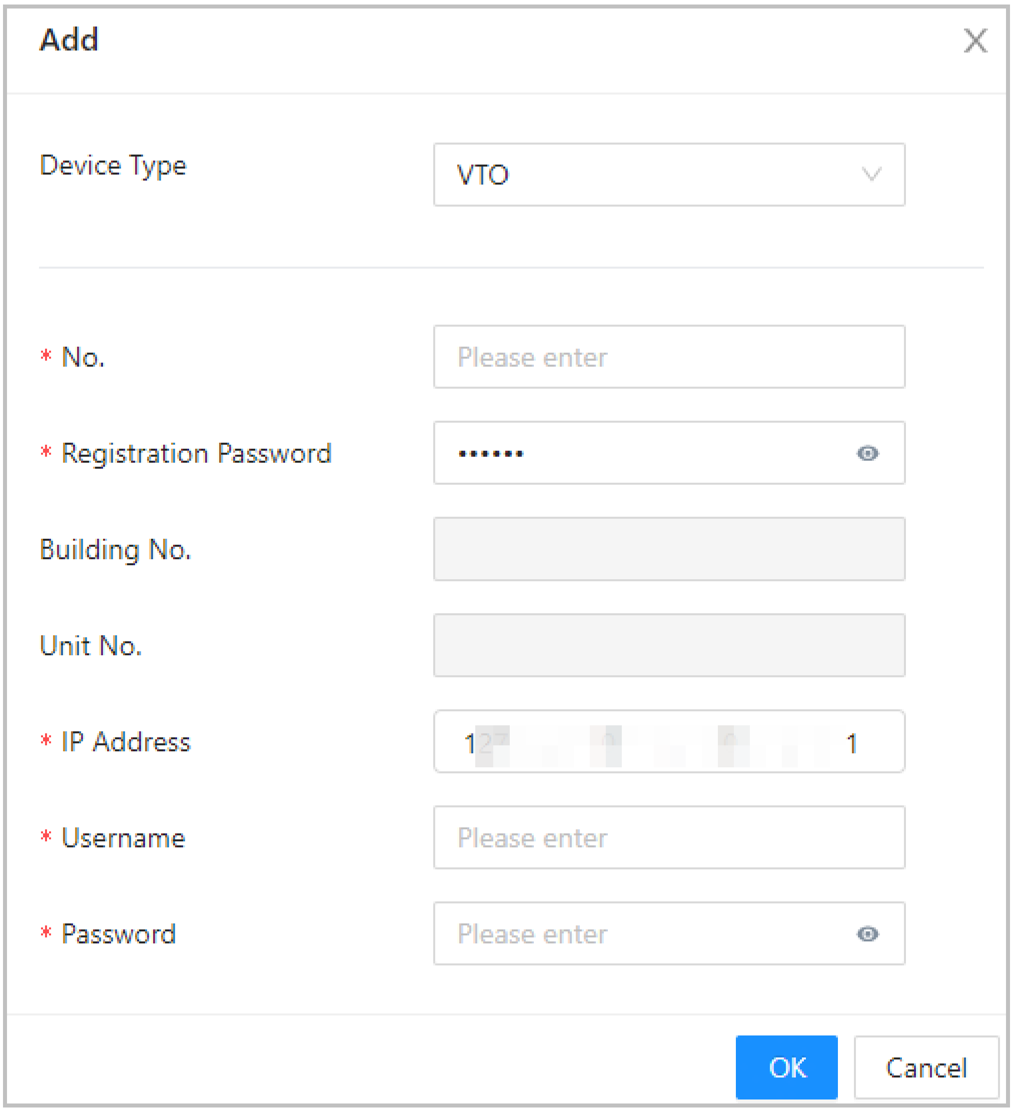
When the Device functions as the SIP Server, you need to add VTOs to the SIP server to make sure they can call each other.

Procedure

Step 1 On the webpage of the Device, select **Intercom Settings** > **Device Setting**.

Step 2 Click **Add**, and then configure the VTO.

Figure 3-21 Add VTO



Add

Device Type: VTO

* No.: Please enter

* Registration Password: ••••••

Building No.:

Unit No.:

* IP Address: [redacted]

* Username: Please enter

* Password: Please enter

Table 3-11 Add VTO configuration

Parameter	Description
Device Type	Select **VTO**.
No.	To view the VTO number, go to the **Device** screen of VTO, and then enter the VTO number on this page.
Registration Password	Keep it default.
Building No.	Cannot be configured.
Unit No.	
IP Address	The IP address of the added VTO.
Username	The username and password that are used to log in to the webpage of the added VTO.
Password	

Step 3 Click **OK**.

3.7.1.4 Adding the VTH

When the Device functions as the SIP Server, you can add all VTHs in the same unit to the SIP server to make sure that they can call each other.

Background Information

- When there are main VTH and extension, you need to turn on the group call function first, and then add main VTH and extension on the **VTH Management** page. For how to turn on the group call function, refer to "3.7.1.2 Configuring Local Parameters".
- Extension cannot be added when the main VTHs are not added.

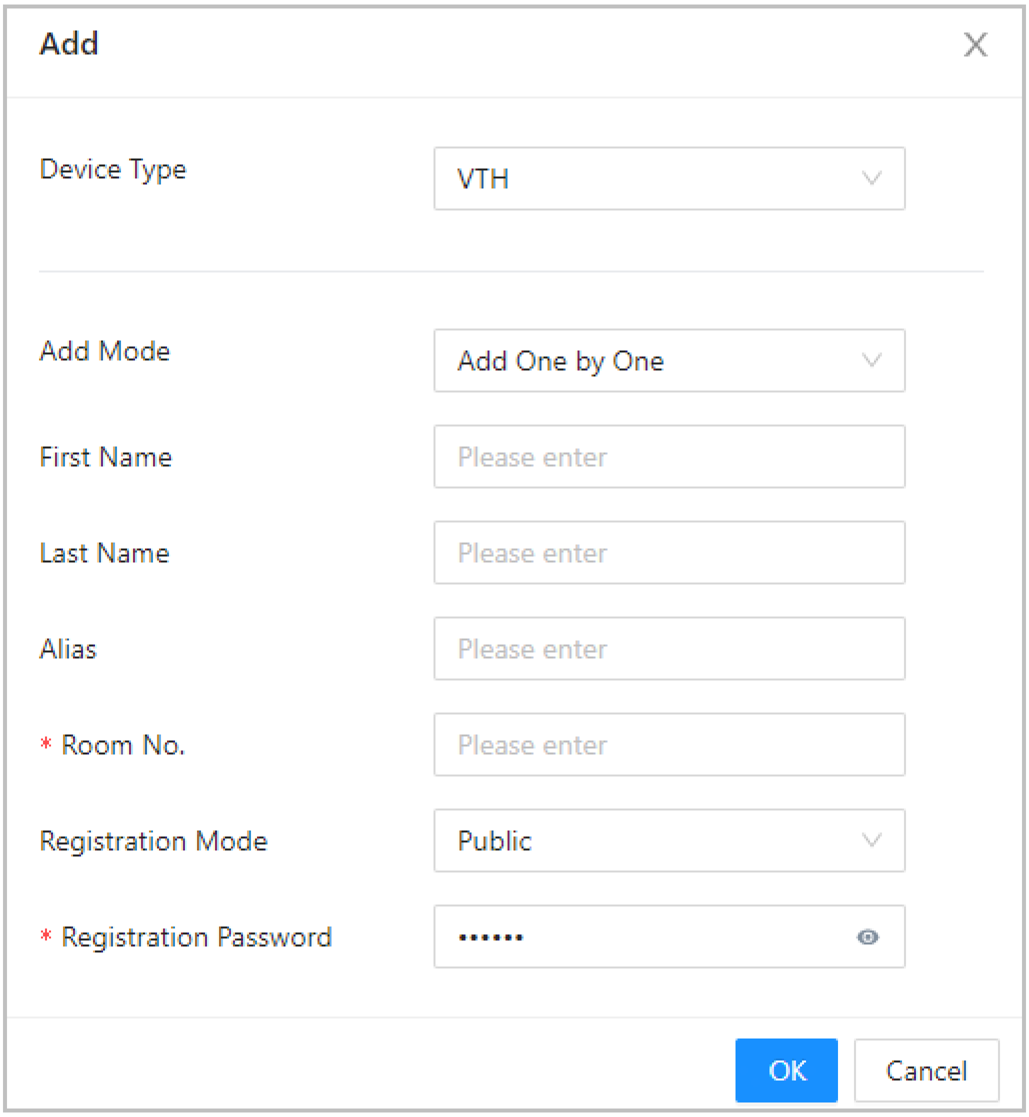
Procedure

Step 1 On the home page, select **Intercom Settings** > **Device Setting**.

Step 2 Add the VTH.

- Add one by one.
  1. Click **Add**.
  2. Configure parameters, and then click **OK**.

Figure 3-22 Add one by one



Add

Device Type: VTH

Add Mode: Add One by One

First Name: Please enter

Last Name: Please enter

Alias: Please enter

* Room No.: Please enter

Registration Mode: Public

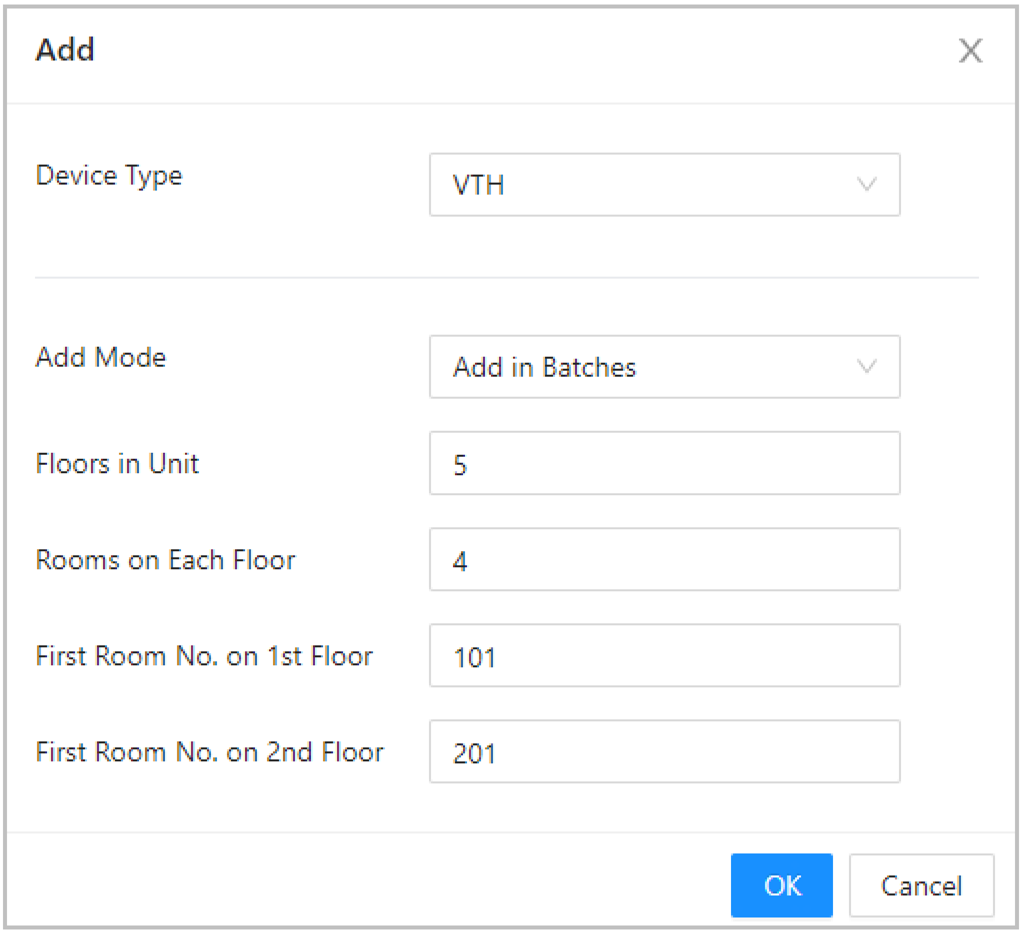
* Registration Password: ••••••

Table 3-12 Room information

Parameter	Description
First Name	Enter the name of the VTH to help you differentiate VTHs.
Last Name	
Alias	
Room No.	Enter the room number of the VTH. ● The room number consists of 1-5 digits, and must conform to the configured room number on the VTH. ● When there are main VTH and extensions, the room number of main VTH ends with -0 and the room number of extension ends with -1, -2 or -3. For example, the main VTH is 101-0, and the room number of the extension is 101-1, 101-2... ● If the group call function is not turned on, room number in the format of 9901-xx cannot be set.
Room No.	Enter the room number of the VTH. ● The room number consists of 1-5 digits, and must conform to the configured room number on the VTH. ● When there are main VTH and extensions, the room number of main VTH ends with -0 and the room number of extension ends with -1, -2 or -3. For example, the main VTH is 101-0, and the room number of the extension is 101-1, 101-2... ● If the group call function is not turned on, room number in the format of 9901-xx cannot be set.
Registration Mode	Keep them as defaults.
Registration Password	

- Add in batches.
  1. Click **Add in Batches**.
  2. Configure the parameters.
  3. Click **Add**.

Figure 3-23 Batch add


Add

Device Type: VTH

Add Mode: Add in Batches

Floors in Unit: 5

Rooms on Each Floor: 4

First Room No. on 1st Floor: 101

First Room No. on 2nd Floor: 201

Table 3-13 Add in batches

Parameter	Description
Floors in Unit	The number of floors of the building, which ranges from 1 to 99.
Rooms on Each Floor	The number of rooms on each floor, which ranges from 1 to 99.
First Room No. on 1st Floor	The first room on the first floor.
First Room No. on 2nd Floor	The first room number on the 2nd floor = The first digit of the first room number on the 1st floor plus 1. For example, if the first room number on the first floor is 101, the first room number on the 2nd floor must be 201.

3.7.1.5 Adding the VTS

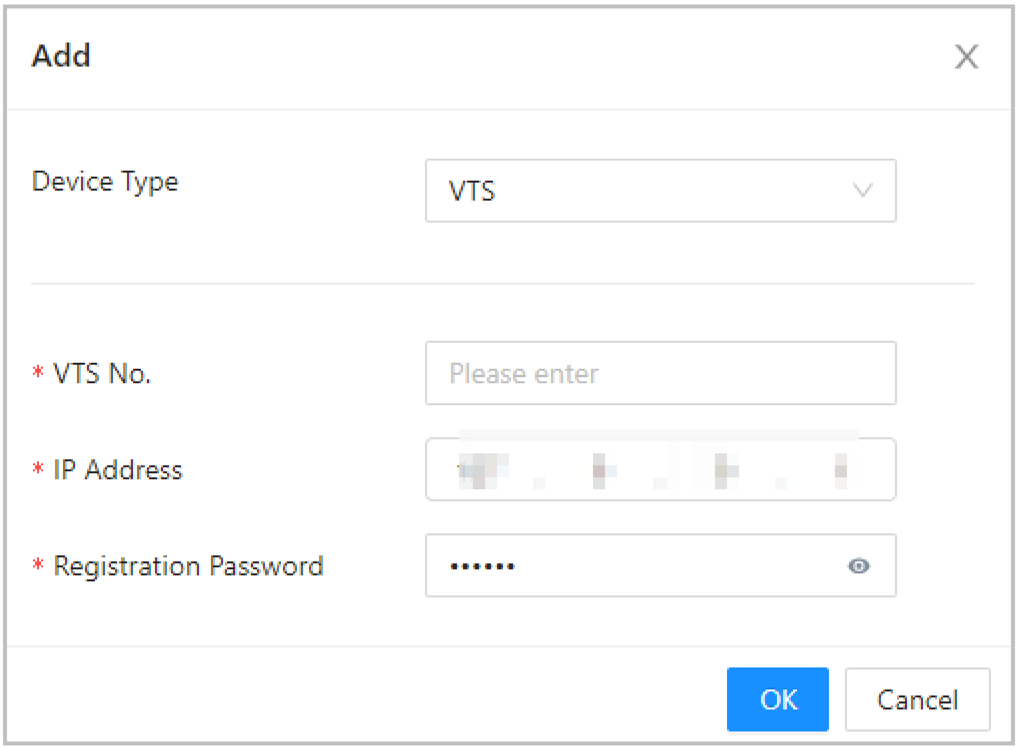
When the Device functions as the SIP Server, you can add VTSs to the SIP server to make sure they can call each other.

Procedure

Step 1 On the Homepage, select **Intercom Settings** > **Device Setting**.

Step 2 Click **Add**, and then set parameters.

Figure 3-24 VTS management



Device Type: VTS

* VTS No.: Please enter

* IP Address: [redacted]

* Registration Password: ••••••

Step 3 Click **OK**.

3.7.2 Using VTO as the SIP server

3.7.2.1 Configuring SIP Server

Use another VTO as the SIP server.

Procedure

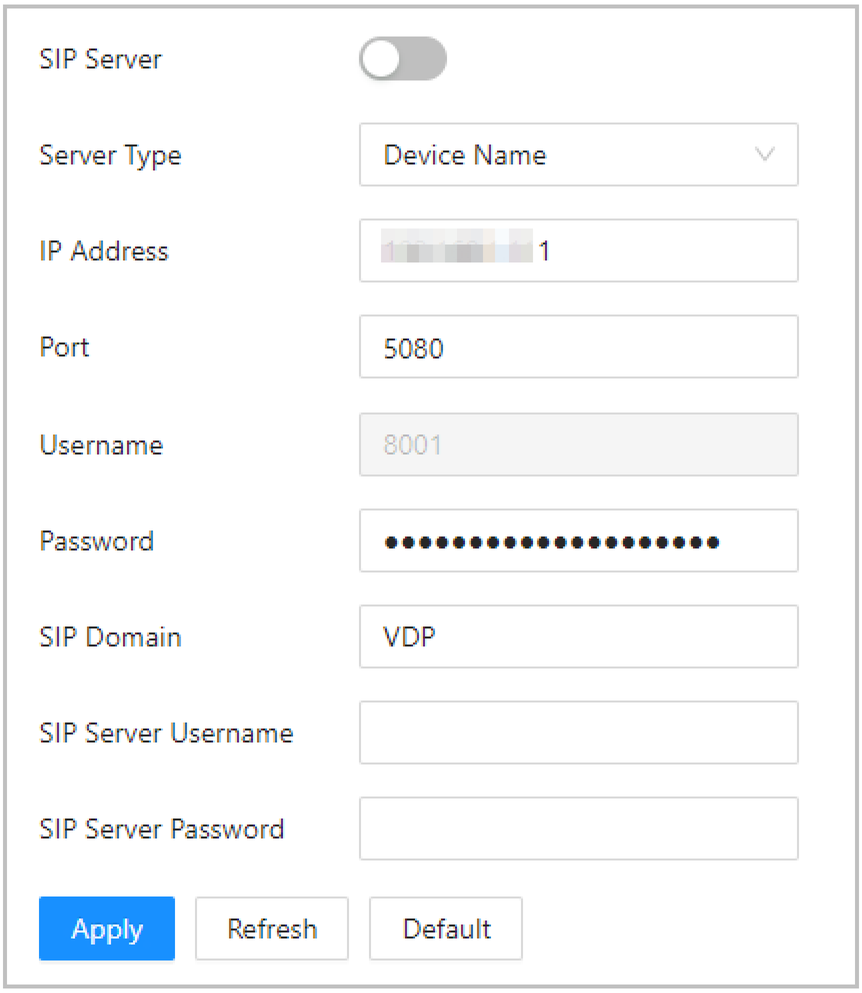
Step 1 Select **Intercom Settings** > **SIP Server**.

Step 2 Select **Device** from the **Server Type**.

Do not enable **SIP server**.

Step 3 Configure the parameters, and then click **OK**.

Figure 3-25 Use VTO as the SIP server



SIP Server: ○ (off)

Server Type: Device Name

IP Address: [redacted]1

Port: 5080

Username: 8001

Password: ••••••••••••••••••••

SIP Domain: VDP

SIP Server Username:

SIP Server Password:

Table 3-15 SIP server configuration

Parameter	Description
IP Address	IP address of the VTO.
Port	5060 by default when VTO works as SIP server.
Username	Leave them as default.
Password	
SIP Domain	VDP.
SIP Server Username	The login username and password of the SIP server.
SIP Server Password	

Step 4 Click **Apply**.

3.7.2.2 Configuring Local Parameters

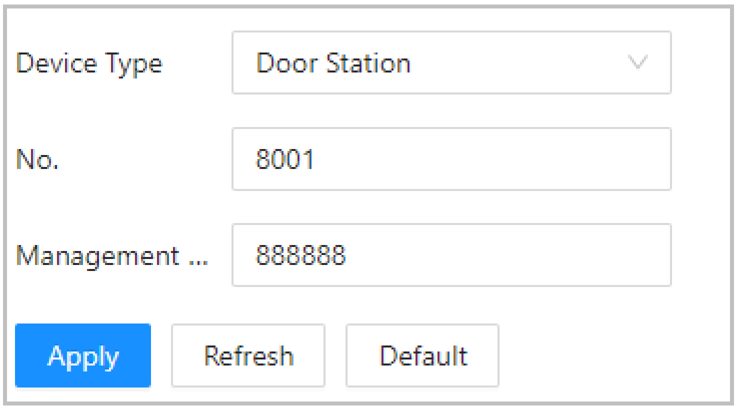
Configure the parameters of the Device when you use another VTO as the SIP server.

Procedure

Step 1 Select **Intercom Settings** > **Local Device Config**.

Step 2 Configure the parameters.

Figure 3-26 Configure the parameters



Device Type: Door Station

No.: 8001

Management ...: 888888

Table 3-16 Parameters description

Parameter	Description
Device Type	Select **Door Station**.
No.	The number of the VTO. 📖 ● The number must have 4 digits. The first 2 digits must be 80, and the last 2 digits start from 01. For example, 8001. ● If multiple VTOs exist in one unit, the VTO No. cannot be repeated.
Management Center	The call number for the management center is 888888. Keep it as default.

Step 3 Click **Apply**.

3.7.3 Using the Platform as the SIP server

3.7.3.1 Configuring SIP Server

The management platform is used as the SIP server.

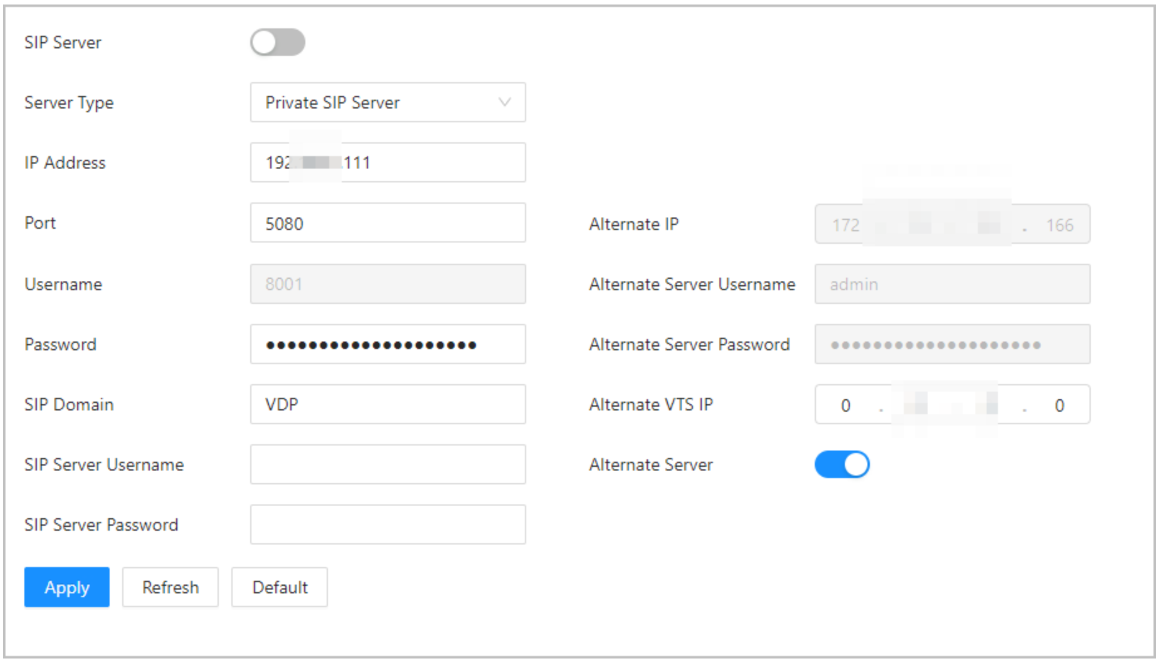
Procedure

Step 1 Select **Intercom Settings** > **SIP Server**.

Step 2 Select **Private SIP Server** from the **Server Type**.

Do not enable **SIP Server**.

Figure 3-27 Use the management platform as the SIP server



SIP Server	○		
Server Type	Private SIP Server		
IP Address	192[redacted]111		
Port	5080	Alternate IP	172 [redacted] . 166
Username	8001	Alternate Server Username	admin
Password	●●●●●●●●●●●●●●●●●●●●	Alternate Server Password	●●●●●●●●●●●●●●●●●●●●
SIP Domain	VDP	Alternate VTS IP	0 . [redacted] . 0
SIP Server Username		Alternate Server	●
SIP Server Password			

Table 3-17 SIP server configuration

Parameter	**Description**
IP Address	IP address of the platform.
Port	5080 by default when the platform works as SIP server.
Username	Leave them as default.
Password	
SIP Domain	Leave it as default.
SIP Server Username	The login username and password of the platform.
SIP Server Password	
Alternate IP	The alternate server will be used as the SIP server when the platform does not respond. ● If you turn on the **Alternate Server** function, you will set the Device as the alternate server. ● If you want another VTO to function as the alternate server, you need to enter the IP address, username, password of the VTO. Do not enable **Alternate Server** in this case. ● We recommend you set the main VTO as the alternate server.
Alternate Server Username	After you set the alternate server, when the management platform does not respond, the alternate server will be activated to make sure VTO and VTH can each other. ● If **Alternate Server** is enabled, the Device is set as the alternate
Alternate Server Password	

Parameter	Description
Alternate Server	server. ● If **Alternate Server** is not enabled, enter the IP of the alternate server, its username and password to set VTO as the alternate server. We recommend you set the main VTO as the alternate server.
Alternate VTS IP	Enter the IP address of the alternate VTS. When the management platform does not respond, the alternate VTS will be activated to make sure VTO, VTH and VTS can each other.

Step 3 Click **Apply**.

3.7.3.2 Configuring Local Parameters

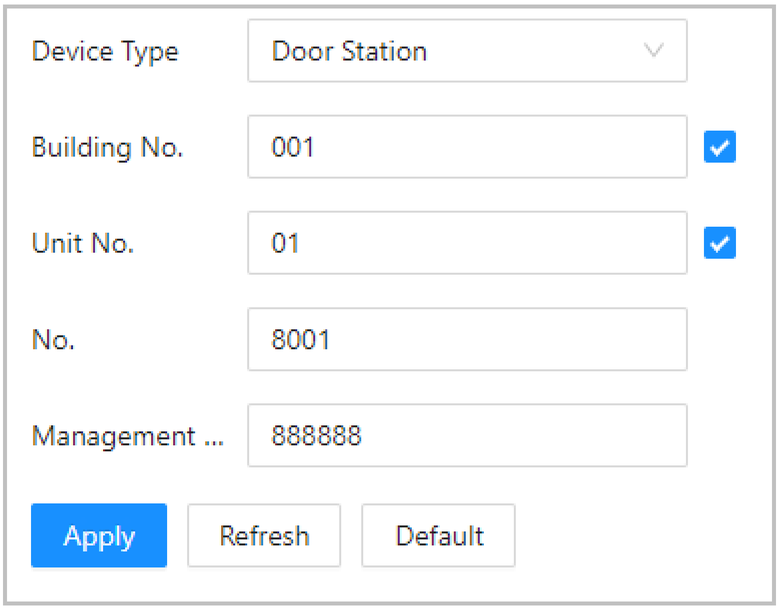
Configure the parameters of the Device when the platform is used as the SIP server.

Procedure

Step 1 Select **Intercom Settings** > **Local Device Config**.

Step 2 Configure the parameters.

Figure 3-28 Basic parameter



Device Type: Door Station

Building No.: 001 ☑

Unit No.: 01 ☑

No.: 8001

Management ...: 888888

Table 3-18 Parameters description

Parameter	Description
Device Type	Select fence station or door station based on its installation site.
Building No.	Select the checkbox and then enter the number of the building where the unit door station is installed.
Unit No.	Select the checkbox, and then enter the number of the unit where the unit door station is installed.

Parameter	Description
No.	● The number must have 4 digits. The first 2 digits must be 80, and the last 2 digits start from 01. For example, 8001. ● If multiple VTOs exist in one unit, the VTO No. cannot be repeated.
Management Center	The default phone number is 888888 when the VTO calls the VTS. Keep it as default.

Step 3 Click **Apply**.

After settings, the username in **Intercom** > **SIP** page is automatically refreshed. Make sure the username is same to the call number when you add the device to the management platform.

3.7.3.3 Registration Management

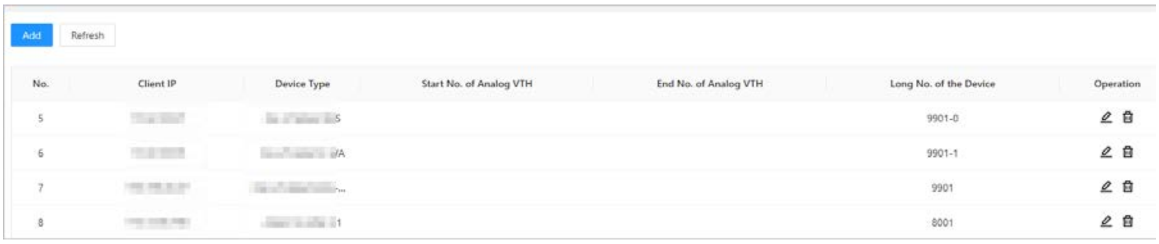
When the management platform works as the SIP server, you can view and manage all devices that registered to SIP server.

Procedure

Step 1 Select **Intercom Settings** > **Registration Management**.

Step 2 You can view and edit the devices.

Figure 3-29 View and manage devices



No.	Client IP	Device Type	Start No. of Analog VTH	End No. of Analog VTH	Long No. of the Device	Operation
5	[redacted]	[redacted]S			9901-0	✎ 🗑
6	[redacted]	[redacted]/A			9901-1	✎ 🗑
7	[redacted]	[redacted]...			9901	✎ 🗑
8	[redacted]	[redacted]1			8001	✎ 🗑

3.8 Attendance Configuration

This function is only available on select models.

3.8.1 Configuring Departments

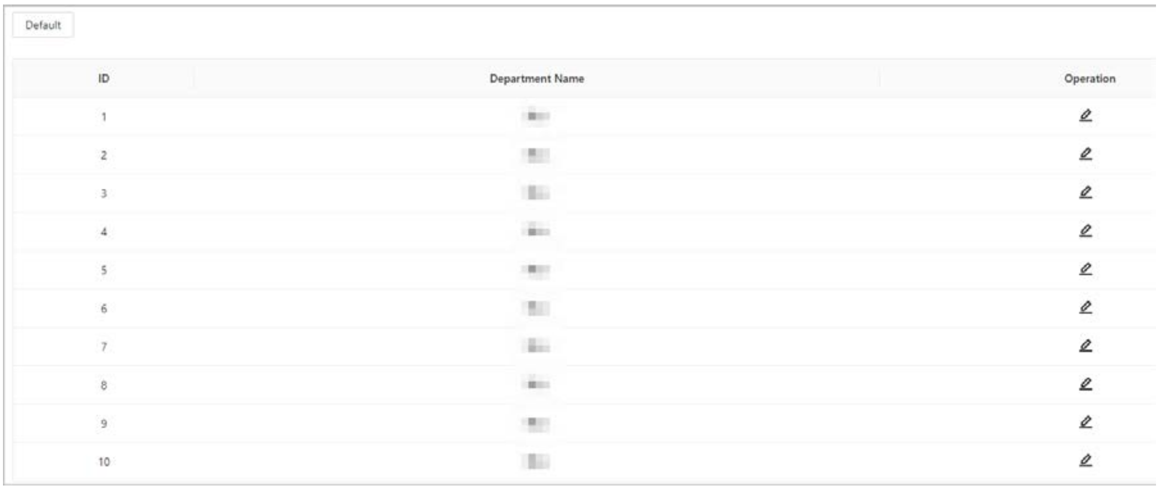
Procedure

Step 1 Select **Attendance Config** > **Department Settings**.

Step 2 Click ✎ to rename the department.

There are 20 default departments. We recommend you rename them.

Figure 3-30 Create departments



Default

ID	Department Name	Operation
1	[redacted]	✎
2	[redacted]	✎
3	[redacted]	✎
4	[redacted]	✎
5	[redacted]	✎
6	[redacted]	✎
7	[redacted]	✎
8	[redacted]	✎
9	[redacted]	✎
10	[redacted]	✎

Related Operations

You can click **Default** to restore departments to default settings.

3.8.2 Configuring Shifts

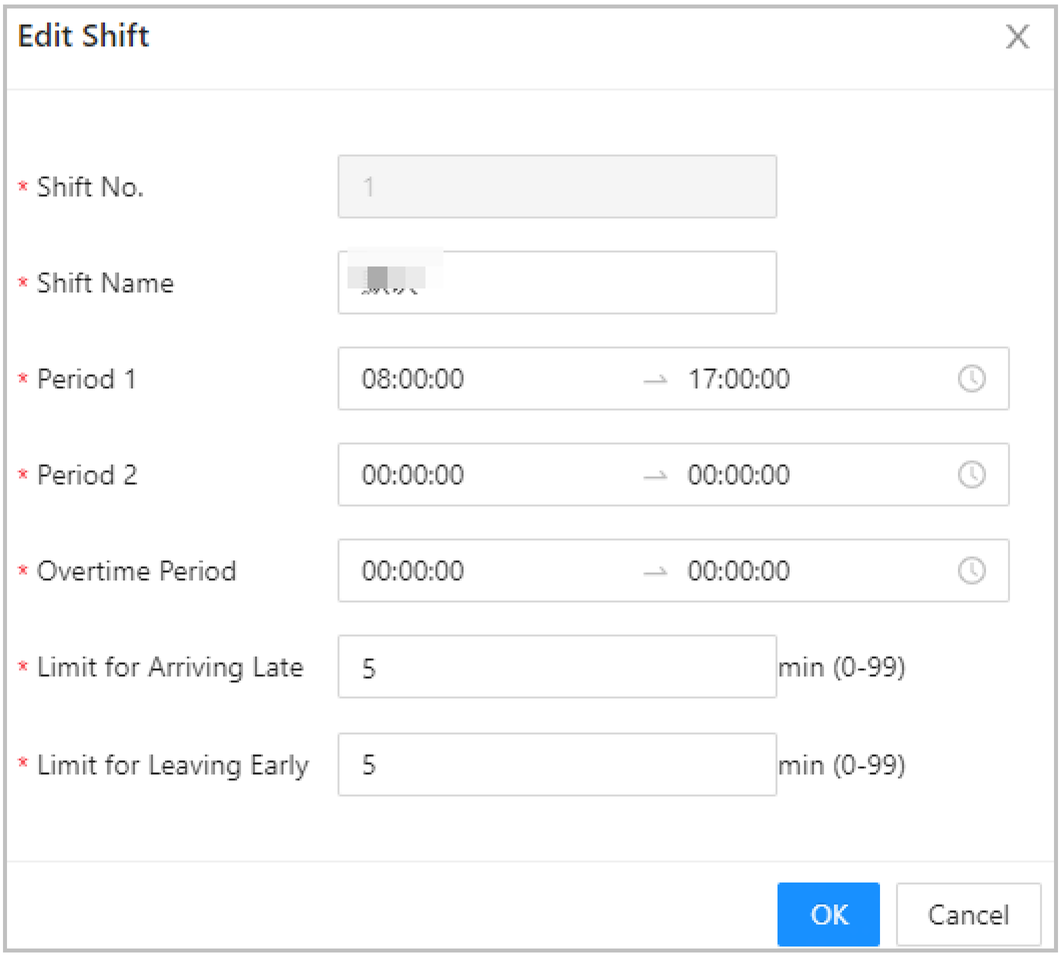
Configure shifts to define time attendance rules. Employees need to work at the time scheduled for their shift to start, and leave at the end time, except when they choose to work overtime.

Procedure

Step 1 Select **Attendance Config** > **Shift Config**.

Step 2 Click ✎ to configure the shift.

Figure 3-31 Create shifts



Edit Shift

* Shift No. 1

* Shift Name [redacted]

* Period 1 08:00:00 → 17:00:00

* Period 2 00:00:00 → 00:00:00

* Overtime Period 00:00:00 → 00:00:00

* Limit for Arriving Late 5 min (0-99)

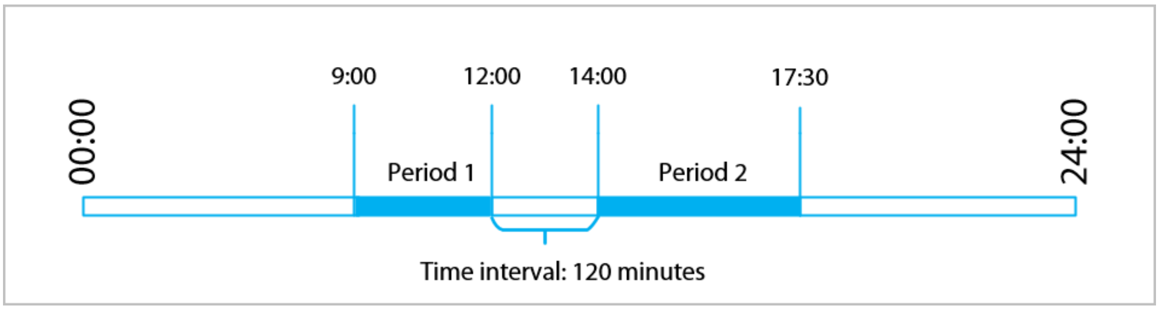
* Limit for Leaving Early 5 min (0-99)

Table 3-19 Shift parameters description

Parameter	Description
Shift Name	Enter the name of the shift.
Period 1	Specify a time range when people can clock in and clock out for the workday. If you only set one attendance period, employees need to clock in and out by the designated times to avoid an anomaly appearing on their attendance record. For example, if you set 08:00 to 17:00, employees must clock in by 08:00 and clock out from 17:00 onwards. If you set 2 attendance periods, the 2 periods cannot overlap. Employees need to clock in and clock out for both periods.
Period 2	
Overtime Period	Employees who clock in or out during the defined period will be considered as working beyond their normal work hours.
Limit for Arriving Late (min)	A certain amount of time can be granted to employees to allow them to clock in a bit late and clock out a bit early. For example, if the regular time to clock in is 08:00, the tolerance period can be set as 5 minutes for employees who arrive by 08:05 to not be considered as late.
Limit for Leaving Early (min)	

- When the time interval between 2 periods is an even number, you can divide the time interval by 2, and assign the first half of the interval to the first period, which will be the clock out time. The second half of the interval should be assigned to the second period as the clock in time.

Figure 3-32 Time interval (even number)

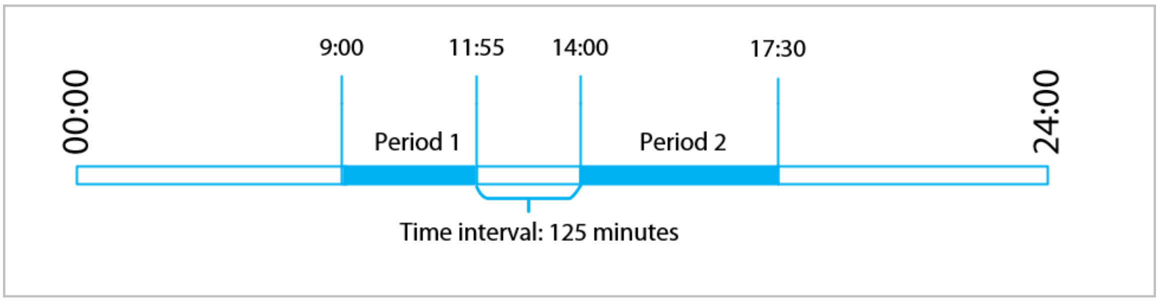


For example: If the interval is 120 minutes, then the clock-out time for period 1 is from 12:00 to 12:59, and the clock-in time for period 2 is from 13:00 to 14:00.

If a person clocks out multiple times during period 1, the latest time will be valid, and if they clock in multiple times during period 2, the earliest time will be valid.

- When the time interval between 2 periods is an odd number, the smallest portion of the interval will be assigned to the first period, which will be the clock out time. The largest portion of the interval will be assigned to the second period as the clock in time.

Figure 3-33 Time interval (even number)



For example: If the interval is 125 minutes, then the clock-out time for period 1 is from 11:55 to 12:57, and the clock-in time for period 2 is from 12:58 to 14:00. Period 1 has 62 minutes, and period 2 has 63 minutes.

If a person clocks out multiple times during period 1, the latest time will be valid, and if they clock in multiple times during period 2, the earliest time will be valid.

All attendance times are precise down to the second. For example, if the normal clock-in time is set to 8:05 AM, the employee who clocks in at 8:05:59 AM will not be considered as arriving late. But, the employee that arrives at 8:06 AM will be marked as late by 1 minute.

Step 3 Click **OK**.

Related Operations

You can click **Default** to restore shifts to factory defaults.

3.8.3 Configuring Holiday

Configure holiday plans to set periods for attendance to not be tracked.

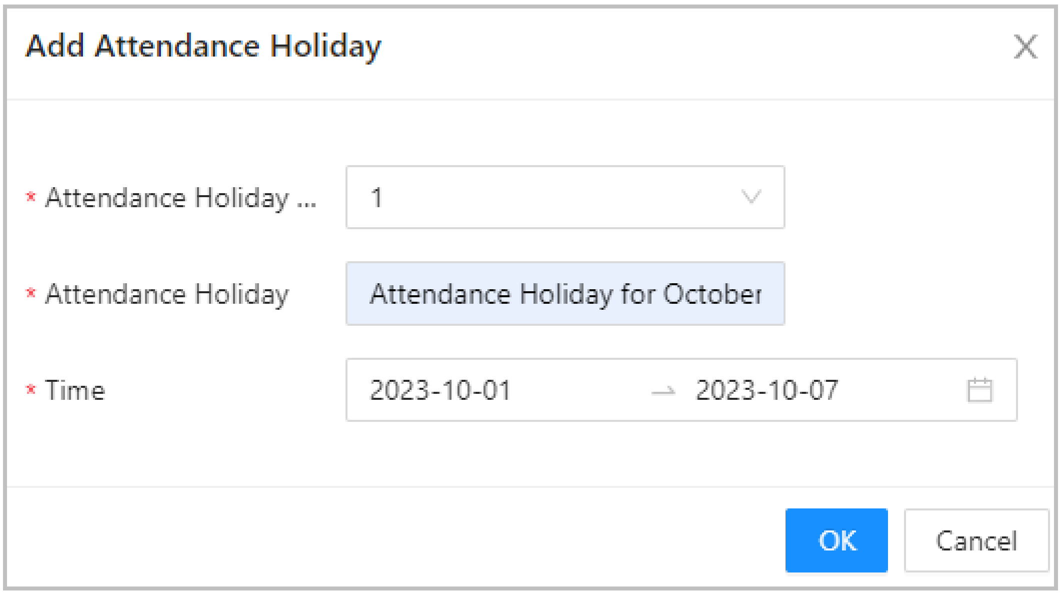
Procedure

Step 1 Select **Attendance Config** > **Shift Config** > **Holiday**.

Step 2 Click **Add** to add holiday plans.

Step 3 Configure the parameters.

Figure 3-34 Create holiday plans



Add Attendance Holiday

* Attendance Holiday ...: 1

* Attendance Holiday: Attendance Holiday for October

* Time: 2023-10-01 → 2023-10-07

Table 3-20 Parameters description

Parameter	Description
Attendance Holiday No.	The number of the holiday.
Attendance Holiday	The name of the holiday.
Start Time	The start and end time of the holiday.
End Time	

Step 4 Click **OK**.

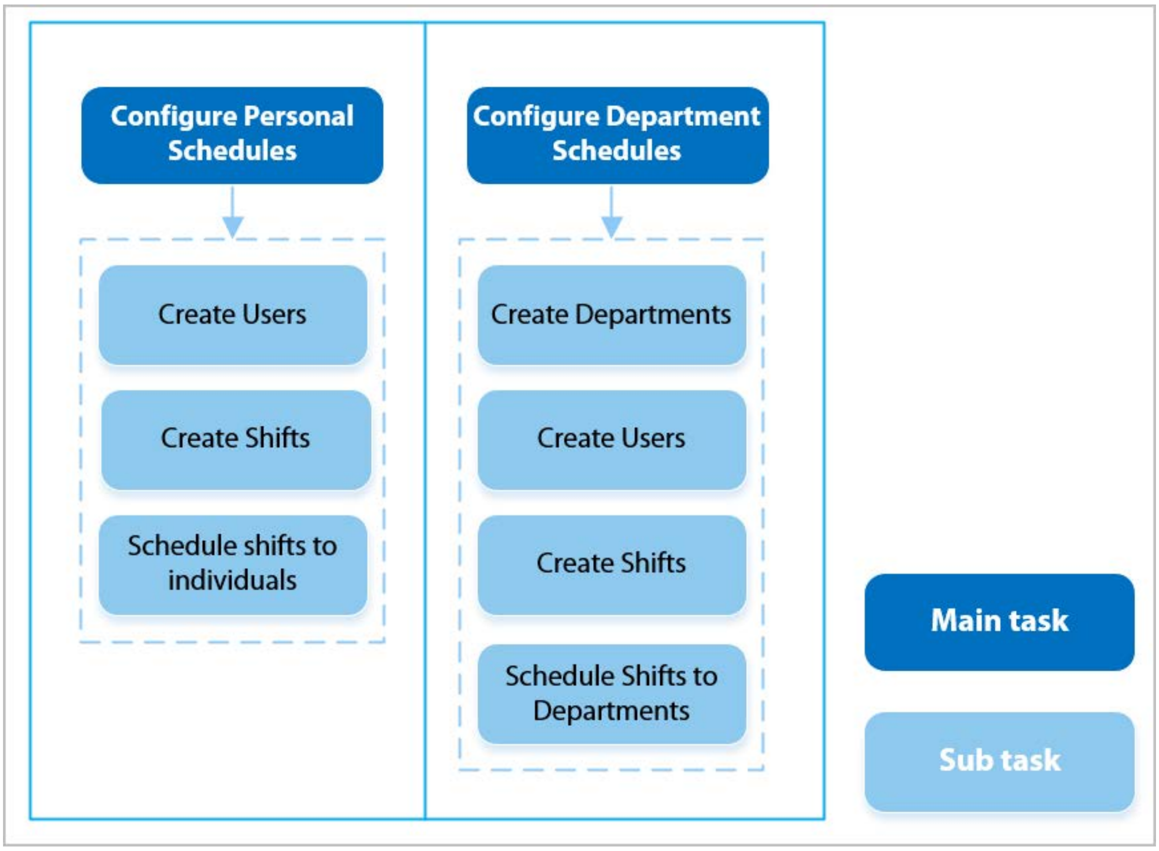
3.8.4 Configuring Work Schedules

A work schedule generally refers to the days per month and the hours per day that an employee is expected to be at their job. You can create different types of work schedules based on different individuals or departments, and then employees must follow the established work schedules.

Background Information

Refer to the flowchart to configure personal schedules or department schedules.

Figure 3-35 Configuring work schedules


Configure Personal Schedules
Create Users
Create Shifts
Schedule shifts to individuals
Configure Department Schedules
Create Departments
Create Users
Create Shifts
Schedule Shifts to Departments
Main task
Sub task

Procedure

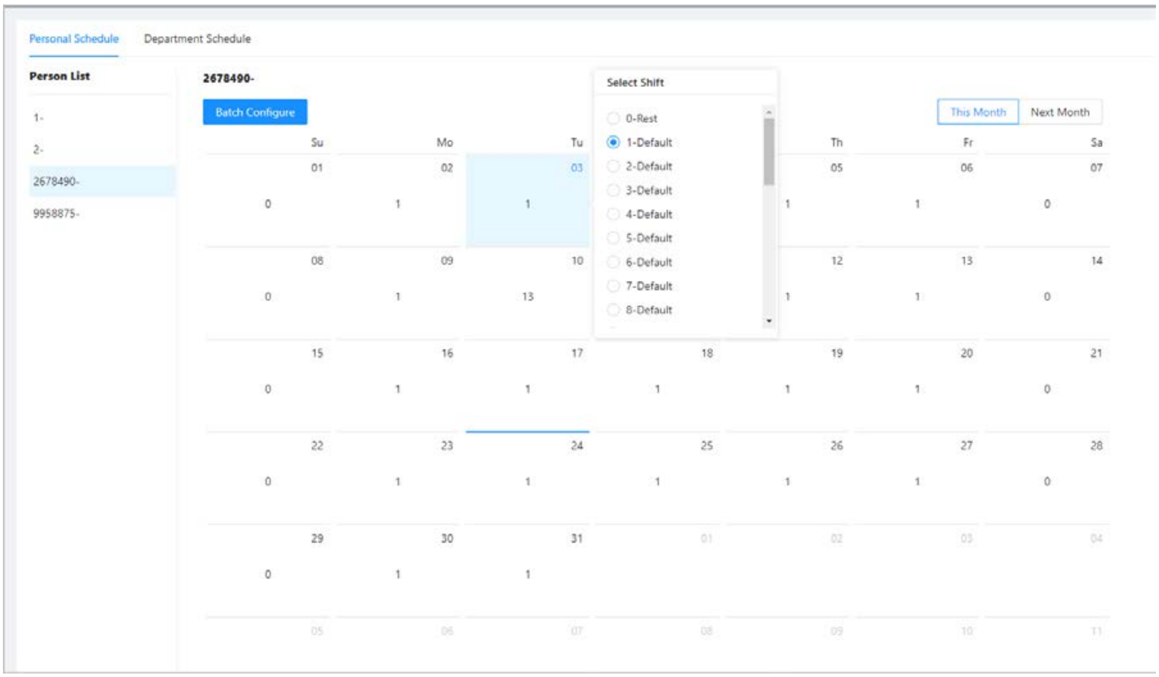
Step 1 Select **Attendance Config** > **Schedule Config**.

Step 2 Set work schedules for individuals.

1. Click **Personal Schedule**.
2. Select a person in the person list.
3. On the calendar, select a day, and then select a shift.

   You can also click **Batch Configure** to schedule shifts to multiple days.

Figure 3-36 Personal schedule



Person List

1-

2-

2678490-

9958875-

2678490-

Select Shift

○ 0-Rest
● 1-Default
○ 2-Default
○ 3-Default
○ 4-Default
○ 5-Default
○ 6-Default
○ 7-Default
○ 8-Default

Su	Mo	Tu		Th	Fr	Sa
01 0	02 1	03 1		05 1	06 1	07 0
08 0	09 1	10 13		12 1	13 1	14 0
15 0	16 1	17 1	18 1	19 1	20 1	21 0
22 0	23 1	24 1	25 1	26 1	27 1	28 0
29 0	30 1	31 1	01	02	03	04
05	06	07	08	09	10	11

You can only set work schedules for the current month and the next month.

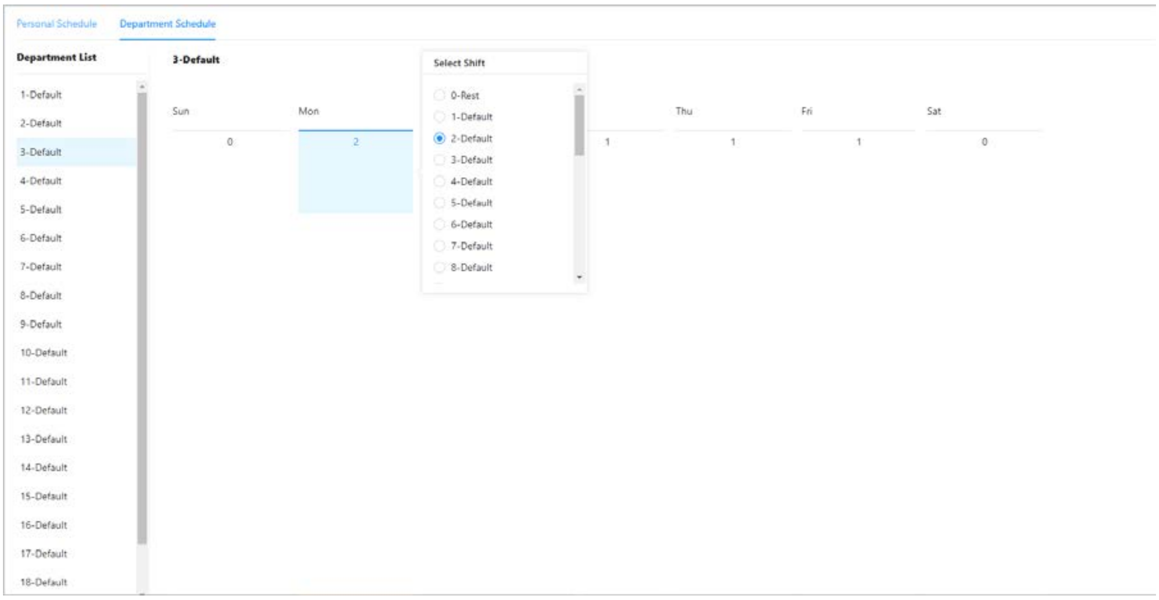
- 0 indicates break.
- 1 to 24 indicates the number of the per-defined shifts. For how to configure shifts, see "2.9.2 Configuring Shifts".
- 25 indicates business trip.
- 26 indicates leave of absence.

Step 3 Set works schedules for departments.

1. Click **Department Schedule**.
2. Select a department in the department list.
3. On the calendar, select a day, and then select a shift.

- 0 indicates rest.
- 1 to 24 indicates the number of the per-defined shifts. For how to configure shifts, see "2.9.2 Configuring Shifts".
- 25 indicates business trip.
- 26 indicates leave of absence.

Figure 3-37 Schedule shifts to a department



The defined work schedule is in a week cycle and will be applied to all employees in the department.

3.8.5 Configuring Attendance Modes

Procedure

Step 1 Select **Attendance Config** > **Attendance Config**.

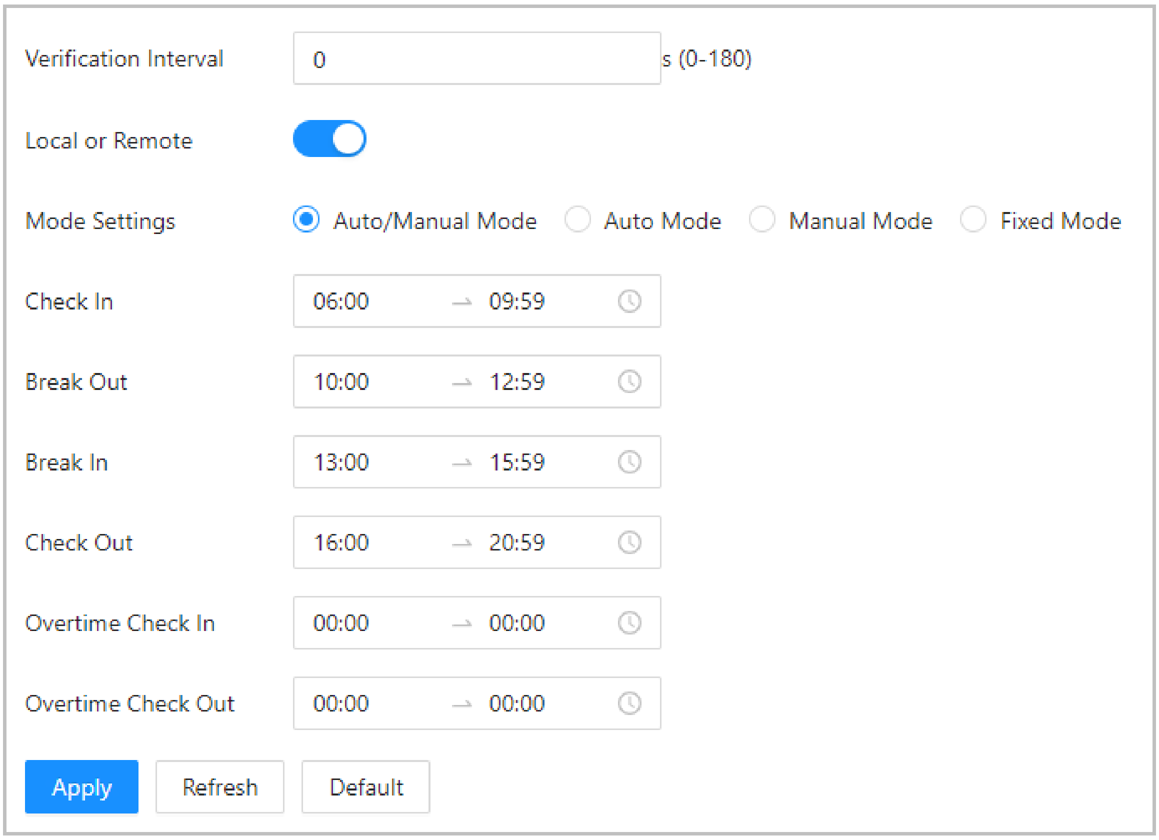
Step 2 Enter the verification interval.

When an employee clocks in and out multiple times within a set interval, the earliest time will be valid.

Step 3 Enable **Local or Remote**, and then set the attendance mode.

Step 4 Configure attendance modes.

Figure 3-38 Attendance modes



Verification Interval: 0 s (0-180)

Local or Remote: on

Mode Settings: ● Auto/Manual Mode ○ Auto Mode ○ Manual Mode ○ Fixed Mode

Check In: 06:00 → 09:59

Break Out: 10:00 → 12:59

Break In: 13:00 → 15:59

Check Out: 16:00 → 20:59

Overtime Check In: 00:00 → 00:00

Overtime Check Out: 00:00 → 00:00

Table 3-21 Attendance mode

Parameter	**Description**
Auto/Manual Mode	The screen displays the attendance status automatically after you clock in or out, but you can also manually change your attendance status. ● Check In: Clock in when your normal workday starts. ● Break Out: Clock out when your break starts. ● Break In: Clock in when your break ends. ● Check Out: Clock out when your normal workday starts. ● Overtime Check In: Clock in when your overtime period starts. ● Overtime Check Out: Clock out when your overtime period ends.
Auto Mode	The screen displays your attendance status automatically after you clock in or out. ● Check In: Clock in when your normal workday starts. ● Break Out: Clock out when your break starts. ● Break In: Clock in when your break ends. ● Check Out: Clock out when your normal workday starts. ● Overtime Check In: Clock in when your overtime period starts. ● Overtime Check Out: Clock out when your overtime period ends.
Manual Mode	Manually select your attendance status when you clock in or out.
Fixed Mode	When you clock in or out, the screen will display the per-defined attendance status all the time.

Step 5 Click **Apply**.

Related Operations

- Refresh: If you do not want to the save the current changes, click **Refresh** to cancel changes and restore it to previous settings.
- Default: Restore the attendance settings to factory defaults.

3.9 Configuring Audio and Video

3.9.1 Configuring Video

On the home page, select **Audio and Video Config** > **Video**, and then configure the video parameters.

Background Information

- Channel No.: Channel 1 is for configurations of visible light image. Channel 2 is for configurations of infrared light image.
- Default: Restore to defaults settings.
- Capture: Take a snapshot of the current image.

3.9.1.1 Configuring Channel 1

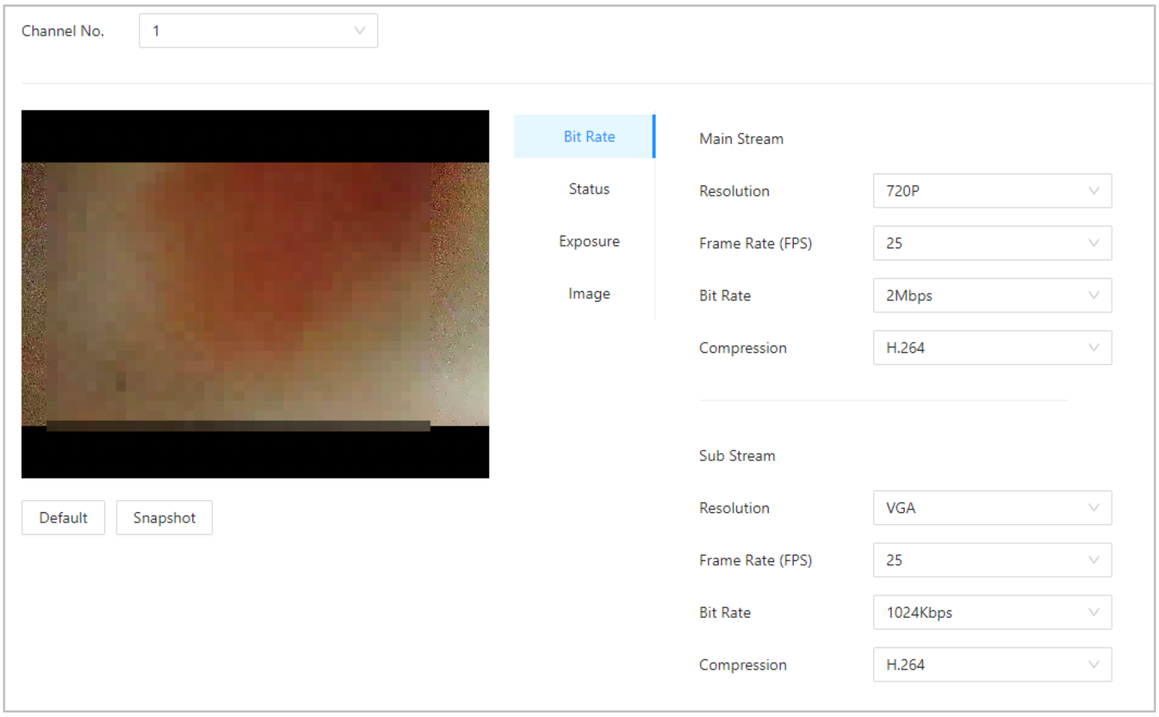
Procedure

Step 1 Select **Audio and Video Config** > **Video**.

Step 2 Select **1** from the **Channel No.** list.

Step 3 Configure the bit rate.

Figure 3-39 Date rate



Channel No. 1

Main Stream

Resolution	720P
Frame Rate (FPS)	25
Bit Rate	2Mbps
Compression	H.264

Sub Stream

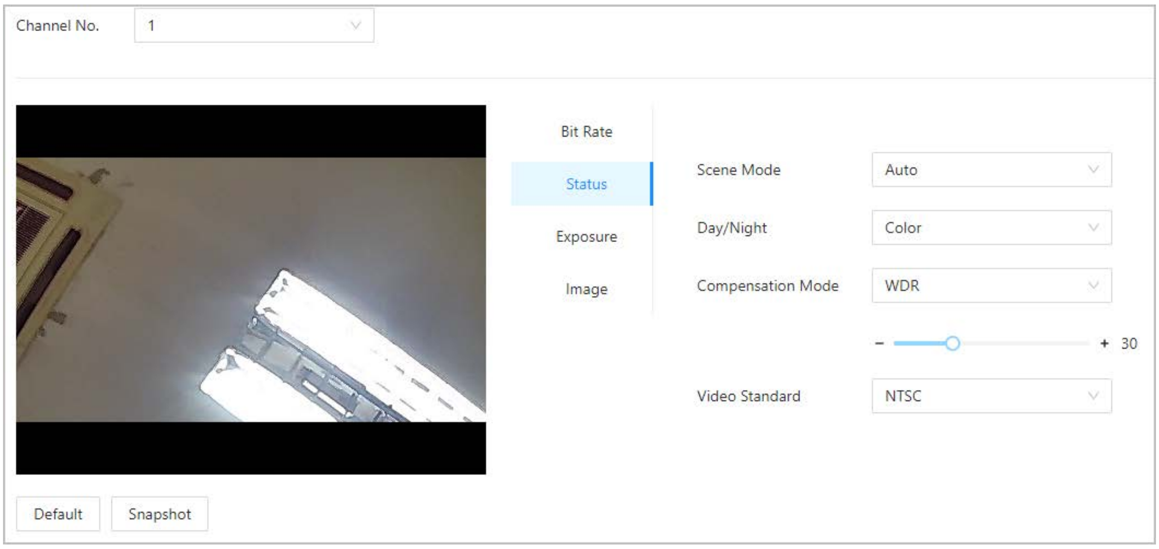
Resolution	VGA
Frame Rate (FPS)	25
Bit Rate	1024Kbps
Compression	H.264

Table 3-22 Bit rate description

Parameter		Description
Main Format	Resolution	When the Device functions as the a VTO and connects the VTH, the acquired stream limit of VTH is 720p.When resolution is changed to 1080p, the call and monitor function might be affected.
	Frame Rate (FPS)	The number of frames (or images) per second.
	Bit Rate	The amount of data transmitted over an internet connection in a given amount of time. Select a proper bandwidth based on your network speed.
	Compression	Video compression standard to deliver good video quality at lower bit rates.
Sub Stream	Resolution	The sub-stream supports D1, VGA and QVGA.
	Frame Rate (FPS)	The number of frames (or images) per second.
	Bit Rate	It indicates the amount of data transmitted over an internet connection in a given amount of time.
	Compression	Video compression standard to deliver good video quality at lower bit rates.

Step 4 Configure the status.

Figure 3-40 Status



Channel No. 1

Scene Mode: Auto

Day/Night: Color

Compensation Mode: WDR

30

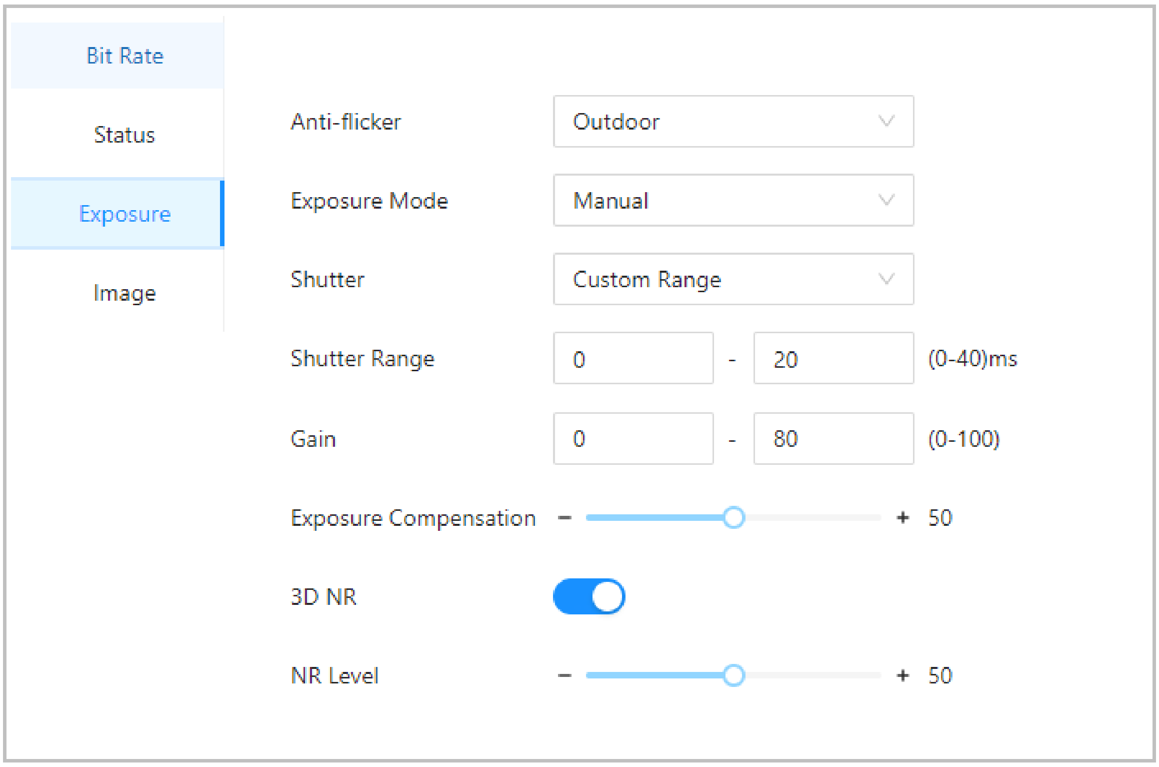
Video Standard: NTSC

Table 3-23 Parameters description of status

Parameter	Description
Scene Mode	The image hue is different in different scene mode. ● **Close**: Scene mode function is turned off. ● **Auto**: The system automatically adjusts the scene mode based on the photographic sensitivity. ● **Sunny**: In this mode, image hue will be reduced. ● **Night**: In this mode, image hue will be increased.
Day/Night	Day/Night mode affects light compensation in different situations. ● **Auto**: The system automatically adjusts the day/night mode based on the photographic sensitivity. ● **Colorful**: In this mode, images are colorful. ● **Black and white**: In this mode, images are in black and white.
Compensation Mode	● **Disable**: Compensation is turned off. ● **BLC**: Backlight compensation automatically brings more light to darker areas of an image when bright light shining from behind obscures it. ● **WDR**: The system dims bright areas and compensates for dark areas to create a balance to improve the overall image quality. ● **HLC**: Highlight compensation (HLC) is a technology used in CCTV/IP security cameras to deal with images that are exposed to lights like headlights or spotlights. The image sensor of the camera detects strong lights in the video and reduces exposure in these spots to enhance the overall quality of the image.

Step 5 Configure the exposure parameters.

Figure 3-41 Exposure



Anti-flicker: Outdoor

Exposure Mode: Manual

Shutter: Custom Range

Shutter Range: 0 - 20 (0-40)ms

Gain: 0 - 80 (0-100)

Exposure Compensation: 50

3D NR: on

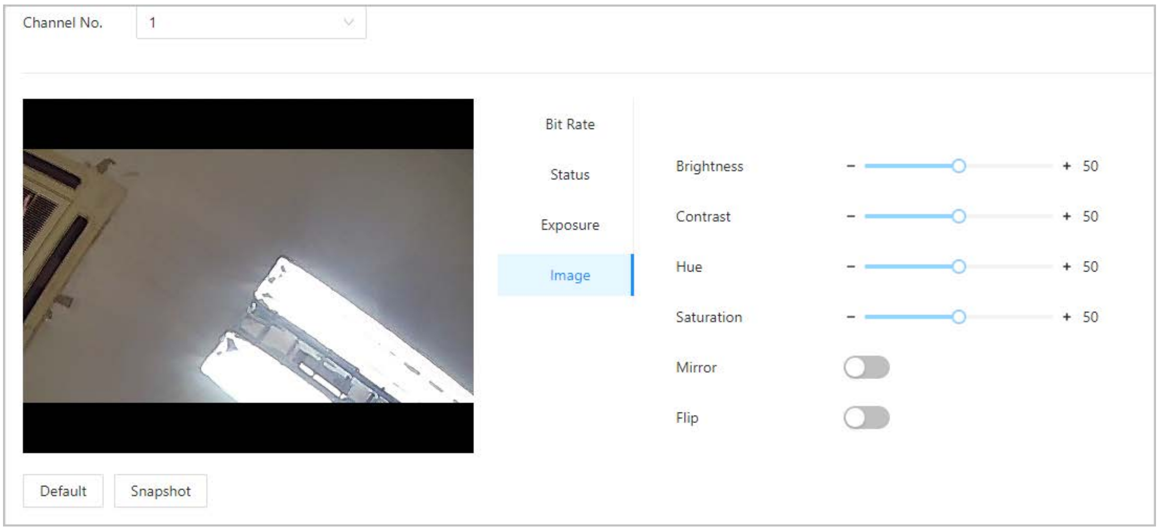
NR Level: 50

Table 3-24 Exposure parameter description

Parameter	Description
Anti-flicker	Set anti-flicker to reduce flicker and decrease or reduce uneven colors or exposure. ● **50Hz**: When the mains electricity is 50 Hz, the exposure is automatically adjusted based on brightness of the surroundings to prevent the appearance of horizontal lines. ● **60Hz**: When the mains electricity is 60 Hz, the exposure is automatically adjusted based on brightness of the surroundings to reduce the appearance of horizontal lines. ● **Outdoor**: When **Outdoor** is selected, the exposure mode can be switched.
Exposure Mode	You can set the exposure to adjust image brightness. ● **Auto**: The Device automatically adjusts the brightness of images based the surroundings. ● **Shutter Priority**: The Device adjust the image brightness according to the set range of the shutter. If the image is not bright enough but the shutter value has reached its upper or lower limit, the Device will automatically adjust the gain value for ideal brightness level. ● **Manual**: You can manually adjust the gain and shutter value to adjust image brightness. ◇ When you select **Outdoor** from the **Anti-flicker** list, you can select **Shutter Priority** as the exposure mode. ◇ Exposure mode might differ depending on models of Device.
Shutter	Shutter is a component that allows light to pass for a determined period. The higher the shutter speed, the shorter the exposure time, and the darker the image. You can select a shutter range or add a custom range.
Gain	When the gain value range is set, video quality will be improved.
Exposure Compensation	The video will be brighter by adjusting exposure compensation value.
3D NR	When 3D Noise Reduction (RD) is turned on, video noise can be reduced to ensure higher definition of videos. You can set its grade when this function is turned on. Higher grade means clearer image.
NR Level	

Step 6 Configure the image.

Figure 3-42 Image



Channel No. 1

Brightness – + 50

Contrast – + 50

Hue – + 50

Saturation – + 50

Mirror

Flip

Table 3-25 Image description

Parameter	Description
Brightness	The brightness of the image. Higher value means brighter images.
Contrast	Contrast is the difference in the luminance or color that makes an object distinguishable. The larger the contrast value is, the greater the color contrast will be.
Hue	Refers to the strength or saturation of a color. It describes the color intensity, or how pure it is.
Saturation	Color saturation indicates the intensity of color in an image. As the saturation increases, the appear stronger, for example being more red or more blue. The saturation value does not change image brightness.
Mirror	When the function is turned on, images will be displayed with the left and right side reversed.
Flip	When this function is turned on, images can be flipped over.

3.9.1.2 Configuring Channel 2

Procedure

Step 1 Select **Audio and Video Config** > **Video**.

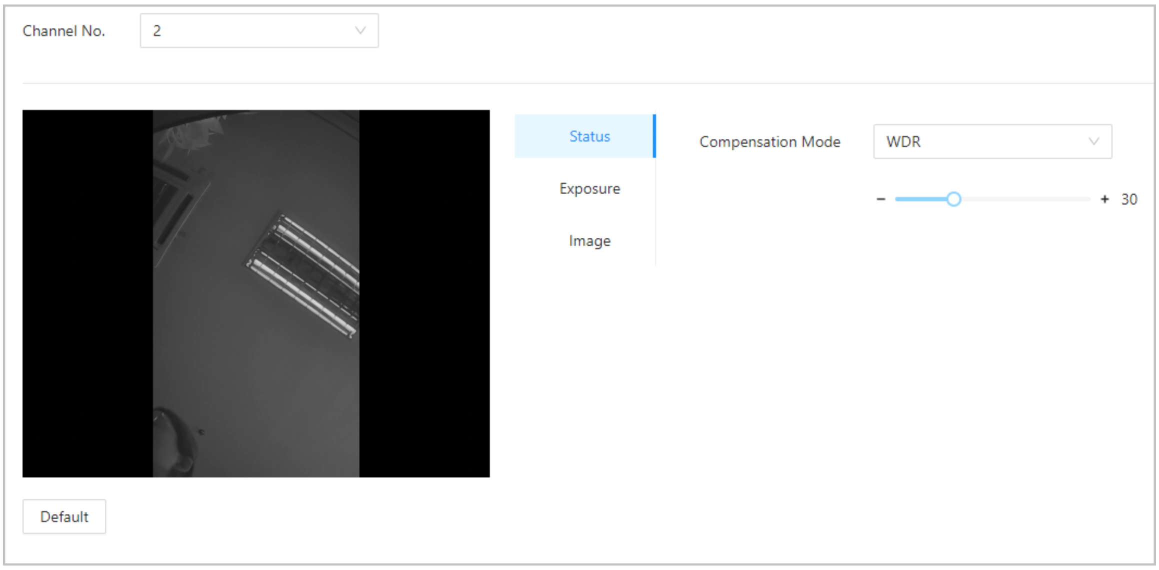
Step 2 Select **2** from the **Channel No.** list.

Step 3 Select 2 from the **Channel No.**.

Step 4 Configure the video status.

We recommend you turn on the WDR function when the face is in back-lighting.

Figure 3-43 Configure status



Channel No. 2

Status

Exposure

Image

Compensation Mode WDR

– + 30

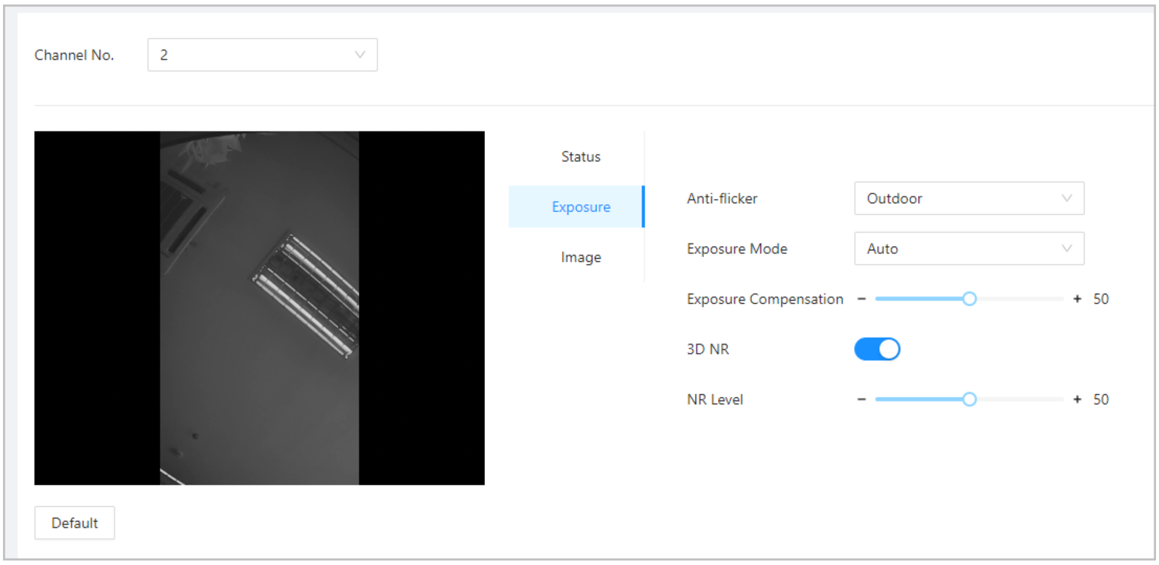
Default

Table 3-26 Status description

Parameter	Description
Compensation Mode	● **Disable**: Compensation is turned off. ● **BLC**: Backlight compensation automatically brings more light to darker areas of an image when bright light shining from behind obscures it. ● **WDR**: The system dims bright areas and compensates for dark areas to create a balance to improve the overall image quality. ● **HLC**: Highlight compensation (HLC) is a technology used in CCTV/IP security cameras to deal with images that are exposed to lights like headlights or spotlights. The image sensor of the camera detects strong lights in the video and reduces exposure in these spots to enhance the overall quality of the image.

Step 5 Configure the exposure parameters.

Figure 3-44 Exposure parameter



Channel No. 2

Status

Exposure

Image

Anti-flicker Outdoor

Exposure Mode Auto

Exposure Compensation – + 50

3D NR

NR Level – + 50

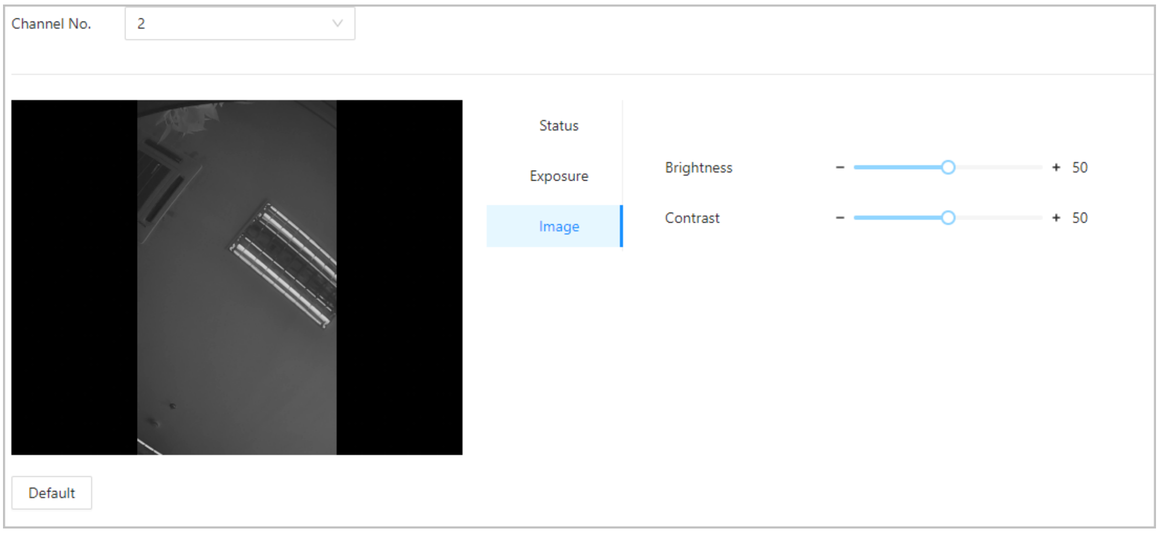
Default

Table 3-27 Exposure parameter description

Parameter	Description
Anti-flicker	Set anti-flicker to reduce flicker and decrease or reduce uneven colors or exposure. ● **50Hz**: When the mains electricity is 50 Hz, the exposure is automatically adjusted based on brightness of the surroundings to prevent the appearance of horizontal lines. ● **60Hz**: When the mains electricity is 60 Hz, the exposure is automatically adjusted based on brightness of the surroundings to reduce the appearance of horizontal lines. ● **Outdoor**: When **Outdoor** is selected, the exposure mode can be switched.
Exposure Mode	You can set the exposure to adjust image brightness. ● **Auto**: The Device automatically adjusts the brightness of images based the surroundings. ● **Shutter Priority**: The Device adjust the image brightness according to the set range of the shutter. If the image is not bright enough but the shutter value has reached its upper or lower limit, the Device will automatically adjust the gain value for ideal brightness level. ● **Manual**: You can manually adjust the gain and shutter value to adjust image brightness. 📖 ◇ When you select **Outdoor** from the **Anti-flicker** list, you can select **Shutter Priority** as the exposure mode. ◇ Exposure mode might differ depending on models of Device.
Exposure Compensation	The video will be brighter by adjusting exposure compensation value.
3D NR	When 3D Noise Reduction (RD) is turned on, video noise can be reduced to ensure higher definition of videos. You can set its grade when this function is turned on. Higher grade means clearer image.
NR Level	

Step 6 Configure the image parameters.

Figure 3-45 Image parameters



Channel No. 2

Brightness − + 50

Contrast − + 50

Table 3-28 Image description

Parameter	Description
Brightness	The brightness of the image. Higher value means brighter images.
Contrast	Contrast is the difference in the luminance or color that makes an object distinguishable. The larger the contrast value is, the greater the color contrast will be.

3.9.2 Configuring Audio Prompts

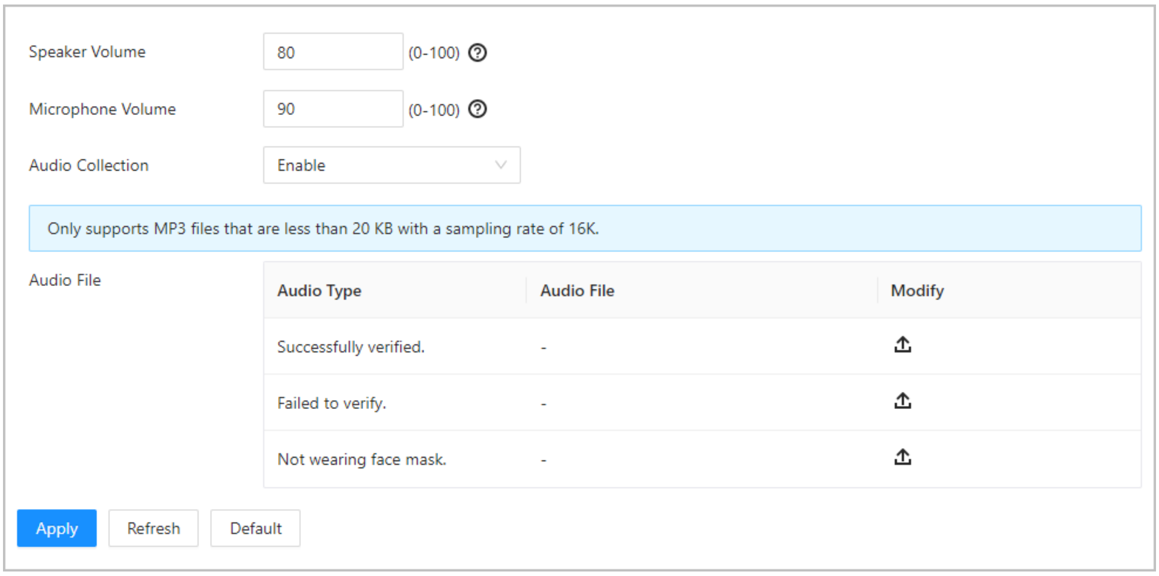
Set audio prompts during identity verification.

Procedure

Step 1 Select **Audio and Video Config** > **Audio**.

Step 2 Configure the audio parameters.

Figure 3-46 Configure audio parameters



Speaker Volume 80 (0-100)

Microphone Volume 90 (0-100)

Audio Collection Enable

Only supports MP3 files that are less than 20 KB with a sampling rate of 16K.

Audio File

Audio Type	Audio File	Modify
Successfully verified.	-	⇧
Failed to verify.	-	⇧
Not wearing face mask.	-	⇧

Table 3-29 Parameters description

Parameters	Description
Speaker	Set the volume of the speaker.
Microphone Volume	Set the volume of the microphone.
Audio Collection	The audio will not be recorded during video talk when this function is not enabled.
Audio File	Click Upload audio files to the platform.

Step 3 Click ⇪ to upload audio files to platform for each audio type.

Only supports MP3 files that are less than 20 KB with a sampling rate of 16K.

Step 4 Click **Apply**.

3.9.3 Configuring Motion Detection

When there are moving objects detected and reaches the set threshold, the screen will be awaken.

Procedure

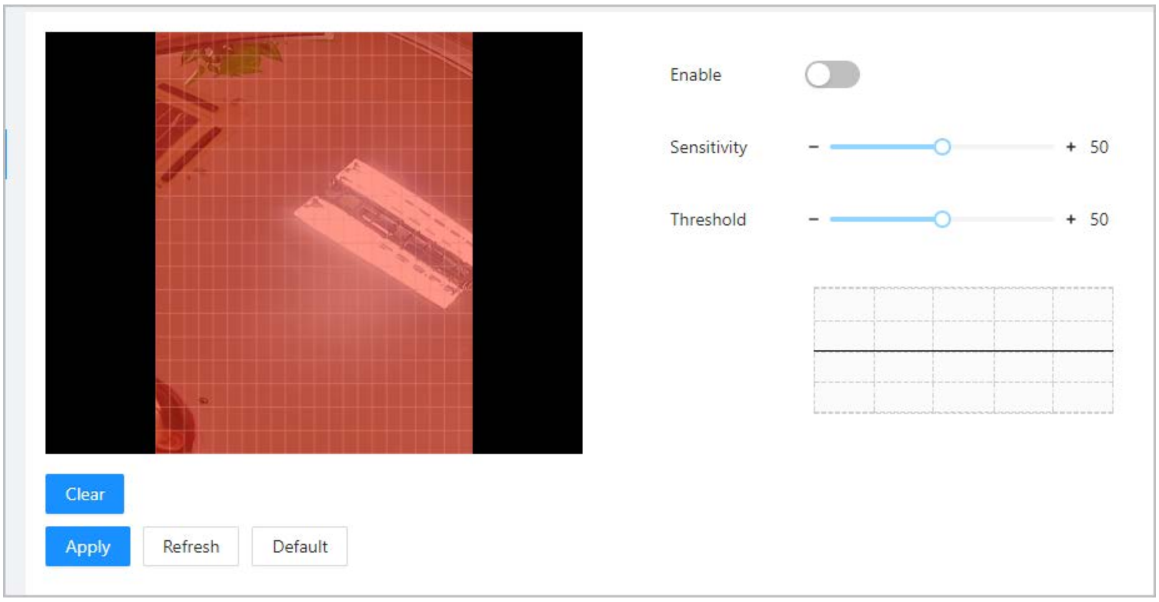
Step 1 Select **Audio and Video Config** > **Motion Detection Settings**.

Step 2 Enable the motion detection function.

Step 3 Press and hold the left mouse button, and then draw a detection area in the red area.

- The motion detection area is displayed in red.
- To remove the existing the motion detection area, click **Clear**.
- The motion detection area you draw will be a non-motion detection area if you draw in the default motion detection area.

Figure 3-47 Motion detection area



Enable

Sensitivity − + 50

Threshold − + 50

Step 4 Configure the parameters.

- Sensitivity: The sensible to the surroundings. Higher sensitivity means easier to trigger alarms.

- Threshold: The percentage of the moving object area in the motion detection area. Higher threshold means easier to trigger alarms.

Step 5 Click **Apply**.

The motion detection is triggered when the red lines are displayed; the green lines are displayed when it is not triggered.

3.9.4 Configuring Local Coding

Set the view area in the video talk and preview.

Background Information

📖

- This function is only available on select models.
- This function is enabled by default when it works with a VTH. The preview might be not accessible when this function is disabled.

Procedure

Step 1 Log in to the webpage.

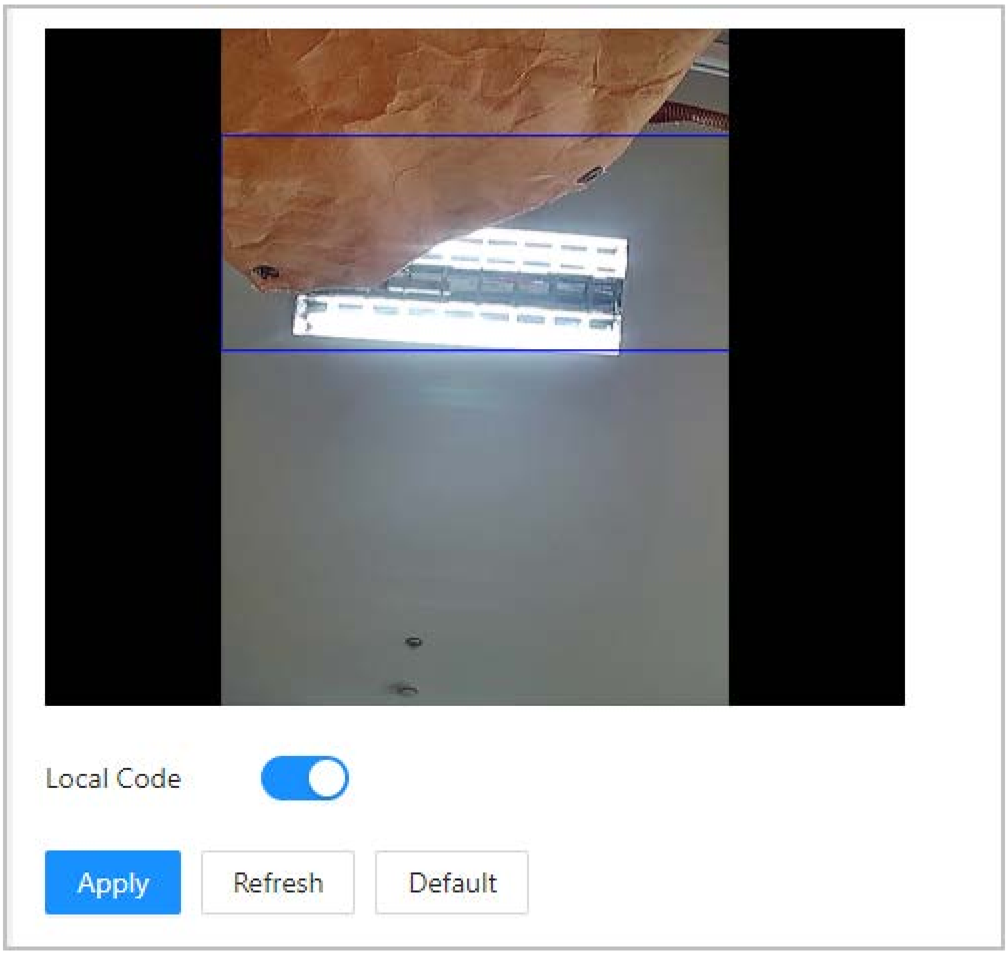
Step 2 Select **Audio and Video Config** > **Local Code**.

Step 3 Select **Enable** to turn on the function.

Step 4 Drag the box to a designated position.

The box indicates the preview area during the video talk.

Figure 3-48 Local coding



Local Code ●

Step 5 Click **Apply**.

3.10 Communication Settings

3.10.1 Network Settings

3.10.1.1 Configuring TCP/IP

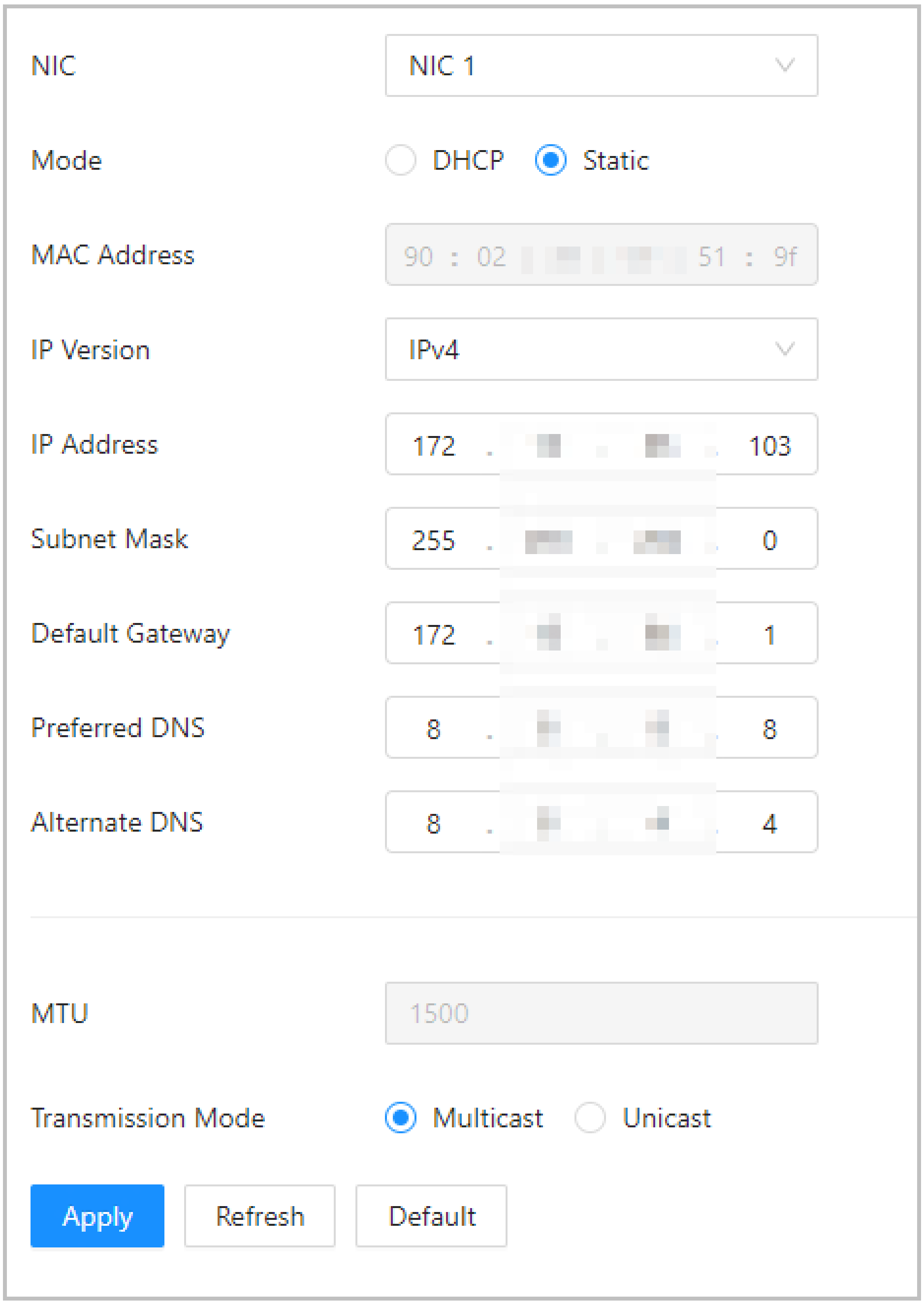
You need to configure IP address of Device to make sure that it can communicate with other devices.

Procedure

Step 1 Select **Communication Settings** > **Network Setting** > **TCP/IP**.

Step 2 Configure the parameters.

Figure 3-49 TCP/IP



NIC	NIC 1
Mode	○ DHCP ● Static
MAC Address	90 : 02 [redacted] 51 : 9f
IP Version	IPv4
IP Address	172 . [redacted] . 103
Subnet Mask	255 . [redacted] . 0
Default Gateway	172 . [redacted] . 1
Preferred DNS	8 . [redacted] . 8
Alternate DNS	8 . [redacted] . 4
MTU	1500
Transmission Mode	● Multicast ○ Unicast

Table 3-30 Description of TCP/IP

Parameter	Description
Mode	● Static: Manually enter IP address, subnet mask, and gateway. ● DHCP: It stands for Dynamic Host Configuration Protocol. When DHCP is turned on, the Device will automatically be assigned with IP address, subnet mask, and gateway.
MAC Address	MAC address of the Device.
IP Version	IPv4 or IPv6.
IP Address	If you set the mode to **Static**, configure the IP address, subnet mask and gateway.
Subnet Mask	

Parameter	Description
Default Gateway	● IPv6 address is represented in hexadecimal. ● IPv6 version do not require setting subnet masks. ● The IP address and default gateway must be in the same network segment.
Preferred DNS	Set IP address of the preferred DNS server.
Alternate DNS	Set IP address of the alternate DNS server.
MTU	MTU (Maximum Transmission Unit) refers to the maximum size of data that can be transmitted in a single network packet in computer networks. A larger MTU value can improve network transmission efficiency by reducing the number of packets and associated network overhead. If a device along the network path is unable to handle packets of a specific size, it can result in packet fragmentation or transmission errors. In Ethernet networks, the common MTU value is 1500 bytes. However, in certain cases such as using PPPoE or VPN, smaller MTU values may be required to accommodate the requirements of specific network protocols or services. The following are recommended MTU values for reference: ● 1500: Maximum value for Ethernet packets, also the default value. This is a typical setting for network connections without PPPoE and VPN, some routers, network adapters, and switches. ● 1492: Optimal value for PPPoE ● 1468: Optimal value for DHCP. ● 1450: Optimal value for VPN.
Transmission Mode	● Multicast: Ideal for video talk. ● Unicast: Ideal for group call.

Step 3 Click **OK**.

3.10.1.2 Configuring Wi-Fi

Procedure

Step 1 Select **Communication Settings** > **Network Setting** > **TCP/IP**.

Step 2 Turn on Wi-Fi.

All available Wi-Fi are displayed.

- Wi-Fi and Wi-Fi AP cannot be enabled at the same time.
- Wi-Fi function is only available on select models.

Step 3 Tap +, and then enter the password of the Wi-Fi.

3.10.1.3 Configuring Port

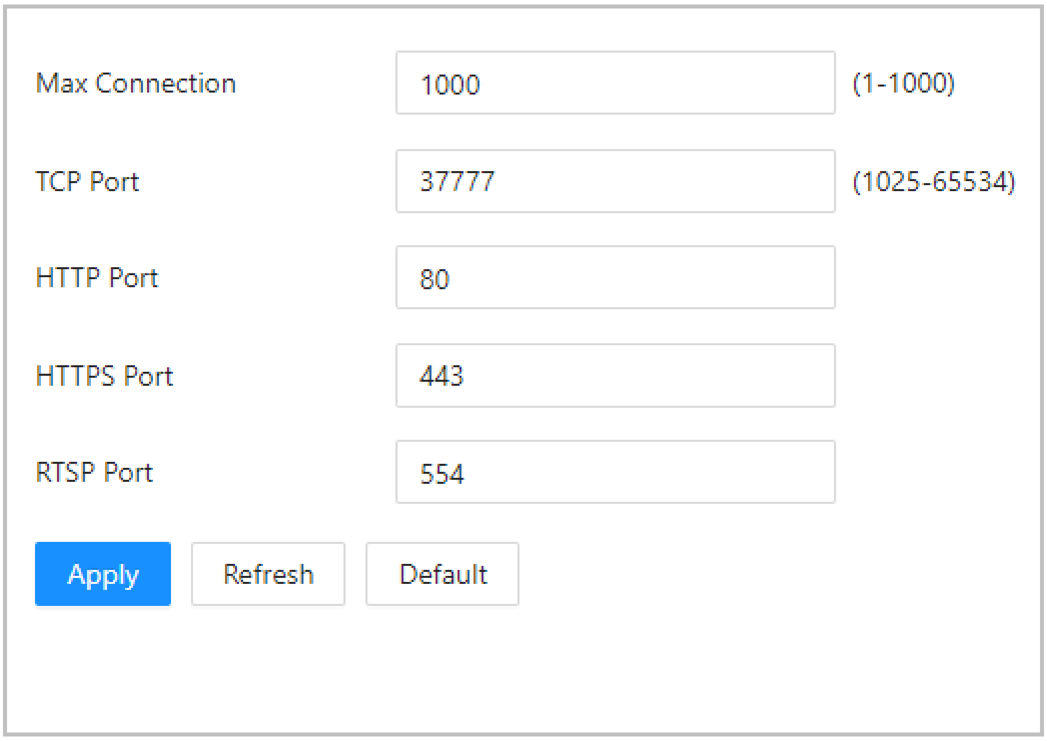
You can limit access to the Device at the same time through webpage, desktop client and mobile client.

Procedure

Step 1 Select **Communication Settings** > **Network Setting** > **Port**.

Step 2 Configure the ports.

Figure 3-50 Configure ports



Max Connection: 1000 (1-1000)

TCP Port: 37777 (1025-65534)

HTTP Port: 80

HTTPS Port: 443

RTSP Port: 554

Except for **Max Connection** and **RTSP Port**, you need to restart the Device to make the configurations effective after you change other parameters.

Table 3-31 Description of ports

Parameter	Description
Max Connection	You can set the maximum number of clients (such as webpage, desktop client and mobile client) that can access the Device at the same time.
TCP Port	Default value is 37777.
HTTP Port	Default value is 80. If you have changed the port number, add the port number after the IP address when access the webpage.
HTTPS Port	Default value is 443.
RTSP Port	Default value is 554.

Step 3 Click **Apply**.

3.10.1.4 Configuring Basic Service

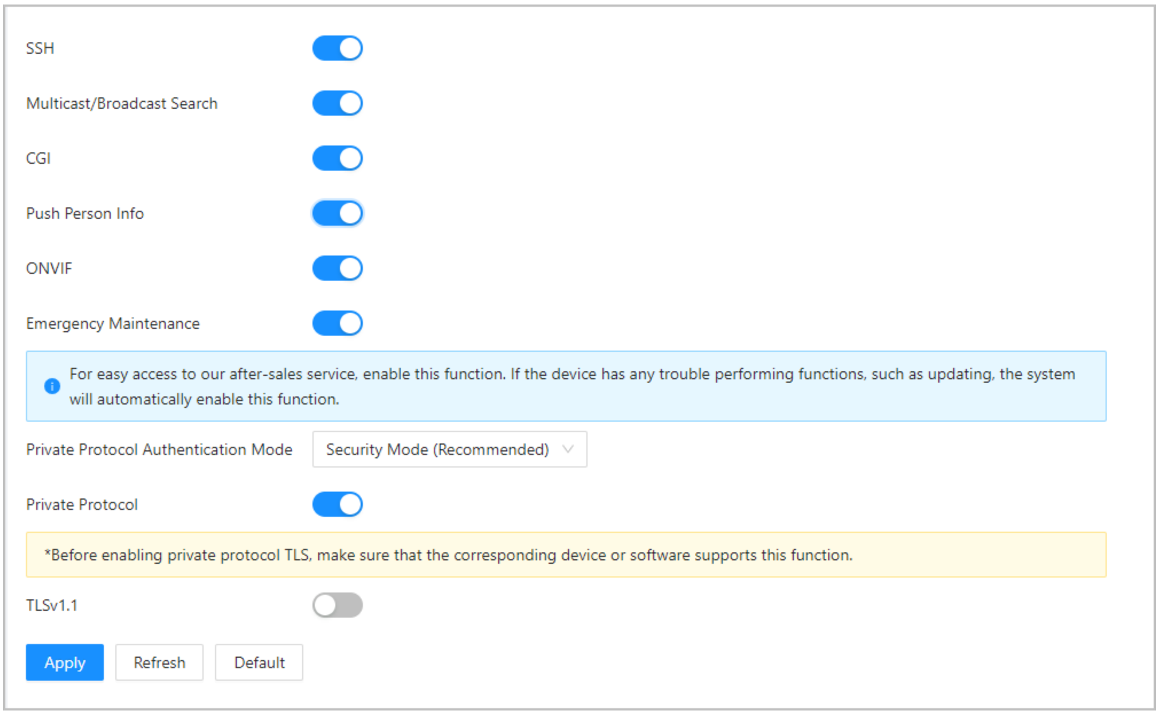
When you want to connect the Device to a third-party platform, turn on the CGI and ONVIF functions.

Procedure

Step 1 Select **Network Settings** > **Basic Services**.

Step 2 Configure the basic service.

Figure 3-51 Basic service



SSH

Multicast/Broadcast Search

CGI

Push Person Info

ONVIF

Emergency Maintenance

For easy access to our after-sales service, enable this function. If the device has any trouble performing functions, such as updating, the system will automatically enable this function.

Private Protocol Authentication Mode: Security Mode (Recommended)

Private Protocol

*Before enabling private protocol TLS, make sure that the corresponding device or software supports this function.

TLSv1.1

Table 3-32 Basic service parameter description

Parameter	Description
SSH	SSH, or Secure Shell Protocol, is a remote administration protocol that allows users to access, control, and modify their remote servers over the internet.
Mutlicast/Broadcast Search	Search for devices through multicast or broadcast protocol.
CGI	The Common Gateway Interface (CGI) is an intersection between web servers through which the standardized data exchange between external applications and servers is possible.
Push Person Info	When the user information is updated or new users are added, the Device will automatically push user information to the management platform.
ONVIF	ONVIF stands for Open Network Video Interface Forum. Its aim is to provide a standard for the interface between different IP-based security devices. These standardized ONVIF specifications are like a common language that all devices can use to communicate.
Emergency Maintenance	It is turned on by default.

Parameter	Description
Private Protocol Authentication Mode	Set the authentication mode, including safe mode and compatibility mode. It is recommended to choose **Security Mode**. ● Security Mode (recommended): Does not support accessing the device through Digest, DES, and plaintext authentication methods, improving device security. ● Compatible Mode: Supports accessing the device through Digest, DES, and plaintext authentication methods, with reduced security.
Private Protocol	The platform adds devices through TLSv1.1 protocol. 📖 Security risks might present when TLSv1.1 is enabled. Please be advised.

Step 3 Click **Apply**.

3.10.1.5 Configuring Cloud Service

The cloud service provides a NAT penetration service. Users can manage multiple devices through DMSS. You do not have to apply for dynamic domain name, configure port mapping or deploy server.

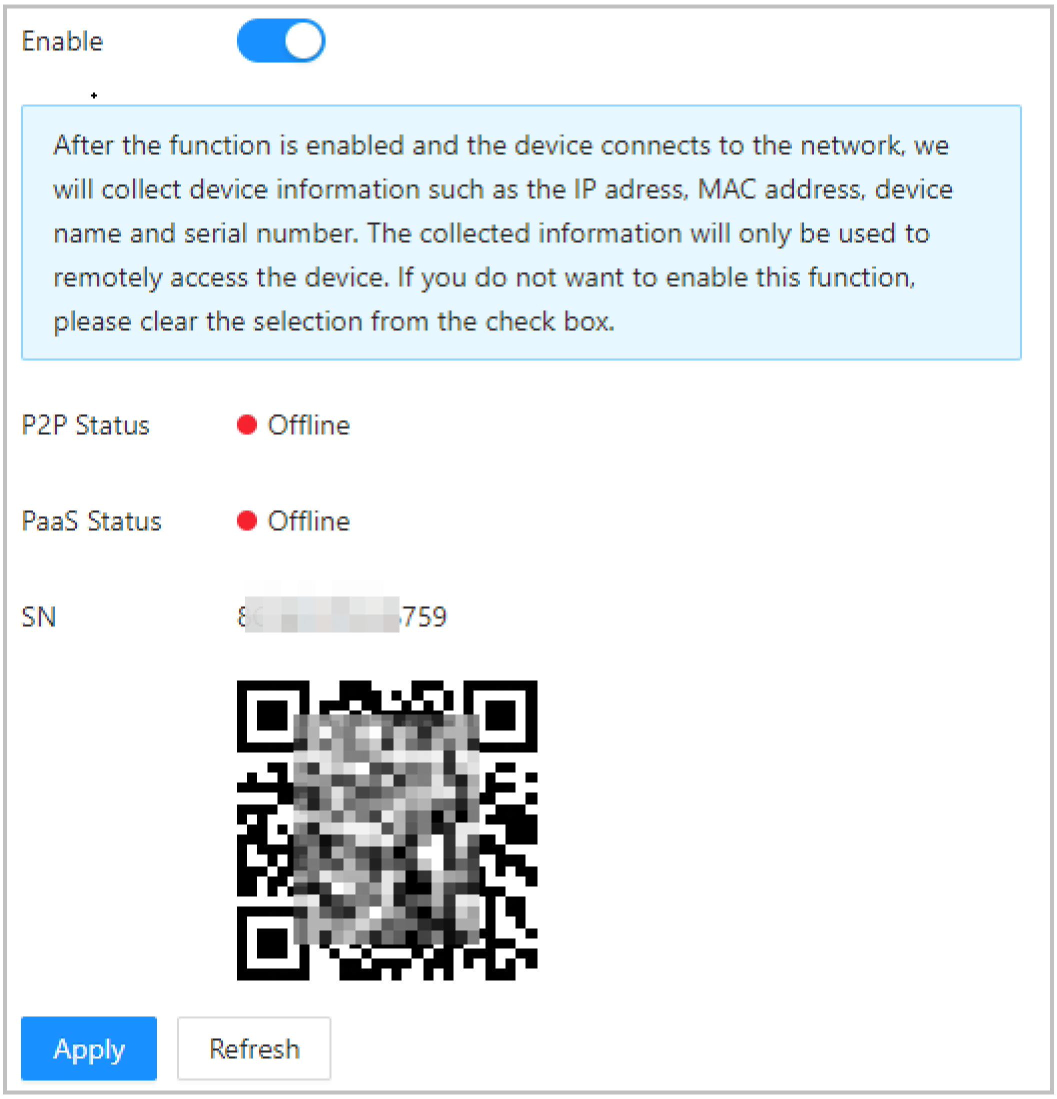
Procedure

Step 1 On the home page, select **Communication Settings** > **Network Setting** > **Cloud Service**.

Step 2 Turn on the cloud service function.

The cloud service goes online if the P2P and PaaS are online.

Figure 3-52 Cloud service



Enable

After the function is enabled and the device connects to the network, we will collect device information such as the IP adress, MAC address, device name and serial number. The collected information will only be used to remotely access the device. If you do not want to enable this function, please clear the selection from the check box.

P2P Status ● Offline

PaaS Status ● Offline

SN 8[redacted]759

Step 3 Click **Apply**.

Step 4 Scan the QR code with DMSS to add the device.

3.10.1.6 Configuring Auto Registration

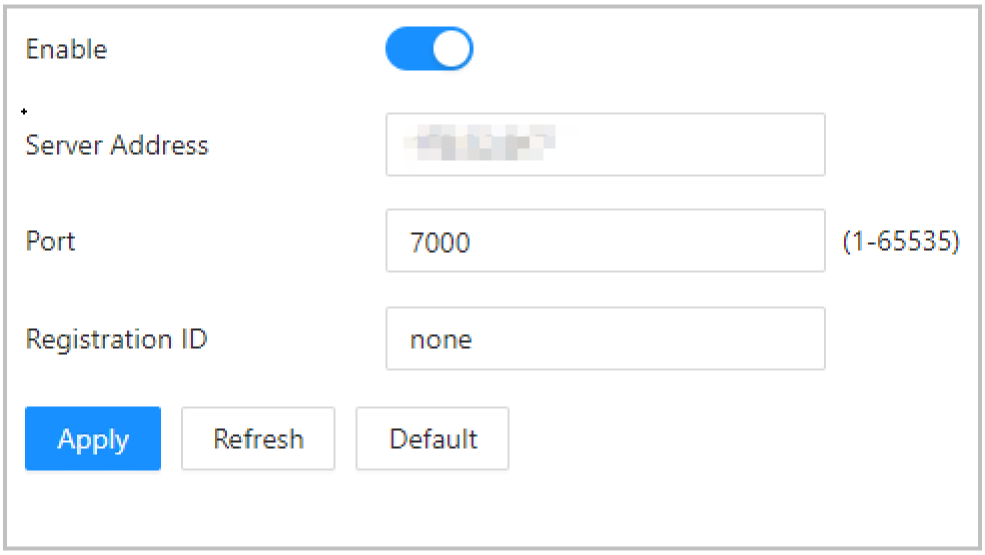
The active registration enables the devices to be added to the management platform without manual input of device information such as IP address and port.

Procedure

Step 1 On the home page, select **Network Setting** > **Auto Registration**.

Step 2 Enable the auto registration function and configure the parameters.

Figure 3-53 Auto Registration



Enable: ●

* Server Address: [redacted]

Port: 7000 (1-65535)

Registration ID: none

Table 3-33 Automatic registration description

Parameter	Description
Server Address	The IP address or the domain name of the server.
Port	The port of the server that is used for automatic registration.
Registration ID	The registration ID (user defined) of the device. Adding the device to the management by entering the registration ID on the platform.

Step 3 Click **Apply**.

3.10.1.7 Configuring CGI Actively Registers

Connect to a third-party platform through CGI protocol.

Background Information

Only supports IPv4.

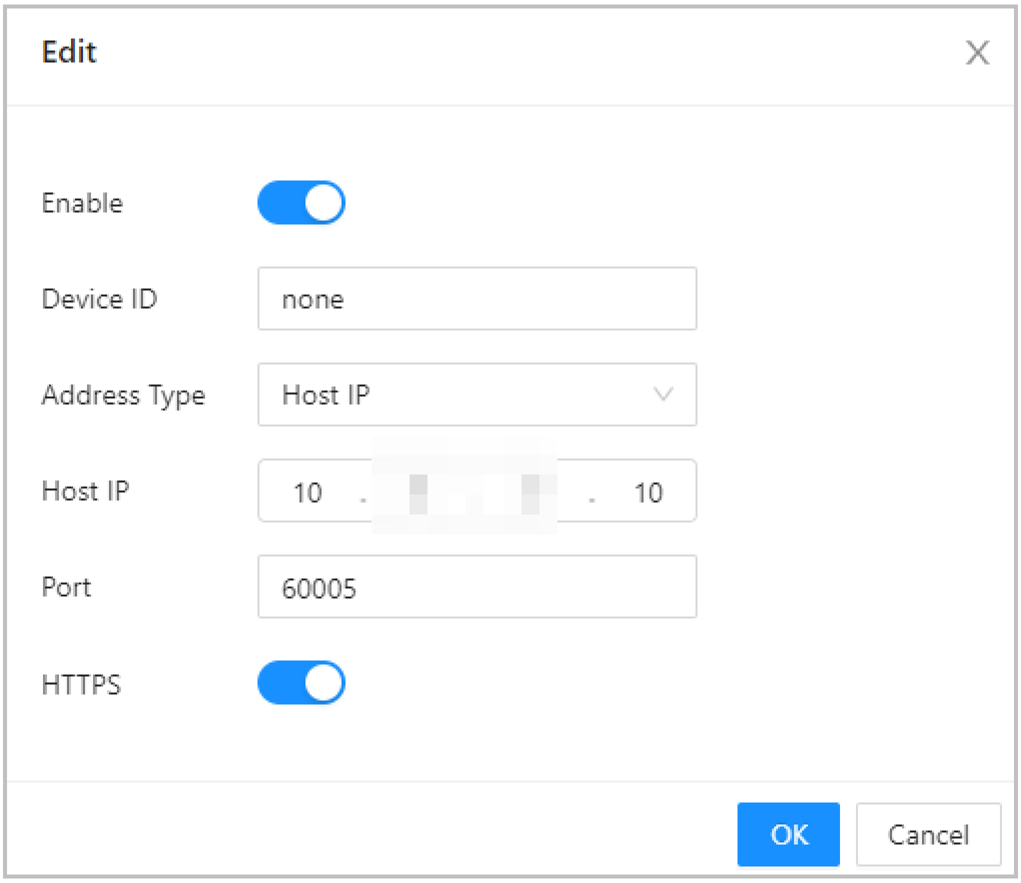
Procedure

Step 1 On the home page, select **Communication Settings** > **Network Settings** > **CGI actively registers**.

Step 2 Enable this function, and then configure the parameters.

Step 3 Click **Add**, and then configure parameters.

Figure 3-54 CGI active registration



Edit

Enable: on

Device ID: none

Address Type: Host IP

Host IP: 10 . [redacted] . 10

Port: 60005

HTTPS: on

Table 3-34 Automatic registration description

Parameter	Description
Device ID	Supports up to 32 bytes, including Chinese, numbers, letters, and special characters.
Address Type	Supports 2 methods to register. ● Host IP: Enter the IP address of the third-party platform. ● Domain Name: Enter the domain name of the third-party platform.
Host IP	
Domain Name	
HTTPS	Access the third-party platform through HTTPS. HTTPS secures communication over a computer network.

Step 4 Click **Apply**.

3.10.1.8 Configuring Auto Upload

Send user information and unlock records through to the management platform

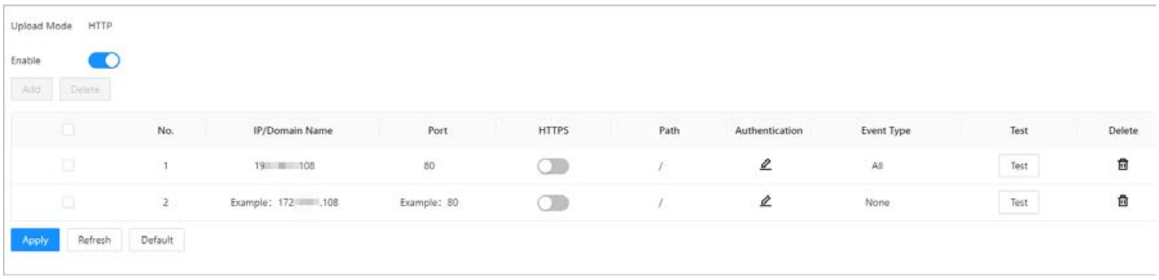
Procedure

Step 1 On the home page, select **Communication Settings** > **Network Settings** > **Auto Upload**.

Step 2 Enable HTTP upload mode.

Step 3 Click **Add**, and then configure parameters.

Figure 3-55 Automatic upload



Upload Mode HTTP

Enable

□	No.	IP/Domain Name	Port	HTTPS	Path	Authentication	Event Type	Test	Delete
□	1	19[redacted]108	80		/		All	Test	
□	2	Example：172[redacted].108	Example：80		/		None	Test	

Table 3-35 Parameters description

Parameter	Description
IP/Domain Name	The IP or domain name of the management platform.
Port	The port of the management platform.
HTTPS	Access the management platform through HTTPS. HTTPS secures communication over a computer network.
Authentication	Enable account authentication when you access the management platform. Login username and password are required.
Even Type	Select the type of event that will be pushed to the management platform. ● Before you use this function, go to **Communication Settings** > **Network Settings** > **Basic Service** to enable **Push Person Info**. ● Person information can only be pushed to one management platform and unlock records can be pushed to multiple management platforms.

Step 4 Click **Apply**.

3.10.2 Configuring RS-485

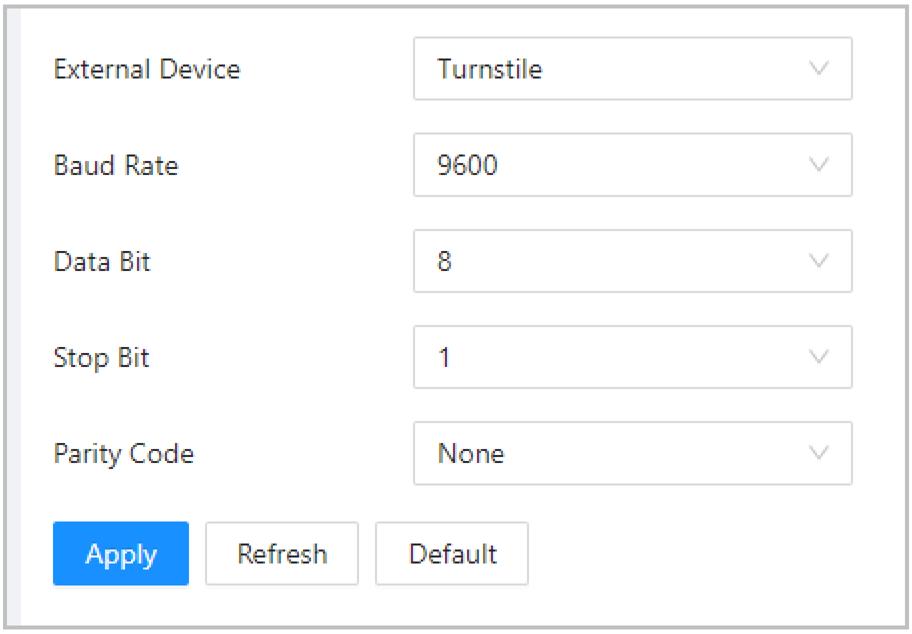
Configure the RS-485 parameters if you connect an external device to the RS-485 port.

Procedure

Step 1 Select **Communication Settings** > **RS-485 Settings**.

Step 2 Configure the parameters.

Figure 3-56 Configure parameters



External Device: Turnstile

Baud Rate: 9600

Data Bit: 8

Stop Bit: 1

Parity Code: None

Table 3-36 Configure the Wiegand format

Parameter	Description
External Device	● Device: Select **Device** when the Device functions as a card reader, and the Device will send data to the Device to control access. Output Data type: ◇ Card Number: Outputs data based on card number when users swipe card to unlock door; outputs data based on user's first card number when they use other unlock methods. ◇ No.: Outputs data based on the user ID. ● Card Reader: The Device connects to a card reader. ● Reader (OSDP): The Device is connected to a card reader based on OSDP protocol. ● Door Control Security Module: The door exit button, lock and fire linkage is not effective after the security module is enabled. ● Turnstile: When the Device connects to a turnstile, and the access controller board of the turnstile connects to an external QR code module or card swiping module, the board will transmit the verification data to the turnstile.
Data Bit	The number of bits used to transmit the actual data in a serial communication. It represents the binary digits that carry the information being transmitted.
Stop Bit	A bit sent after the data and optional parity bits to indicate the end of a data transmission. It allows the receiver to prepare for the next byte of data and provides synchronization in the communication protocol.

Parameter	Description
Parity Code	An additional bit sent after the data bits to detect transmission errors. It helps verify the integrity of the transmitted data by ensuring a specific number of logical high or low bits.

Step 3 Click **Apply**.

3.10.3 Configuring Wiegand

Configure the RS-485 parameters if you connect an external device with the RS-485 port.

Procedure

Step 1 Select **Communication Settings** > **Wiegand**.

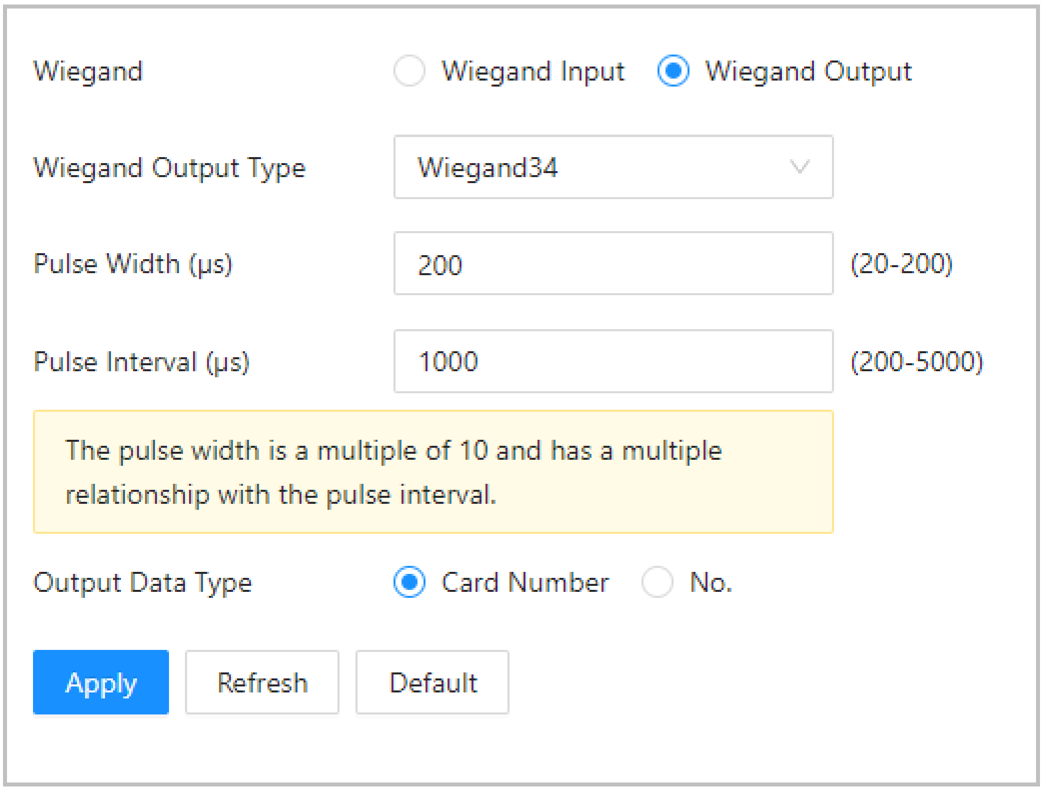
Step 2 Select a Wiegand type, and then configure parameters.

- Select **Wiegand Input** when you connect an external card reader to the Device.

  When the Device connects to a third-party device through the Wiegand input port, and the card number read by the Device is in the reverse order from the actual card number. In this case, you can turn on **Card No. Inversion** function.

- Select **Wiegand Output** when the Device functions as a card reader, and you need to connect it to a controller or another access terminal.

Figure 3-57 Wiegand output



Wiegand ○ Wiegand Input ● Wiegand Output

Wiegand Output Type: Wiegand34

Pulse Width (μs): 200 (20-200)

Pulse Interval (μs): 1000 (200-5000)

The pulse width is a multiple of 10 and has a multiple relationship with the pulse interval.

Output Data Type ● Card Number ○ No.

Table 3-37 Description of Wiegand output

Parameter	Description
Wiegand Output Type	Select a Wiegand format to read card numbers or ID numbers. ● **Wiegand26**: Reads 3 bytes or 6 digits. ● **Wiegand34**: Reads 4 bytes or 8 digits. ● **Wiegand66**: Reads 8 bytes or 16 digits.
Pulse Width	Enter the pulse width and pulse interval of Wiegand output.
Pulse Interval	
Output Data Type	Select the type of output data. ● **No.**: Outputs data based on user ID. The data format is hexadecimal or decimal. ● **Card Number**: Outputs data based on user's first card number.

Step 3 Click **Apply**.

3.11 Configuring the System

3.11.1 User Management

You can add or delete users, change users' passwords, and enter an email address for resetting the password when you forget your password.

3.11.1.1 Adding Administrators

You can add new administrator accounts, and then they can log in to the webpage of the Device.

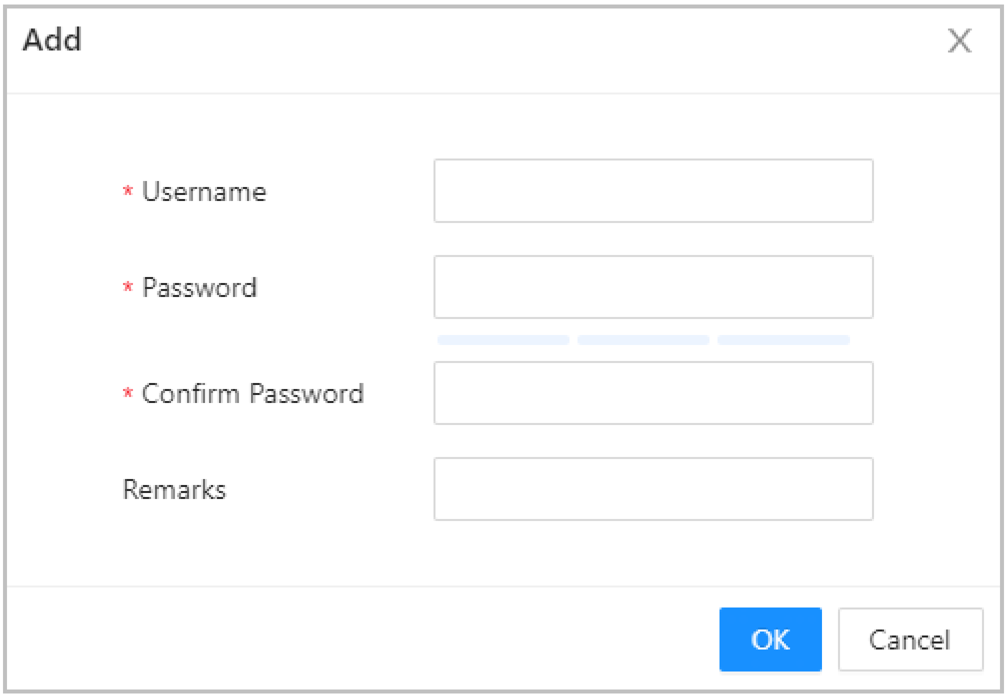
Procedure

Step 1 On the home page, select **System** > **Account**.

Step 2 Click **Add**, and enter the user information.

- The username cannot be the same with existing account. The username consists of up to 31 characters and only allows for numbers, letters, underscores, midlines, dots, or @.
- The password must consist of 8 to 32 non-blank characters and contain at least two types of the following characters: Upper case, lower case, numbers, and special characters (excluding ' " ; : &).Set a high-security password by following the password strength prompt.

Figure 3-58 Add administrators



Step 3 Click **OK**.

Only admin account can change password and admin account cannot be deleted.

3.11.1.2 Adding ONVIF Users

Background Information

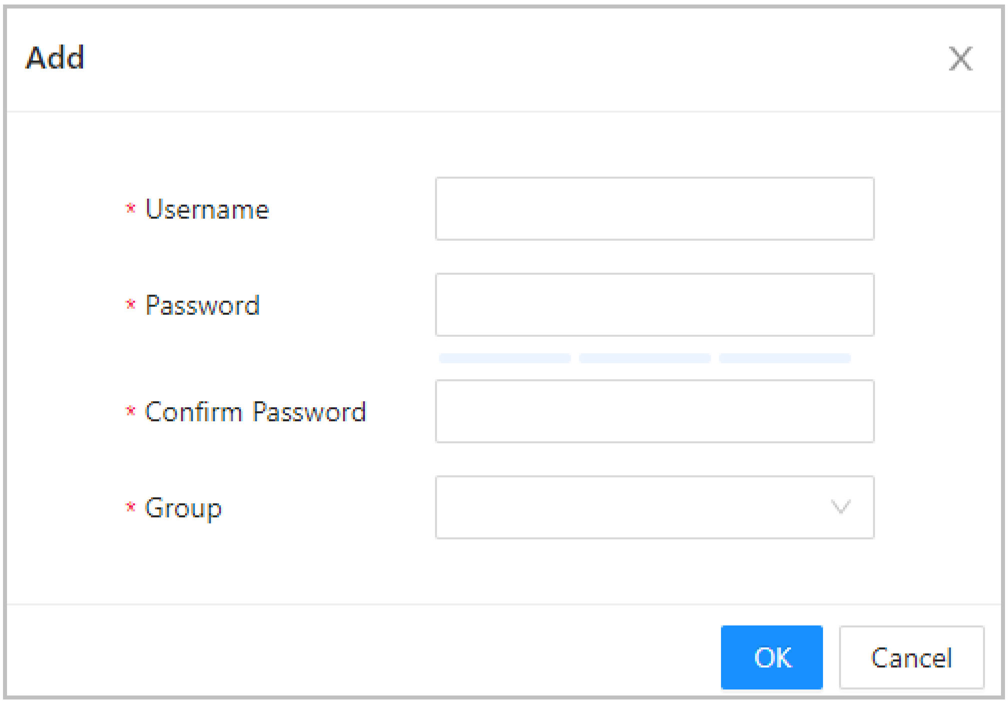
Open Network Video Interface Forum (ONVIF), a global and open industry forum that is established for the development of a global open standard for the interface of physical IP-based security products, which allows the compatibility from different manufactures. ONVIF users have their identities verified through ONVIF protocol. The default ONVIF user is admin.

Procedure

Step 1 On the home page, select **System** > **Account** > **ONVIF User**.

Step 2 Click **Add**, and then configure parameters.

Figure 3-59 Add ONVIF user



Step 3 Click **OK**.

3.11.1.3 Resetting the Password

Reset the password through the linked e-mail when you forget your password.

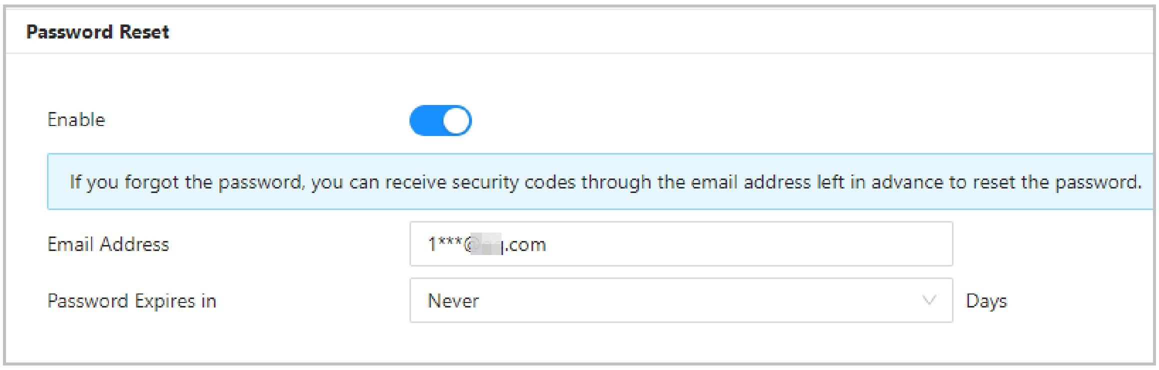
Procedure

Step 1 Select **System** > **Account**.

Step 2 Enter the email address, and set the password expiration time.

Step 3 Turn on the password reset function.

Figure 3-60 Reset Password



Password Reset

Enable

If you forgot the password, you can receive security codes through the email address left in advance to reset the password.

Email Address: 1***@[redacted].com

Password Expires in: Never Days

If you forgot the password, you can receive security codes through the linked email address to reset the password.

Step 4 Click **Apply**.

3.11.1.4 Viewing Online Users

You can view online users who currently log in to the webpage. On the home page, select **System** >

Online User.

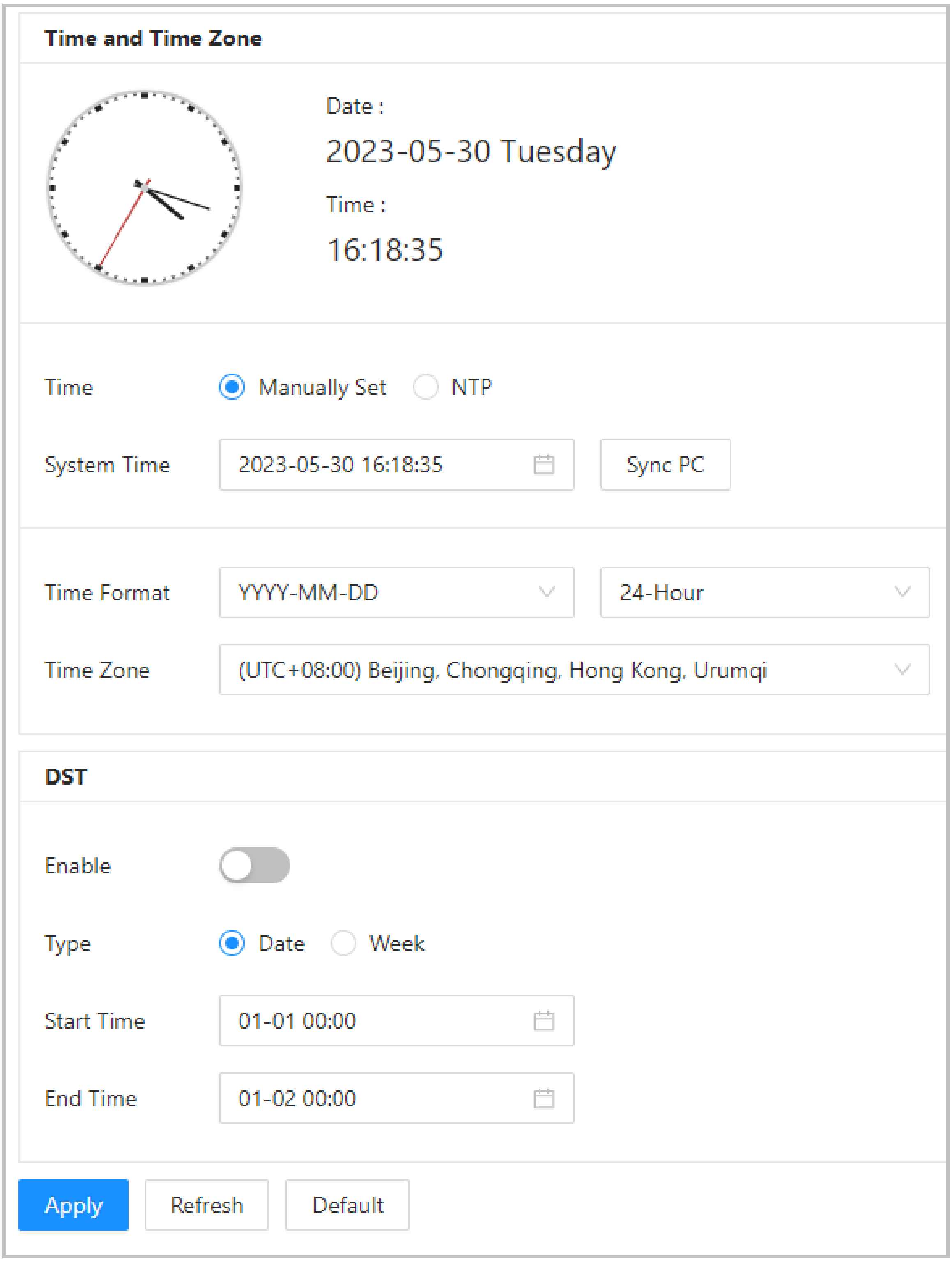
3.11.2 Configuring Time

Procedure

Step 1 On the home page, select **System** > **Time**.

Step 2 Configure the time of the Platform.

Figure 3-61 Date settings



Time and Time Zone

Date : 2023-05-30 Tuesday

Time : 16:18:35

Time: ● Manually Set ○ NTP

System Time: 2023-05-30 16:18:35

Time Format: YYYY-MM-DD; 24-Hour

Time Zone: (UTC+08:00) Beijing, Chongqing, Hong Kong, Urumqi

DST

Enable: off

Type: ● Date ○ Week

Start Time: 01-01 00:00

End Time: 01-02 00:00

Table 3-39 Time settings description

Parameter	Description
Time	● Manual Set: Manually enter the time or you can click **Sync Time** to sync time with computer. ● NTP: The Device will automatically sync the time with the NTP server. ◇ **Server**: Enter the domain of the NTP server. ◇ **Port**: Enter the port of the NTP server. ◇ **Interval**: Enter its time with the synchronization interval.
Time format	Select the time format.
Time Zone	Enter the time zone.
DST	1. (Optional) Enable DST. 2. Select **Date** or **Week** from the **Type**. 3. Configure the start time and end time of the DST.

Step 3 Click **Apply**.

3.12 Personalization

Configure themes and add video or image resources to the Device.

3.12.1 Adding Resources

Add images or videos to be displayed on the standby screen of the Device.

Background Information

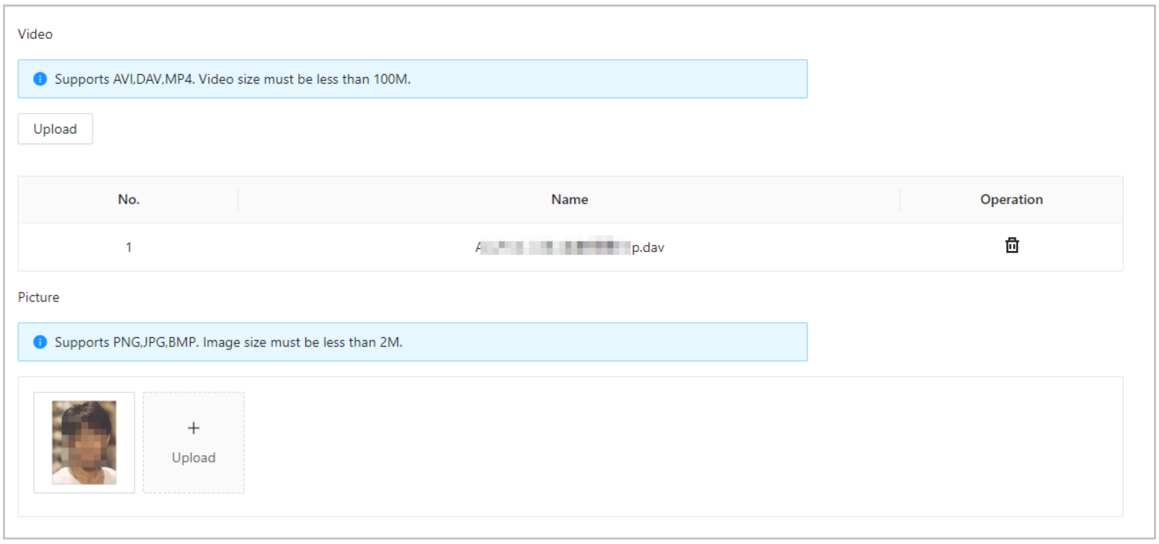
This function is only available on select models.

Procedure

Step 1 On the home page, select **Personalization** > **Advertisement** > **Ad Resources**.

Step 2 Add videos or images.

Figure 3-62 Add videos or images



Video

Supports AVI,DAV,MP4. Video size must be less than 100M.

No.	Name	Operation
1	A[redacted]p.dav	🗑

Picture

Supports PNG,JPG,BMP. Image size must be less than 2M.

- Add videos.
  1. Click **Upload**.
  2. Click **Browse**, select the video file, and then click **Next**.

     The video is automatically uploaded to the platform after transcoding.

     - You can upload up to 5 video files.
     - Supports DAV, AVI, MP4. Video size must be less than 100 M.
     - Only supports latest version of FireFox and Chrome to upload video files.
- Add images.
  1. Click +.
  2. Select image from the local and upload it.

     Supports PNG, JPG, BMP. Image size must be less than 2 M.

Related Operations

Click 🗑 to delete uploaded images or videos.

Videos and images in use cannot be deleted.

3.12.2 Configuring Themes

Background Information

This function is only available on select models.

Procedure

Step 1 On the home page, select **Personalization** > **Advertisement** > **Subject**.

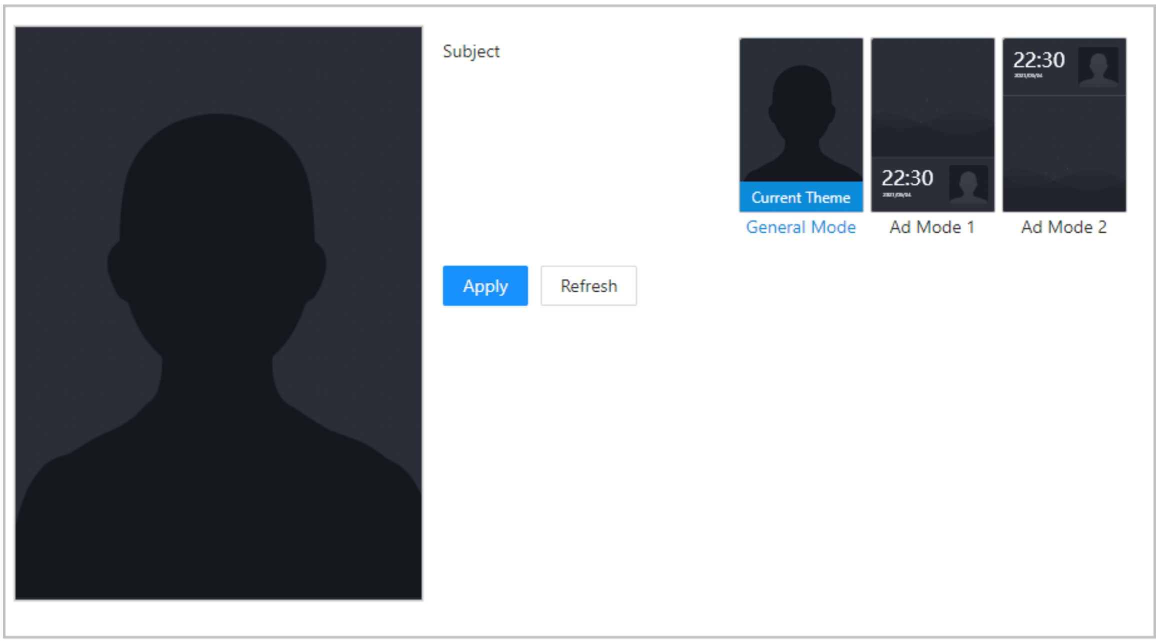
Step 2 Select the theme.

- General Theme: Displays the face image in full screen.
- Ad Mode 1: The upper area displays the advertisements, and the lower area displays

the time and the face detection box.

- Ad Mode 2: The upper area displays the time and the face detection box, and the lower area displays the advertisements.

Figure 3-63 Theme

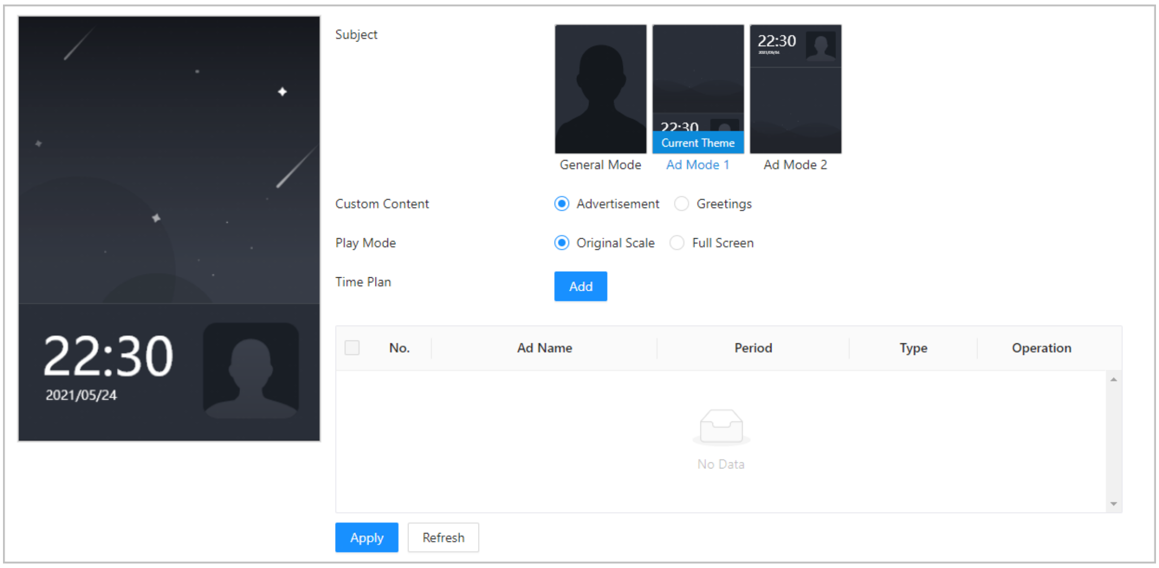


Step 3 Select the voice prompt for successful identity verification.

Step 4 Set advertisement display.

1. Select Ad mode 1 or Ad mode 2, and then select **Advertisement**.

Figure 3-64 Advertisement mode



Custom Content ● Advertisement ○ Greetings

Play Mode ● Original Scale ○ Full Screen

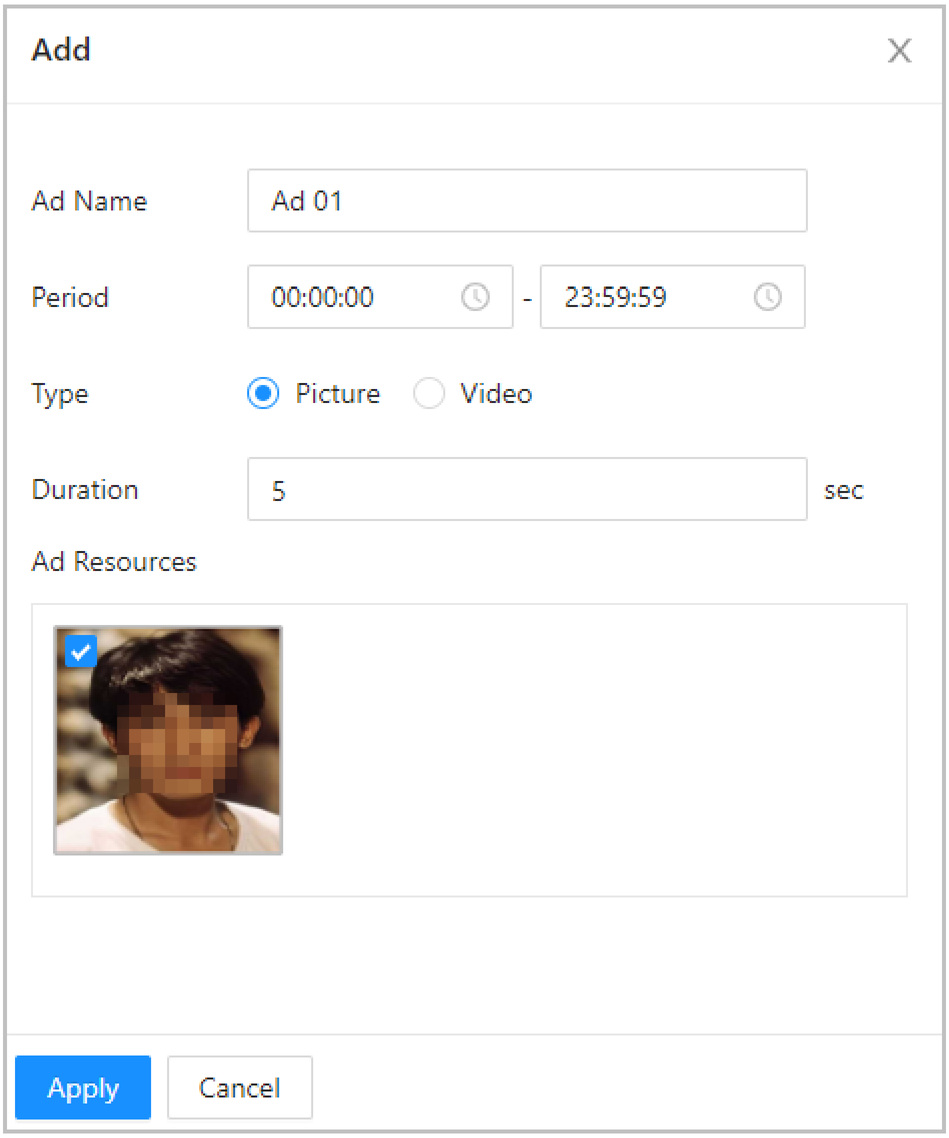
□	No.	Ad Name	Period	Type	Operation

2. Select the display mode.
   - Original Scale: Plays the image and video in the original size.
   - Full Screen: Plays the image and video in full screen.
3. Click **Add** to add time schedules.

   You can add up to 10 schedules.
4. Enter the name of the advertisement.
5. Select the time section, file type and file.
6. Enter the duration, and then click **Apply**.

   Set the duration for a single picture when pictures are played in a loop. The duration ranges from 1 s to 20 s and it is 5 s by default.

Figure 3-65 Add time schedules



Ad Name: Ad 01

Period: 00:00:00 - 23:59:59

Type: ● Picture ○ Video

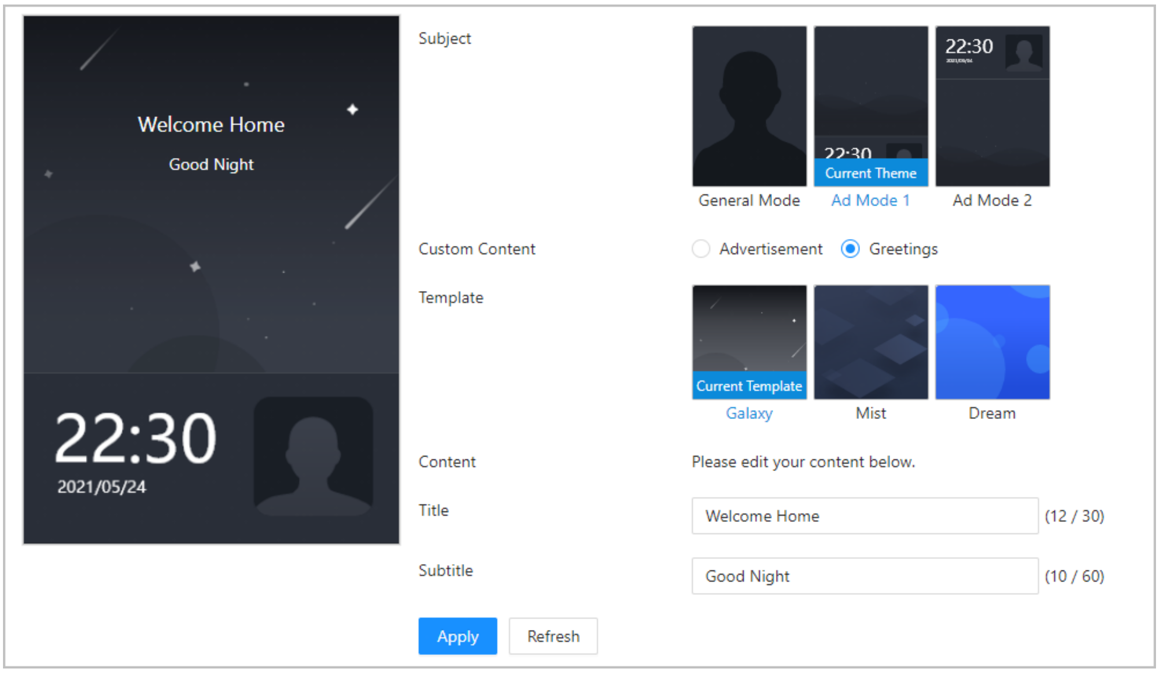
Duration: 5 sec

Ad Resources ☑

Step 5 Configure greetings.

1. Select **Greetings** from the **Custom Content**.
2. Select the template.
3. Enter the title and subtitle.

Figure 3-66 Greetings



Subject: General Mode, Ad Mode 1 (Current Theme), Ad Mode 2

Custom Content: ○ Advertisement ● Greetings

Template: Galaxy (Current Template), Mist, Dream

Content: Please edit your content below.

Title: Welcome Home (12 / 30)

Subtitle: Good Night (10 / 60)

4. Click **Apply**.

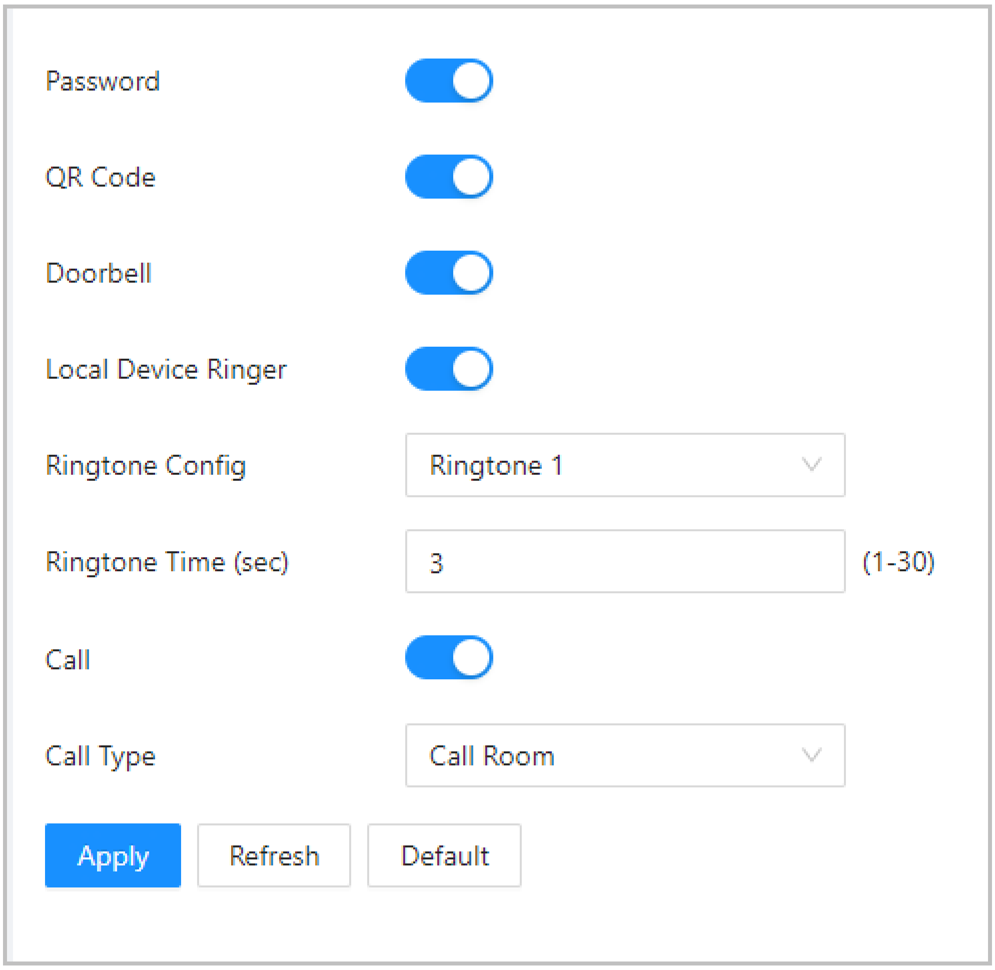
3.12.3 Configuring the Shortcuts

Procedure

Step 1 On the webpage of the Device, select **Personalization** > **Shortcut Settings**.

Step 2 Configure the shortcut parameters.

Figure 3-67 Shortcut Settings



Password ☑

QR Code ☑

Doorbell ☑

Local Device Ringer ☑

Ringtone Config: Ringtone 1

Ringtone Time (sec): 3 (1-30)

Call ☑

Call Type: Call Room

Table 3-40 1

Parameter	Description
Password	The icon of the password unlock method is displayed on the standby screen.
QR code	The QR code icon is displayed on standby screen. This function is not available for Device with a standalone QR code module.
Doorbell	After the doorbell function is turned on, doorbell icon is displayed on the standby screen. ● Local Device Ringer: Tap the ring bell icon on the standby screen, Device will ring. ● Ringtone Config: Select a ringtone ● Ringtone Time (sec): Set ring time (1-30 seconds). The default value is 3. ● Alarm: Tap the ring bell icon, and the external alarm device rings. This function is only available on select models. This function is only available on select models.
Call	The icon of call is displayed on the standby screen.

Parameter	Description
Call Type	● Call Room: Tap the call icon on the standby mode and enter the room number to make calls. ● Call Management Center: Tap the call icon on the standby mode, and then call the management center. ● Custom Call room: Enter the number of room, and then you can tap the call icon on the standby screen to call the pre-defined room number. 📖 You can call DMSS only in this call type.

3.13 Management Center

3.13.1 One-click Diagnosis

The system automatically diagnoses the configurations and the status of the device to improve its performance.

Procedure

Step 1 On the home page, select **Maintenance Center** > **One-click Diagnosis**.

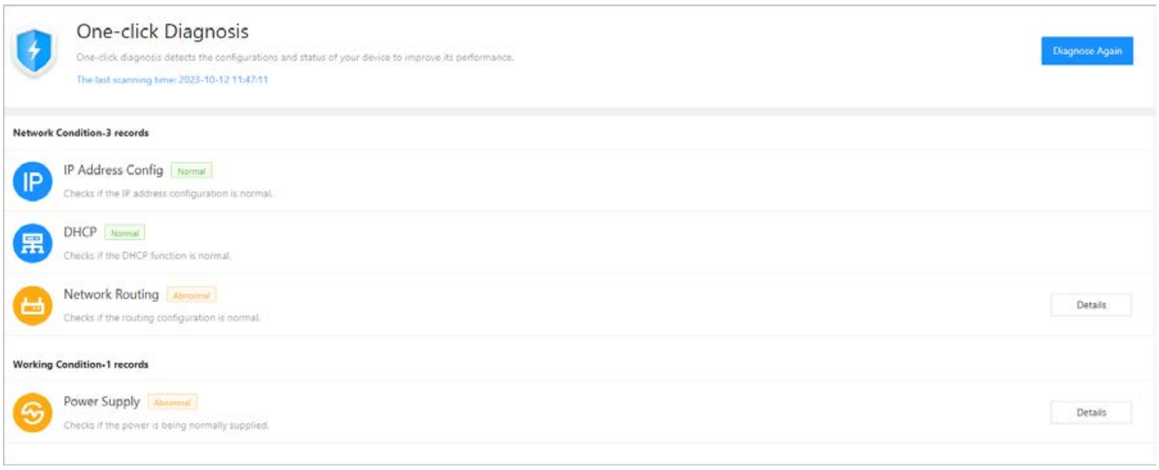
Step 2 Click **Diagnose**.

The system automatically diagnoses the configurations and the status of the device and display diagnosis results after it completes.

Step 3 (Optional) Click **Details** to view details of abnormal items.

You can ignore the abnormality or optimize it. You can also click **Diagnose Again** to perform automatic diagnosis again.

Figure 3-68 One-click diagnosis



One-click Diagnosis

One-click diagnosis detects the configurations and status of your device to improve its performance.

The last scanning time: 2023-10-12 11:47:11

Network Condition-3 records

IP Address Config Normal

Checks if the IP address configuration is normal.

DHCP Normal

Checks if the DHCP function is normal.

Network Routing Abnormal

Checks if the routing configuration is normal.

Working Condition-1 records

Power Supply Abnormal

Checks if the power is being normally supplied.

3.13.2 System Information

3.13.2.1 Viewing Version Information

On the webpage, select **System** > **Version**, and you can view version information of the Device.

3.13.2.2 Viewing Legal Information

On the home page, select **System** > **Legal Info**, and you can view the software license agreement, privacy policy and open source software notice.

3.13.3 Data Capacity

You can see how many users, cards and face images that the Device can store.
Log in to the webpage and select **Data Capacity**.

3.13.4 Viewing Logs

View logs such as system logs, admin logs, and unlock records.

3.13.4.1 System Logs

View and search for system logs.

Procedure

Step 1 Log in to the webpage.

Step 2 Select **Log** > **Log**.

Step 3 Select the time range and the log type, and then click **Search**.

Related Operations

- click **Export** to export the searched logs to your local computer.
- Click **Encrypt Log Backup**, and then enter a password. The exported file can be opened only after entering the password.
- Click 🕮 to view details of a log.

3.13.4.2 Unlock Records

Search for unlock records and export them.

Procedure

Step 1 Log in to the webpage.

Step 2 Select **Log** > **Unlock Records**.

Step 3 Select the time range and the type, and then click **Search**.

You can click **Export** to download the log.

3.13.4.3 Call History

View call logs.

Procedure

Step 1 Log in to the webpage.

Step 2 Select **Log** > **Call History**.

3.13.4.4 Alarm Logs

View alarm logs.

Procedure

Step 1 Log in to the webpage.

Step 2 Select **Log** > **Alarm Log**.

Step 3 Select the type and the time range.

Step 4 Enter the admin ID, and then click **Search**.

3.13.4.5 Admin Logs

Search for admin logs by using admin ID.

Procedure

Step 1 Log in to the webpage.

Step 2 Select **Log** > **Admin Log**.

Step 3 Enter the admin ID, and then click **Search**.

Click **Export** to export admin logs.

3.13.4.6 USB Management

Export user information from/to USB.

Procedure

Step 1 Log in to the webpage.

Step 2 Select **Maintenance Center** > **Log** > **USB Management**.

📖

- Make sure that a USB is inserted to the Device before you export data or update the system. To avoid failure, do not pull out the USB or perform any operation of the Device during the process.
- You have to use a USB to export the information from an Device to other devices. Face images are not allowed to be imported through USB.

Step 3 Select a data type, and then click **USB Import** or **USB Export** to import or export the data.

3.13.5 Configuration Management

When more than one Device need the same configurations, you can configure parameters for them by importing or exporting configuration files.

3.13.5.1 Exporting and Importing Configuration Files

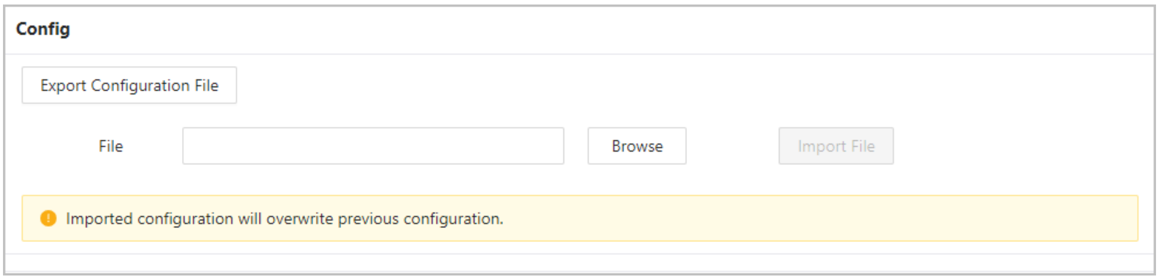
You can import and export the configuration file for the Device. When you want to apply the same configurations to multiple devices, you can import the configuration file to them.

Procedure

Step 1 Log in to the webpage.

Step 2 Select **System** > **Config**.

Figure 3-69 Configuration management



Config

Export Configuration File

File

Browse

Import File

Imported configuration will overwrite previous configuration.

Step 3 Export or import configuration files.

- Export the configuration file.

  Click **Export Configuration File** to download the file to the local computer.

  The IP will not be exported.

- Import the configuration file.

  1. Click **Browse** to select the configuration file.
  2. Click **Import configuration**.

     Configuration files can only be imported to devices that have the same model.

3.13.5.2 Restoring the Factory Default Settings

Procedure

Step 1 Select **System** > **Config**.

⚠

Restoring the **Device** to its default configurations will result in data loss. Please be advised.

Step 2 Restore to the factory default settings if necessary.

- **Factory Defaults**: Resets all the configurations of the Device and delete all the data.
- **Restore to Default (Except for User Info and Logs)**: Resets the configurations of the Device and deletes all the data except for user information and logs.

Only the main controller supports **Restore to Default (Except for User Info and Logs)**.

3.13.6 Maintenance

Regularly restart the Device during its idle time to improve its performance.

Procedure

Step 1 Log in to the webpage.

Step 2 Select **System** > **Maintenance**.

Step 3 Set the time, and then click **Apply**.

The Device will restart at the scheduled time, or you can click **Restart** to restart it immediately.

3.13.7 Updating the System

- Use the correct update file. Make sure that you get the correct update file from technical support.
- Do not disconnect the power supply or network, and do not restart or shutdown the Device during the update.

3.13.7.1 File Update

Procedure

Step 1 On the home page, select **System** > **Update**.

Step 2 In **File Update**, click **Browse**, and then upload the update file.

The update file should be a .bin file.

Step 3 Click **Update**.

The Device will restart after the update finishes.

3.13.7.2 Online Update

Procedure

Step 1 On the home page, select **System** > **Update**.

Step 2 In the **Online Update** area, select an update method.

- Select **Auto Check for Updates**, and the Device will automatically check for the latest version update.
- Select **Manual Check**, and you can immediately check whether the latest version is available.

Step 3 (Optional) Click **Update Now** to update the Device immediately.

3.13.8 Advanced Maintenance

Acquire device information and capture packet to make easier for maintenance personnel to perform troubleshooting.

3.13.8.1 Exporting

Procedure

Step 1 On the home page, select **Maintenance Center** > **Advanced Maintenance** > **Export**.

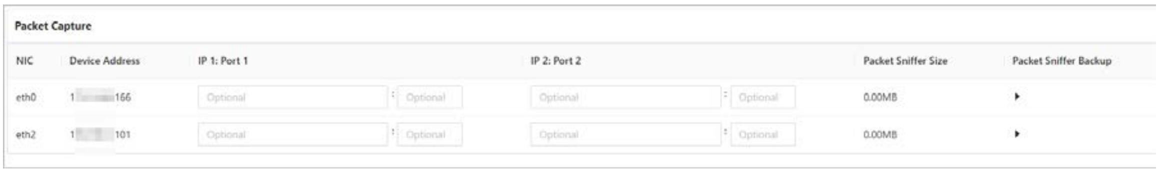
Step 2 Click **Export** to export the serial number, firmware version, device operation logs and configuration information.

3.13.8.2 Packet Capture

Procedure

Step 1 On the home page, select **Maintenance Center** > **Advanced Maintenance** > **Packet Capture**.

Figure 3-70 Packet Capture



Packet Capture

NIC	Device Address	IP 1: Port 1		IP 2: Port 2		Packet Sniffer Size	Packet Sniffer Backup
eth0	1[redacted]166	Optional	Optional	Optional	Optional	0.00MB	▶
eth2	1[redacted]101	Optional	Optional	Optional	Optional	0.00MB	▶

Step 2 Enter the IP address, click ▶.

▶ changes to ⏸.

Step 3 After you acquired enough data, click ⏸.

Captured packets are automatically downloaded to your local computer.

3.14 Security Settings(Optional)

3.14.1 Security Status

Scan the users, service, and security modules to check the security status of the Device.

Background Information

- User and service detection: Check whether the current configuration conforms to recommendation.
- Security modules scanning: Scan the running status of security modules, such as audio and video transmission, trusted protection, securing warning and attack defense, not detect whether they are enabled.

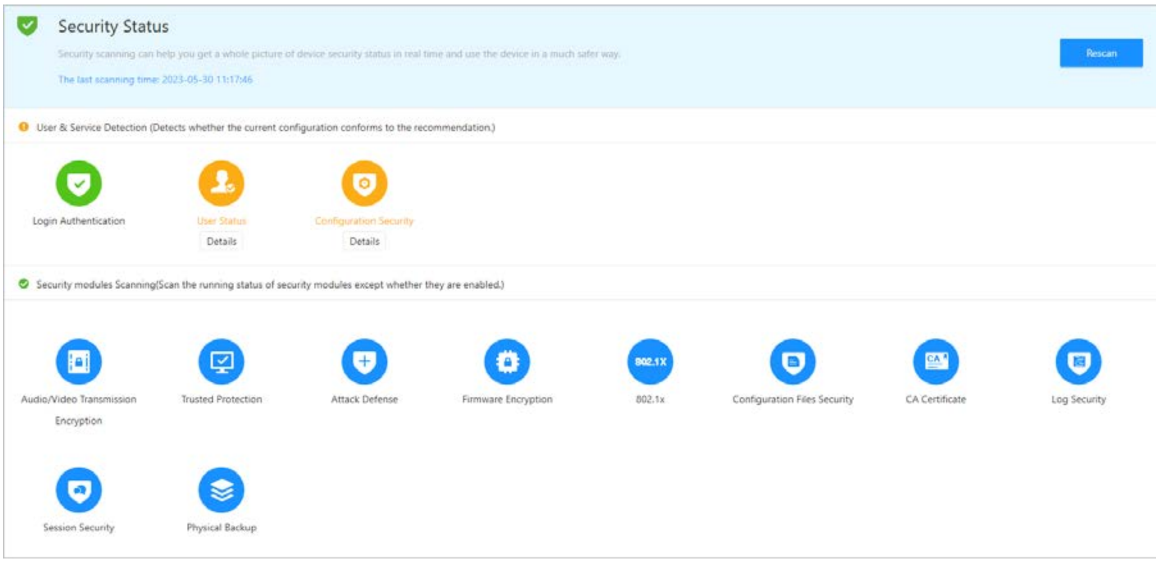
Procedure

Step 1 Select 🛡 > **Security Status**.

Step 2 Click **Rescan** to perform a security scan of the Device.

Hover over the icons of the security modules to see their running status.

Figure 3-71 Security Status



Security Status

Security scanning can help you get a whole picture of device security status in real time and use the device in a much safer way.

The last scanning time: 2023-05-30 11:17:46

User & Service Detection (Detects whether the current configuration conforms to the recommendation.)

Security modules Scanning(Scan the running status of security modules except whether they are enabled.)

Related Operations

After you perform the scan, the results will be displayed in different colors. Yellow indicates that the security modules are abnormal, and green indicates that the security modules are normal.

- Click **Details** to view the details on the results of the scan.
- Click **Ignore** to ignore the abnormality, and it will not be scanned. The abnormality that was ignored will be highlighted in grey.
- Click **Optimize** to troubleshoot the abnormality.

3.14.2 Configuring HTTPS

Create a certificate or upload an authenticated certificate, and then you can log in to the webpage through HTTPS on your computer. HTTPS secures communication over a computer network.

Procedure

Step 1 Select 🛡 > **System Service** > **HTTPS**.

Step 2 Turn on the HTTPS service.

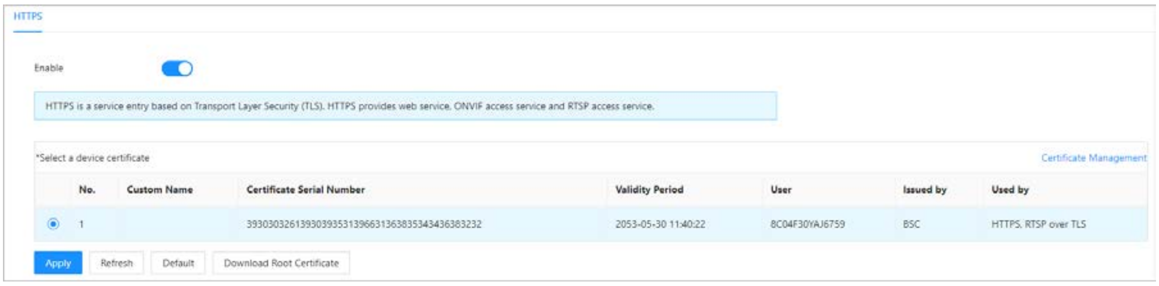
⚠

If you turn on the compatible with TLS v1.1 and earlier versions, security risks might occur. Please be advised.

Step 3 Select the certificate.

If there are no certificates in the list, click **Certificate Management** to upload a certificate.

Figure 3-72 HTTPS



HTTPS

Enable

HTTPS is a service entry based on Transport Layer Security (TLS). HTTPS provides web service, ONVIF access service and RTSP access service.

*Select a device certificate

Certificate Management

	No.	Custom Name	Certificate Serial Number	Validity Period	User	Issued by	Used by
●	1		393030326139303935313966313638353434363832 32	2053-05-30 11:40:22	8C04F30YAJ6759	BSC	HTTPS, RTSP over TLS

Step 4 Click **Apply**.

Enter“https://*IP address*: *httpsport*" in a web browser. If the certificate is installed, you can log in to the webpage successfully. If not, the webpage will display the certificate as wrong or untrusted.

3.14.3 Attack Defense

3.14.3.1 Configuring Firewall

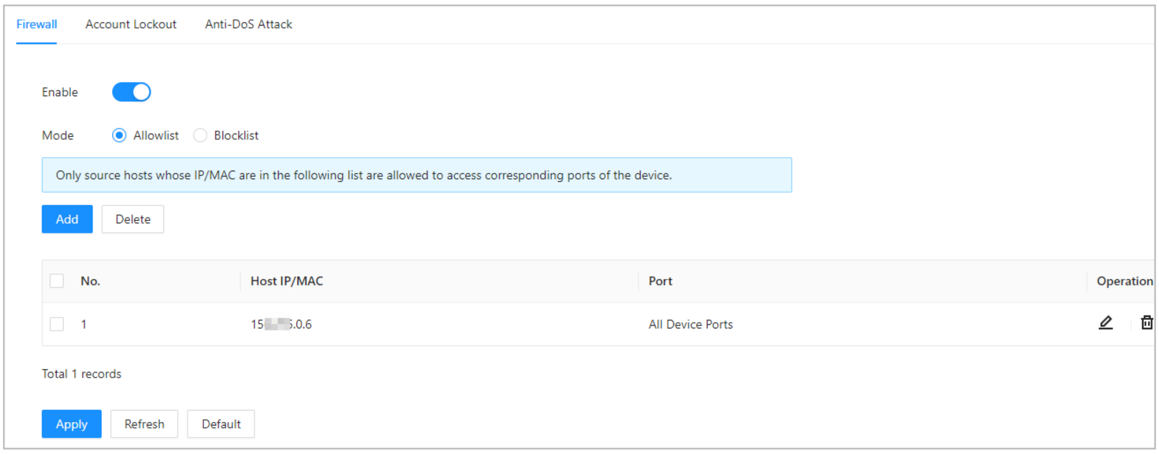
Configure firewall to limit access to the Device.

Procedure

Step 1 Select 🛡 > **Attack Defense** > **Firewall**.

Step 2 Click ○ to enable the firewall function.

Figure 3-73 Firewall



Enable

Mode ● Allowlist ○ Blocklist

Only source hosts whose IP/MAC are in the following list are allowed to access corresponding ports of the device.

□	No.	Host IP/MAC	Port	Operation
□	1	15[redacted]5.0.6	All Device Ports	✎ 🗑

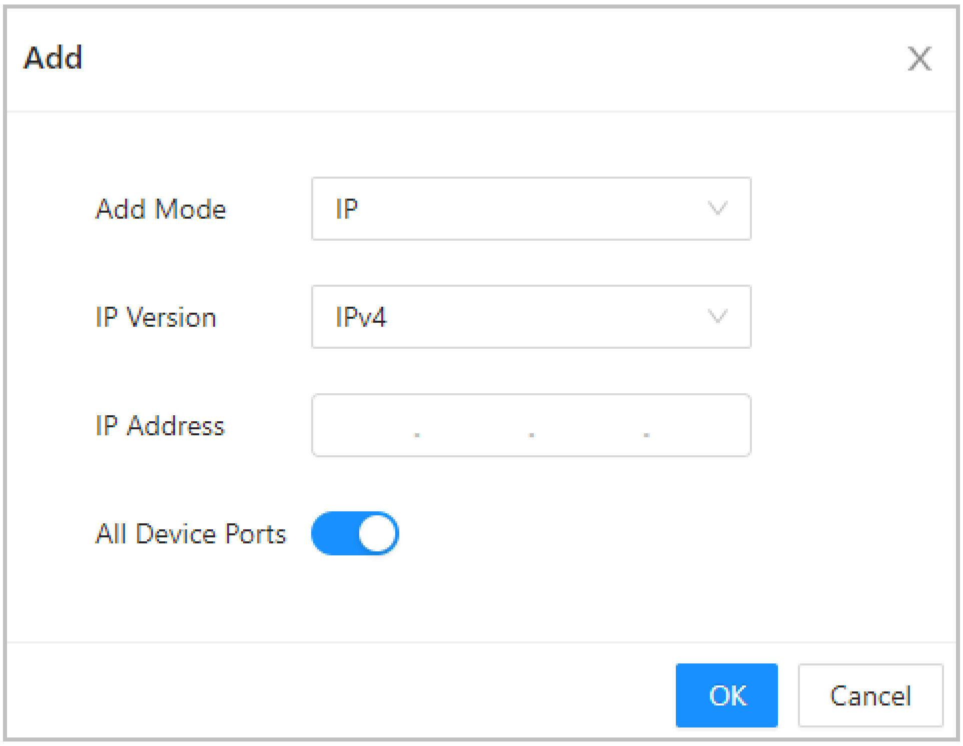
Total 1 records

Step 3 Select the mode: **Allowlist** and **Blocklist**.

- **Allowlist**: Only IP/MAC addresses on the allowlist can access the Device.
- **Blocklist**: The IP/MAC addresses on the blocklist cannot access the Device.

Step 4 Click **Add** to enter the IP information.

Figure 3-74 Add IP information



Add Mode: IP

IP Version: IPv4

IP Address: . . .

All Device Ports: ●

Step 5 Click **OK**.

Related Operations

- Click ✎ to edit the IP information.
- Click 🗑 to delete the IP address.

3.14.3.2 Configuring Account Lockout

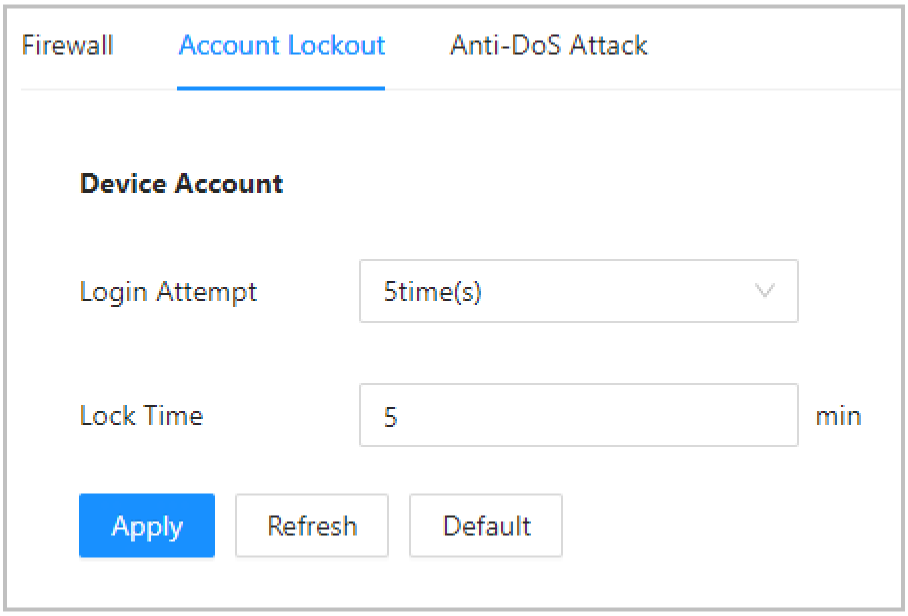
If the incorrect password is entered for a defined number of times, the account will be locked.

Procedure

Step 1 Select 🛡 > **Attack Defense** > **Account Lockout**.

Step 2 Enter the number of login attempts and the time the administrator account and ONVIF user will be locked for.

Figure 3-75 Account lockout



Device Account

Login Attempt: 5time(s)

Lock Time: 5 min

- Login Attempt: The limit of login attempts. If the incorrect password is entered for a defined number of times, the account will be locked.
- Lock Time: The duration during which you cannot log in after the account is locked.

Step 3 Click **Apply**.

3.14.3.3 Configuring Anti-DoS Attack

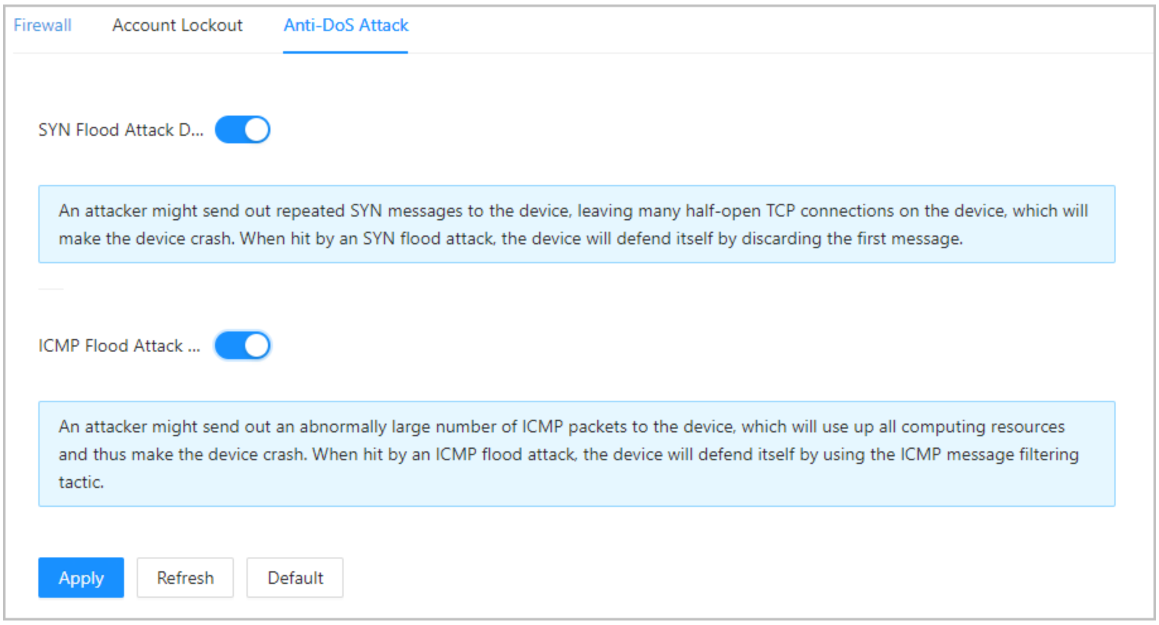
You can enable **SYN Flood Attack Defense** and **ICMP Flood Attack Defense** to defend the Device against Dos attacks.

Procedure

Step 1 Select 🛡 > **Attack Defense** > **Anti-DoS Attack**.

Step 2 Turn on **SYN Flood Attack Defense** or **ICMP Flood Attack Defense** to protect the Device against Dos attack.

Figure 3-76 Anti-DoS attack



SYN Flood Attack D...

An attacker might send out repeated SYN messages to the device, leaving many half-open TCP connections on the device, which will make the device crash. When hit by an SYN flood attack, the device will defend itself by discarding the first message.

ICMP Flood Attack ...

An attacker might send out an abnormally large number of ICMP packets to the device, which will use up all computing resources and thus make the device crash. When hit by an ICMP flood attack, the device will defend itself by using the ICMP message filtering tactic.

Step 3 Click **Apply**.

3.14.4 Installing Device Certificate

Create a certificate or upload an authenticated certificate, and then you can log in through HTTPS on your computer.

3.14.4.1 Creating Certificate

Create a certificate for the Device.

Procedure

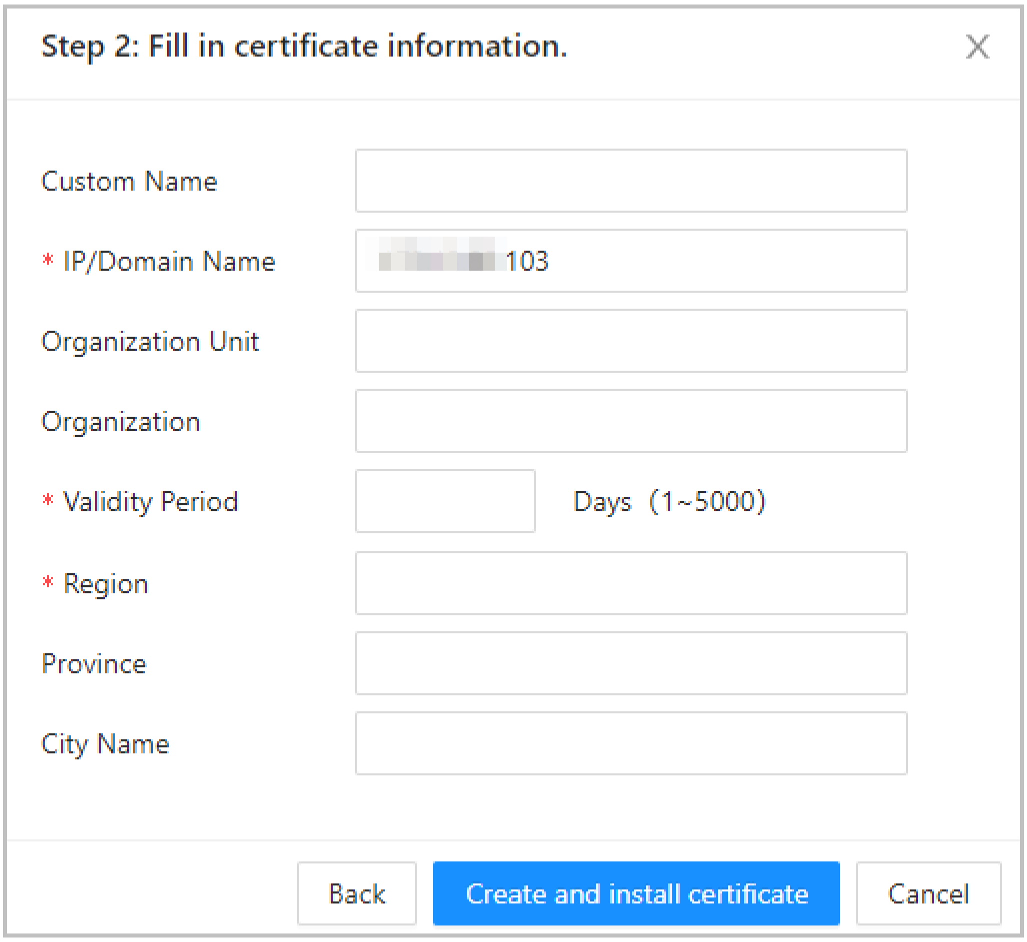
Step 1 Select > **CA Certificate** > **Device Certificate**.

Step 2 Select **Install Device Certificate**.

Step 3 Select **Create Certificate**, and click **Next**.

Step 4 Enter the certificate information.

Figure 3-77 Certificate information



Step 2: Fill in certificate information.

Custom Name	
* IP/Domain Name	[redacted]103
Organization Unit	
Organization	
* Validity Period	Days（1~5000）
* Region	
Province	
City Name	

The name of region cannot exceed 2 characters. We recommend entering the abbreviation of the name of the region.

Step 5 Click **Create and install certificate**.

The newly installed certificate is displayed on the **Device Certificate** page after the certificate is successfully installed.

Related Operations

- Click **Enter Edit Mode** on the **Device Certificate** page to edit the name of the certificate.
- Click ⤓ to download the certificate.
- Click 🗑 to delete the certificate.

3.14.4.2 Applying for and Importing CA Certificate

Import the third-party CA certificate to the Device.

Procedure

Step 1 Select 🛡 > **CA Certificate** > **Device Certificate**.

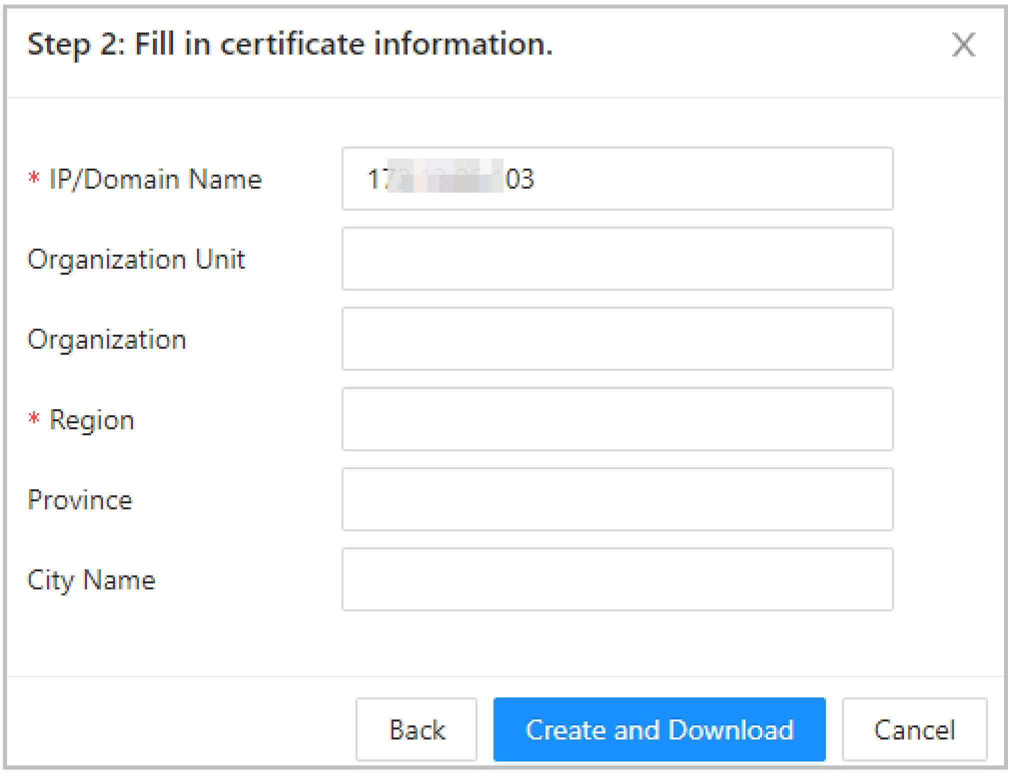
Step 2 Click **Install Device Certificate**.

Step 3 Select **Apply for CA Certificate and Import (Recommended)**, and click **Next**.

Step 4 Enter the certificate information.

- IP/Domain name: the IP address or domain name of the Device.
- Region: The name of region must not exceed 3 characters. We recommend you enter the abbreviation of region name.

Figure 3-78 Certificate information (2)



Step 2: Fill in certificate information.

* IP/Domain Name	17[redacted]03
Organization Unit	
Organization	
* Region	
Province	
City Name	

Step 5 Click **Create and Download**.

Save the request file to your computer.

Step 6 Apply to a third-party CA authority for the certificate by using the request file.

Step 7 Import the signed CA certificate.

1) Save the CA certificate to your computer.
2) Click **Installing Device Certificate**.
3) Click **Browse** to select the CA certificate.
4) Click **Import and Install**.

The newly installed certificate is displayed on the **Device Certificate** page after the certificate is successfully installed.

- Click **Recreate** to create the request file again.
- Click **Import Later** to import the certificate at another time.

Related Operations

- Click **Enter Edit Mode** on the **Device Certificate** page to edit the name of the certificate.
- Click ⬇ to download the certificate.
- Click 🗑 to delete the certificate.

3.14.4.3 Installing Existing Certificate

If you already have a certificate and private key file, import the certificate and private key file.

Procedure

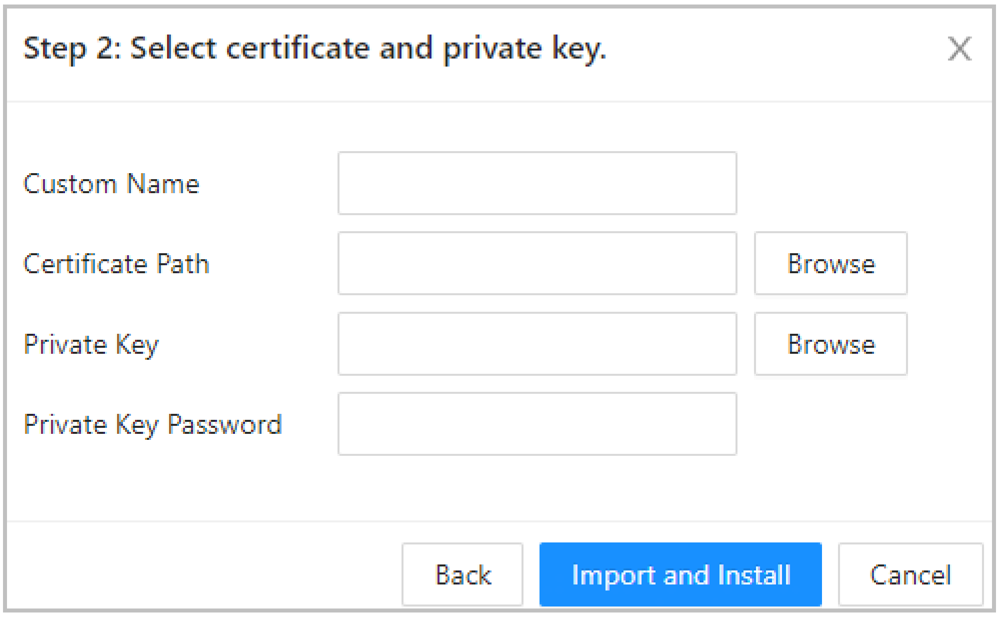
Step 1 Select **Security** > **CA Certificate** > **Device Certificate**.

Step 2 Click **Install Device Certificate**.

Step 3 Select **Install Existing Certificate**, and click **Next**.

Step 4 Click **Browse** to select the certificate and private key file, and enter the private key password.

Figure 3-79 Certificate and private key



Step 2: Select certificate and private key.

Step 5 Click **Import and Install**.

The newly installed certificate is displayed on the **Device Certificate** page after the certificate is successfully installed.

Related Operations

- Click **Enter Edit Mode** on the **Device Certificate** page to edit the name of the certificate.
- Click ⬇ to download the certificate.
- Click 🗑 to delete the certificate.

3.14.5 Installing the Trusted CA Certificate

A trusted CA certificate is a digital certificate that is used for validating the identities of websites and servers. For example, when 802.1x protocol is used, the CA certificate for switches is required to authenticate its identity.

Background Information

802.1X is a network authentication protocol that opens ports for network access when an organization authenticates a user's identity and authorizes them access to the network.

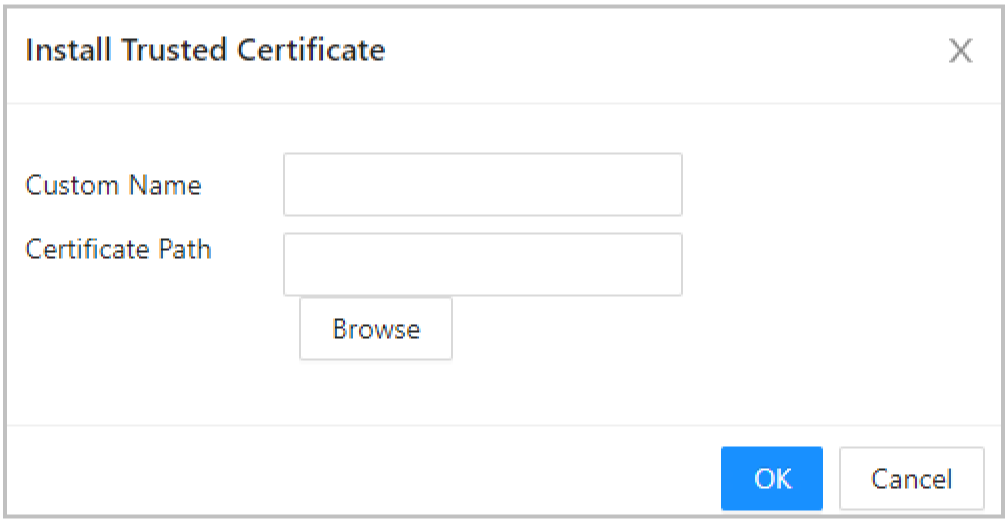
Procedure

Step 1 Select 🛡 > **CA Certificate** > **Trusted CA Certificates**.

Step 2 Select **Install Trusted Certificate**.

Step 3 Click **Browse** to select the trusted certificate.

Figure 3-80 Install the trusted certificate



Install Trusted Certificate

Custom Name

Certificate Path

Step 4 Click **OK**.

The newly installed certificate is displayed on the **Trusted CA Certificates** page after the certificate is successfully installed.

Related Operations

- Click **Enter Edit Mode** on the **Device Certificate** page to edit the name of the certificate.
- Click ⭳ to download the certificate.
- Click 🗑 to delete the certificate.

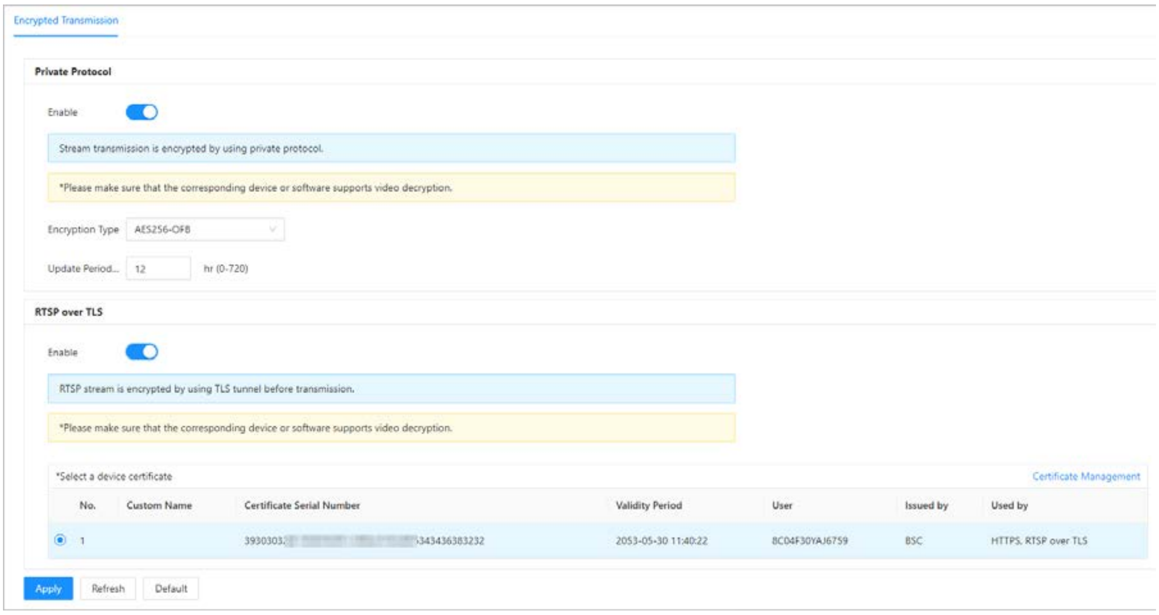
3.14.6 Data Encryption

Procedure

Step 1 Select 🛡 > **Data Encryption**.

Step 2 Configure the parameters.

Figure 3-81 Data encryption



Encrypted Transmission

Private Protocol

Enable

Stream transmission is encrypted by using private protocol.

*Please make sure that the corresponding device or software supports video decryption.

Encryption Type: AES256-OFB

Update Period...: 12 hr (0-720)

RTSP over TLS

Enable

RTSP stream is encrypted by using TLS tunnel before transmission.

*Please make sure that the corresponding device or software supports video decryption.

*Select a device certificate

Certificate Management

	No.	Custom Name	Certificate Serial Number	Validity Period	User	Issued by	Used by
●	1		3930303[redacted]343436383232	2053-05-30 11:40:22	8C04F30YAJ6759	BSC	HTTPS, RTSP over TLS

Apply Refresh Default

Table 3-41 Data encryption description

	Parameter	Description
Private Protocol	Enable	Streams are encrypted during transmission through private protocol.
	Encryption Type	Keep it as default.
	Update Period of Secret Key	Ranges from 0 h -720 h. 0 means never update the secret key.
RTSP over TLS	Enable	RTSP stream is encrypted during transmission through TLS tunnel.
	Certificate Management	Create or import certificate. For details, see"3.14.4 Installing Device Certificate". The installed certificates are displayed in the list.

3.14.7 Security Warning

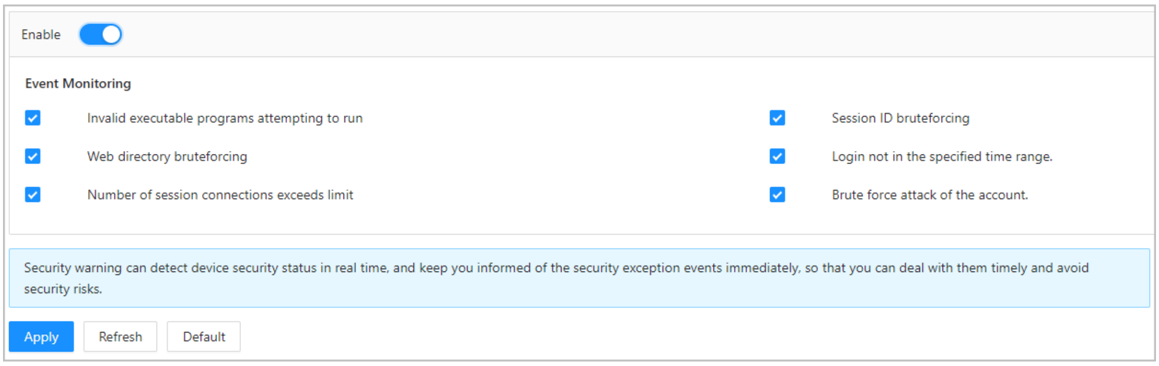
Procedure

Step 1 Select 🛡 > **Security Warning**.

Step 2 Enable the security warning function.

Step 3 Select the monitoring items.

Figure 3-82 Security warning



Enable

Event Monitoring

☑ Invalid executable programs attempting to run

☑ Web directory bruteforcing

☑ Number of session connections exceeds limit

☑ Session ID bruteforcing

☑ Login not in the specified time range.

☑ Brute force attack of the account.

Security warning can detect device security status in real time, and keep you informed of the security exception events immediately, so that you can deal with them timely and avoid security risks.

Apply Refresh Default

Step 4 Click **Apply**.

3.14.8 Security Authentication

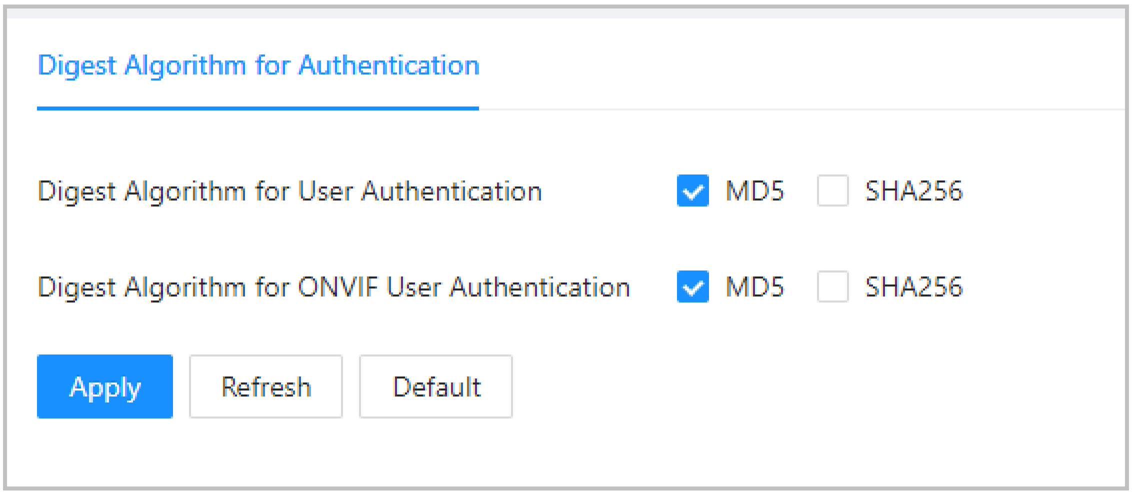
Procedure

Step 1 Select **Security** > **Security Authentication**.

Step 2 Select a message digest algorithm.

Step 3 Click **Apply**.

Figure 3-83 Security Authentication



Digest Algorithm for Authentication

Digest Algorithm for User Authentication ☑ MD5 □ SHA256

Digest Algorithm for ONVIF User Authentication ☑ MD5 □ SHA256

4 Smart PSS Lite Configuration

This section introduces how to manage and configure the Device through Smart PSS Lite. For details, see the user's manual of Smart PSS Lite.

4.1 Installing and Logging In

Install and log in to Smart PSS Lite. For details, see the user manual of Smart PSS Lite.

Procedure

Step 1 Get the software package of the Smart PSS Lite from the technical support, and then install and run the software according to instructions.

Step 2 Initialize Smart PSS Lite when you log in for the first time, including setting password and security questions.

📖

Set the password is for the first-time use, and then set security questions to reset your password when you forgot it.

Step 3 Enter your username and password to log in to Smart PSS Lite.

4.2 Adding Devices

You need to add the Device to Smart PSS Lite. You can add them in batches or individually.

4.2.1 Adding Device One By One

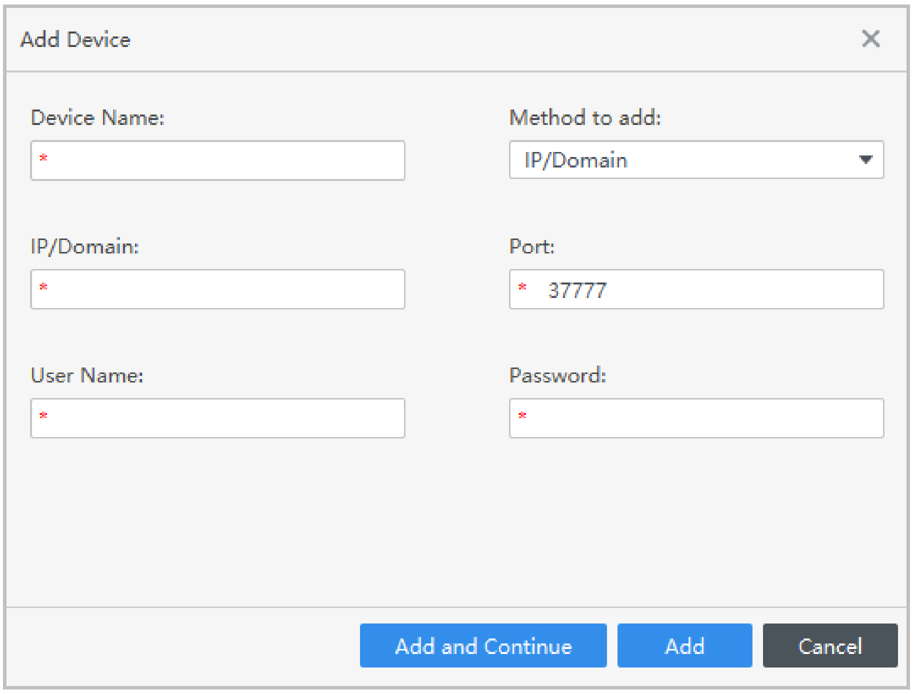
You can add Device one by one through entering their IP addresses or domain names.

Procedure

Step 1 On the **Device Manager** page, click **Add**.

Step 2 Configure the information of the device.

Figure 4-1 Add devices



Method to add: IP/Domain

Port: 37777

Table 4-1 Parameters of IP adding

Parameter	Description
Device Name	We recommend you name devices with the monitoring area for easy identification.
Method to add	Select **IP/Domain**. ● IP/Domain: Enter the IP address or domain name of the device. ● SN: Enter the serial number of the device.
Port	Enter the port number, and the port number is 37777 by default. The actual port number might differ according to different models.
User Name	Enter the username of the device.
Password	Enter the password of the device.

Step 3 Click **Add**.

You can click **Add and Continue** to add more devices.

4.2.2 Adding Devices in Batches

Background Information

- We recommend you add devices by automatically search when you need to add devices in batches within the same network segment, or when the network segment is known but the exact IP addresses of devices are not known.
- Close ConfigTool and DSS when you configure devices; otherwise, you may not be able to find all devices.

Procedure

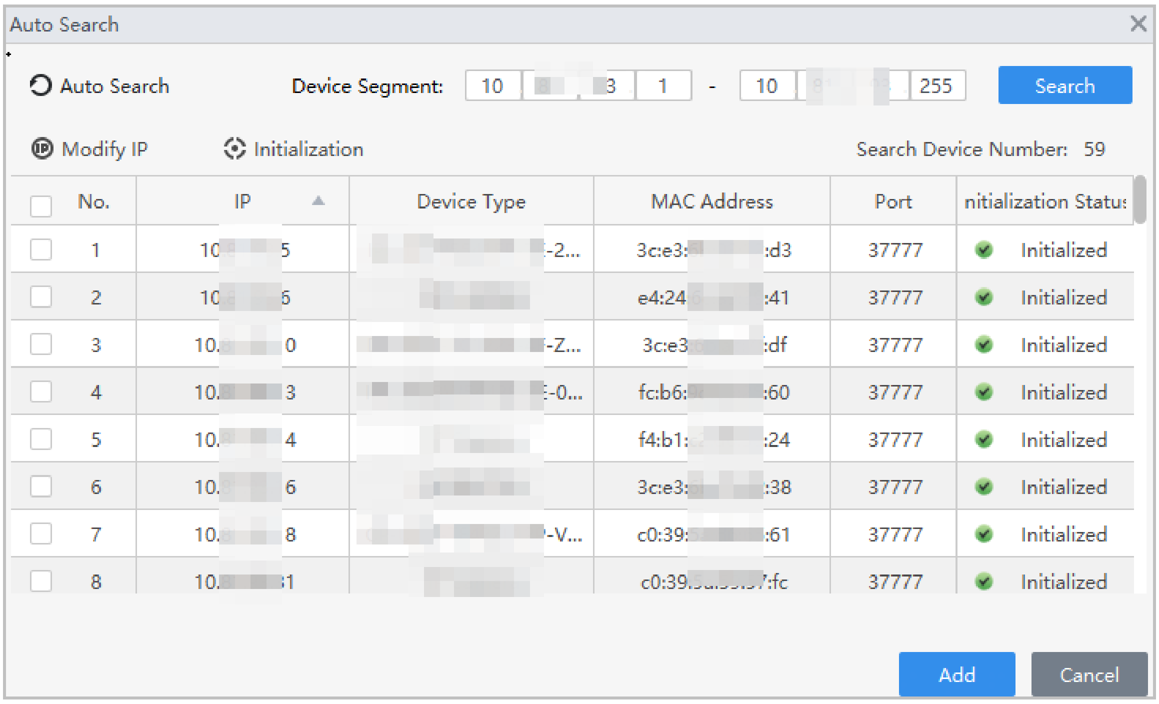
Step 1 On the **Device Manager** page, click **Auto Search**.

Step 2 Select a search method.

- Auto Search: Enter the username and the password of the device. The system will automatically search for devices that are on the same network to your computer.
- Device Segment Search: Enter the username and the password of the device, and then define the start IP and the end IP. The system will automatically search for devices in this IP range.

You can select both methods for the system to automatically search for devices on the network your computer is connected to and other networks.

Figure 4-2 Search for devices



Auto Search

Auto Search　Device Segment: 10 [redacted] 3 1 - 10 [redacted] 255　Search

Modify IP　Initialization　Search Device Number: 59

□	No.	IP	Device Type	MAC Address	Port	nitialization Statu:
□	1	10[redacted]5	[redacted]-2...	3c:e3:[redacted]:d3	37777	✓ Initialized
□	2	10[redacted]6	[redacted]	e4:24[redacted]:41	37777	✓ Initialized
□	3	10.[redacted]0	[redacted]-Z...	3c:e3[redacted]:df	37777	✓ Initialized
□	4	10.[redacted]3	[redacted]-0...	fc:b6:[redacted]:60	37777	✓ Initialized
□	5	10.[redacted]4	[redacted]	f4:b1:[redacted]:24	37777	✓ Initialized
□	6	10.[redacted]6	[redacted]	3c:e3:[redacted]:38	37777	✓ Initialized
□	7	10.[redacted]8	[redacted]-V...	c0:39:[redacted]:61	37777	✓ Initialized
□	8	10.[redacted]1	[redacted]	c0:39[redacted]:fc	37777	✓ Initialized

Add　Cancel

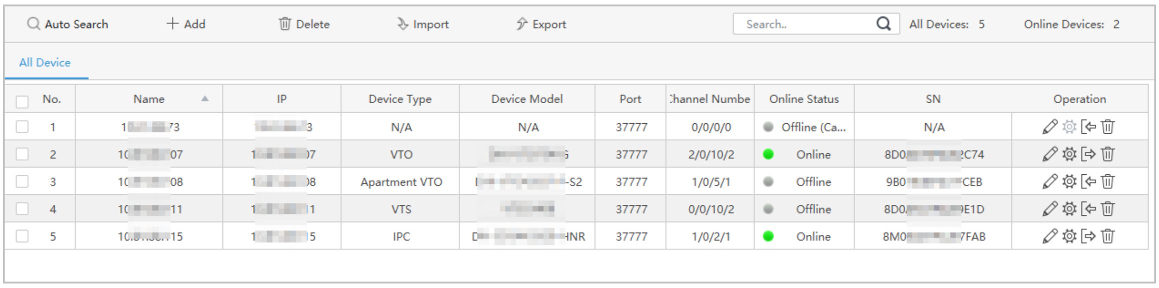
Step 3　Click devices, and then click **Add**.

Step 4　Enter the login user name and password, and then click **OK**.

Result

After the devices are successfully added, they are displayed on this page.

Figure 4-3 Added devices



Auto Search　+ Add　Delete　Import　Export　Search..　All Devices: 5　Online Devices: 2

All Device

□	No.	Name	IP	Device Type	Device Model	Port	:hannel Numbe	Online Status	SN	Operation
□	1	1[redacted]73	[redacted]3	N/A	N/A	37777	0/0/0/0	● Offline (Ca...	N/A	
□	2	10[redacted]07	1[redacted]07	VTO	[redacted]	37777	2/0/10/2	● Online	8D0[redacted]2C74	
□	3	10[redacted]08	1[redacted]08	Apartment VTO	[redacted]-S2	37777	1/0/5/1	● Offline	9B0[redacted]CEB	
□	4	10[redacted]11	1[redacted]1	VTS	[redacted]	37777	0/0/10/2	● Offline	8D0[redacted]E1D	
□	5	10.[redacted]15	1[redacted]5	IPC	D[redacted]HNR	37777	1/0/2/1	● Online	8M0[redacted]7FAB	

4.3 User Management

Add users, assign cards to them, and configure their access permissions.

4.3.1 Configuring Card Type

Set the card type before you assign cards to users. For example, if the assigned card is an ID card, set card type to ID card.

Procedure

Step 1 Log in to Smart PSS Lite.

Step 2 Click **Access Solution** > **Personnel Manager** > **User**.

Step 3 On the **Card Issuing Type** and then select a card type.

Make sure that the card type is same to the actually assigned card; otherwise, the card number cannot be read.

Step 4 Click **OK**.

4.3.2 Adding Users

4.3.2.1 Adding Users One by One

Procedure

Step 1 Select **Personnel** > **Personnel Manager** > **Add**.

Step 2 Enter basic information of staff.

1) Select **Basic Info**.
2) Add basic information of staff.
3) Take snapshot or upload picture, and then click **Finish**.

- The card number can be read automatically or filled in manually. To automatically read card number, select the card reader next to **Card No.**, and then place the card on the card reader. The card number will be read automatically.
- You can select multiple USB cameras to snap pictures.
- Set password

  Click **Add** to add the password. For second-generation access controllers, set person passwords; for other devices, set card passwords. New passwords must consist of 6-8 digits.
- Configure card

  a. Click ⚙ to select **Device** or **Card issuer** as card reader.

  b. Add card. The card number must be added if the non-second generation access controller is used.

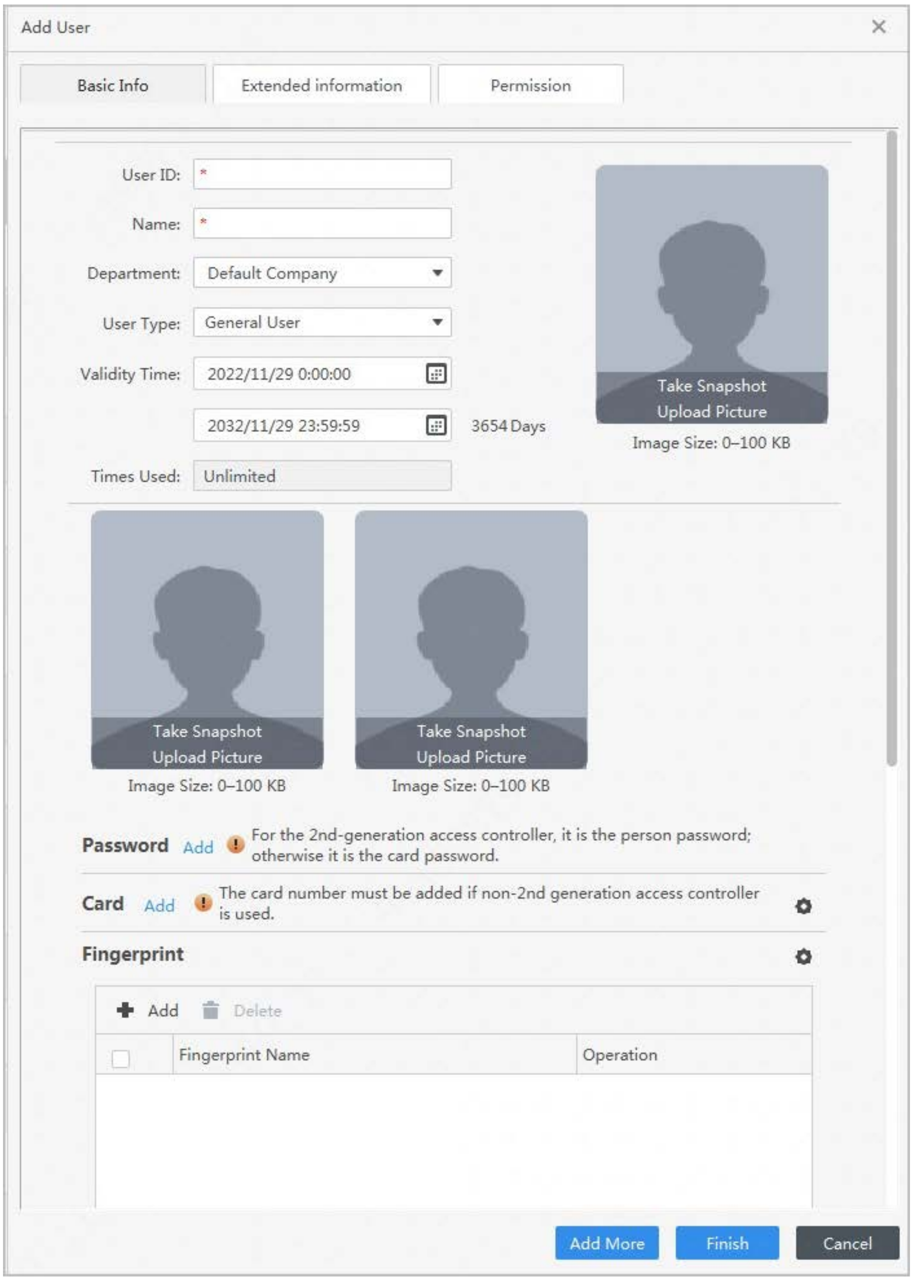
  c. After adding, you can select the card as main card or duress card, or replace the card with a new one, or delete the card.

  d. Click ▦ to display the QR code of the card.

Only 8-digit card number in hexadecimal mode can display the QR code of the card.

- Configure fingerprint
  a. Click ⚙ to select **Device** or **Fingerprint Scanner** as the fingerprint collector.
  b. Add fingerprint. Select **Add** > **Add Fingerprint**, and then press finger on the scanner for three times continuously.

Figure 4-4 Add basic information



Add User ×

Basic Info | Extended information | Permission

User ID: *

Name: *

Department: Default Company

User Type: General User

Validity Time: 2022/11/29 0:00:00

2032/11/29 23:59:59 3654 Days

Times Used: Unlimited

Take Snapshot
Upload Picture
Image Size: 0–100 KB

Take Snapshot
Upload Picture
Image Size: 0–100 KB

Take Snapshot
Upload Picture
Image Size: 0–100 KB

Password Add For the 2nd-generation access controller, it is the person password; otherwise it is the card password.

Card Add The card number must be added if non-2nd generation access controller is used.

Fingerprint

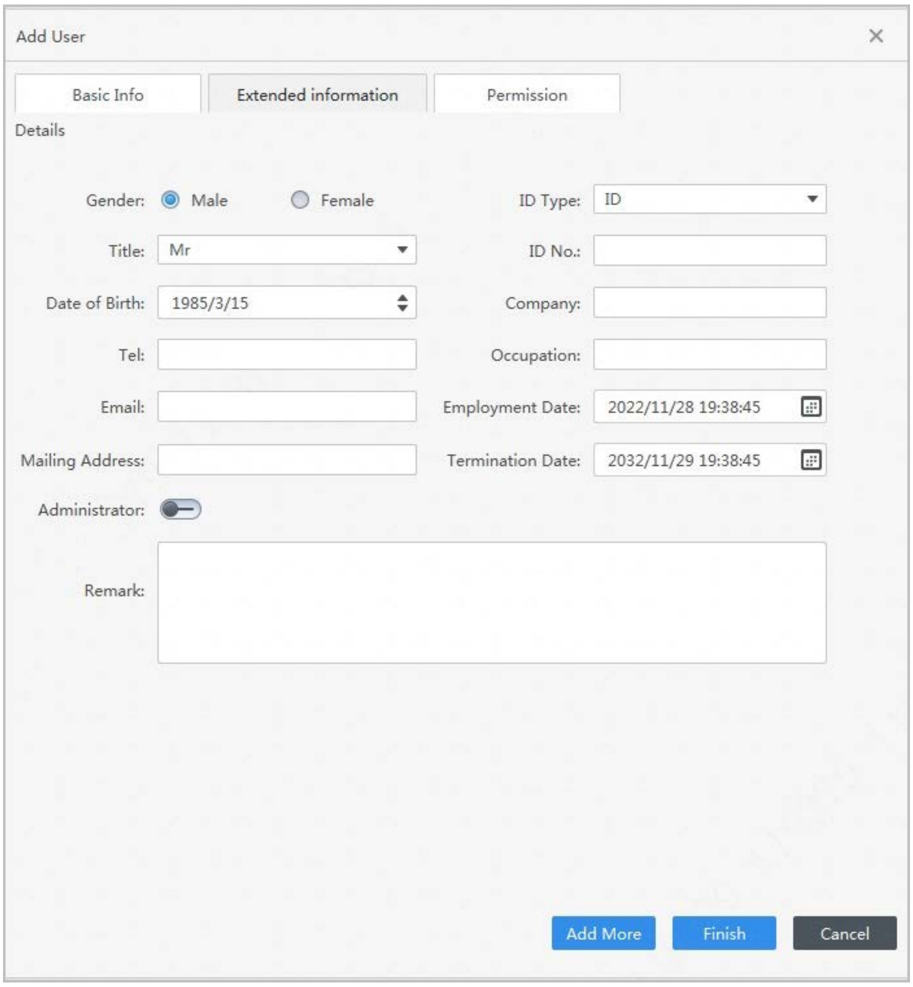
Add Delete

□	Fingerprint Name	Operation

Add More | Finish | Cancel

Step 3 Click **Extended information** to add extended information of the personnel, and then click **Finish** to save.

Figure 4-5 Add extended information



Gender: ● Male ○ Female

ID Type: ID

Title: Mr

ID No.:

Date of Birth: 1985/3/15

Company:

Tel:

Occupation:

Email:

Employment Date: 2022/11/28 19:38:45

Mailing Address:

Termination Date: 2032/11/29 19:38:45

Administrator:

Remark:

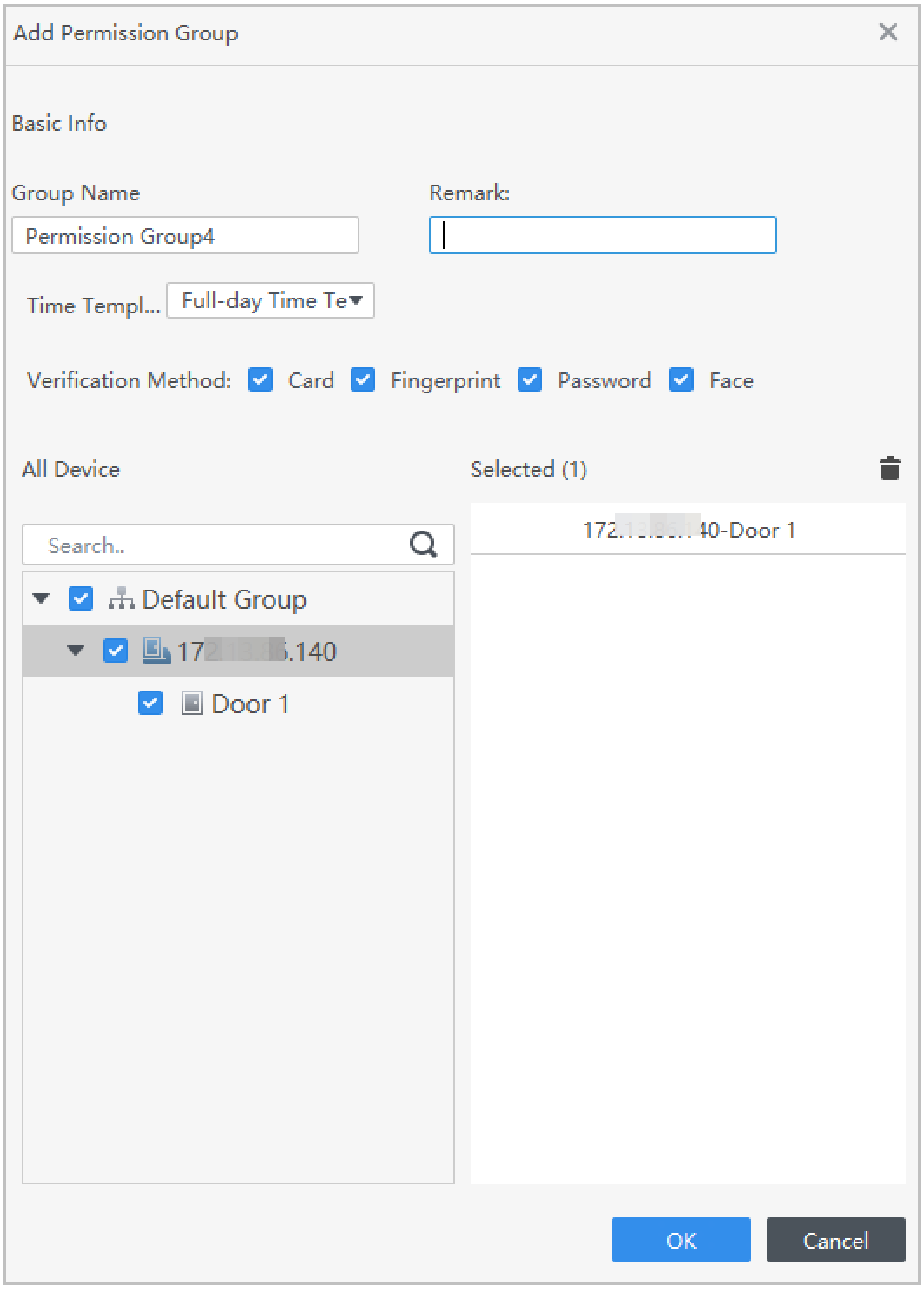
Step 4 Configure permissions.

1) Click + .
2) Enter the group name, remarks (optional), and select a time template.
3) Select verification methods and doors.

Step 5 Configure permissions. For details, see "4.3.3 Assigning Access Permission".

1. Select **Group**.
2. Enter the group name, remarks (optional), and select a time template.
3. Select verification methods and doors.
4. Click **OK**.

Figure 4-6 Configure permission groups



Add Permission Group

Basic Info

Group Name: Permission Group4

Remark:

Time Templ...: Full-day Time Te▾

Verification Method: ☑ Card ☑ Fingerprint ☑ Password ☑ Face

All Device

Search..

- ☑ Default Group
  - ☑ 17[redacted].140
    - ☑ Door 1

Selected (1)

172.[redacted]40-Door 1

Step 6 Click **Finish**.

After completing adding, you can click ✎ to modify information or add details in the list of staff.

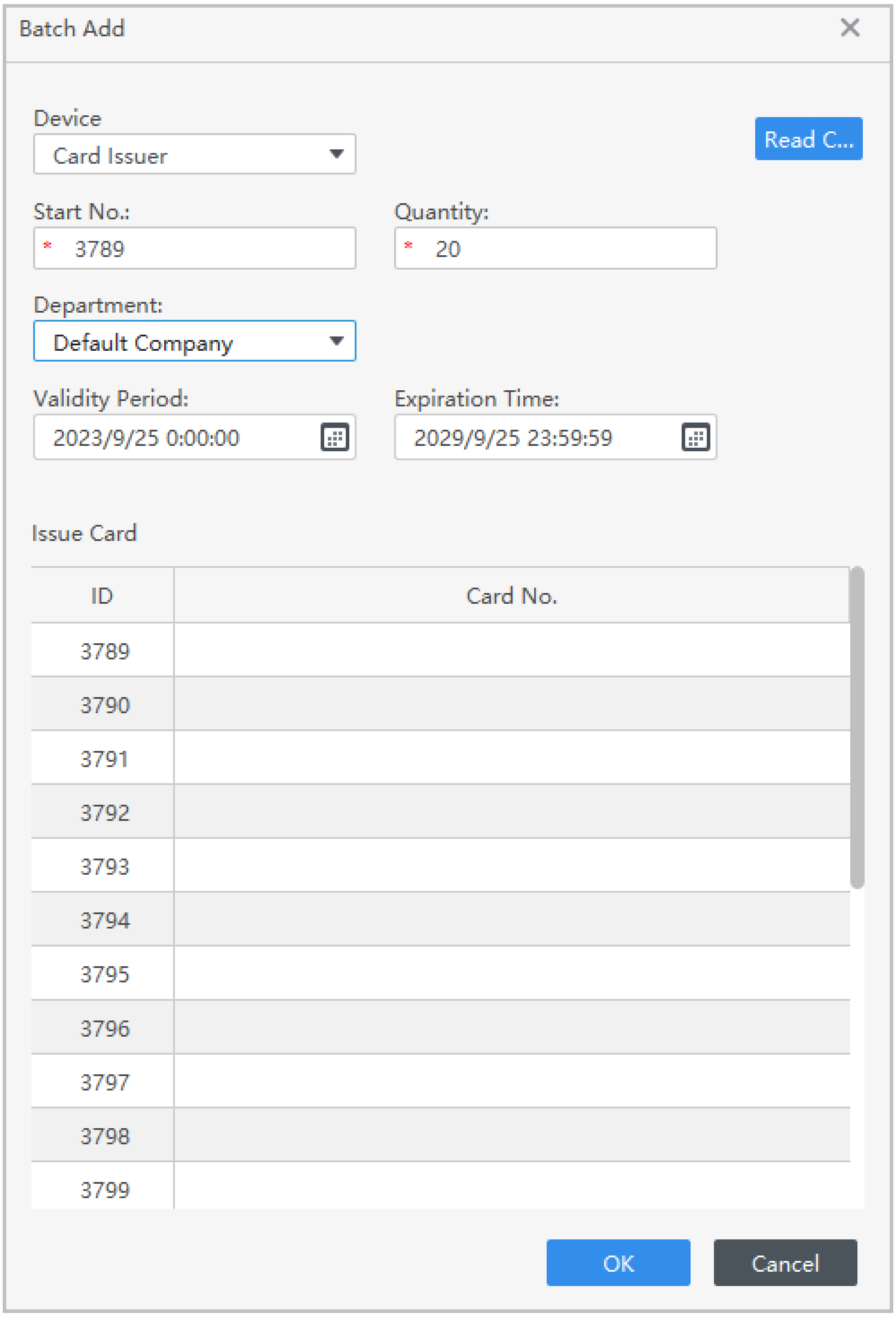
4.3.2.2 Adding Users in Batches

Procedure

Step 1 Click **Personnel Manger** > **Batch Update** > **Batch Add**.

Step 2 Select **Card issuer** or **Device** from the **Device** list, and then configure the parameters.

Figure 4-7 Add users in batches



Device: Card Issuer

Start No.: * 3789

Quantity: * 20

Department: Default Company

Validity Period: 2023/9/25 0:00:00

Expiration Time: 2029/9/25 23:59:59

Issue Card

ID	Card No.
3789	
3790	
3791	
3792	
3793	
3794	
3795	
3796	
3797	
3798	
3799	

Table 4-2 Add users in batches parameters

Parameter	Description
Start No.	The user ID starts with the number you defined.
Quantity	The number of users you want to add.
Department	Select the department that the user belongs to.
Effective Time/Expired Time	The users can unlock the door within the defined period.

Step 3 Click **Read Card No.**, and swipe cards on the card reader.

The card number will be read automatically.

Step 4 Click **OK**.

4.3.3 Assigning Access Permission

Create a permission group that is a collection of door access permissions, and then link users with the group so that users can unlock doors associated with the permission group.

Procedure

Step 1 Click **Access Solution** > **Personnel Manger** > **Permission**.

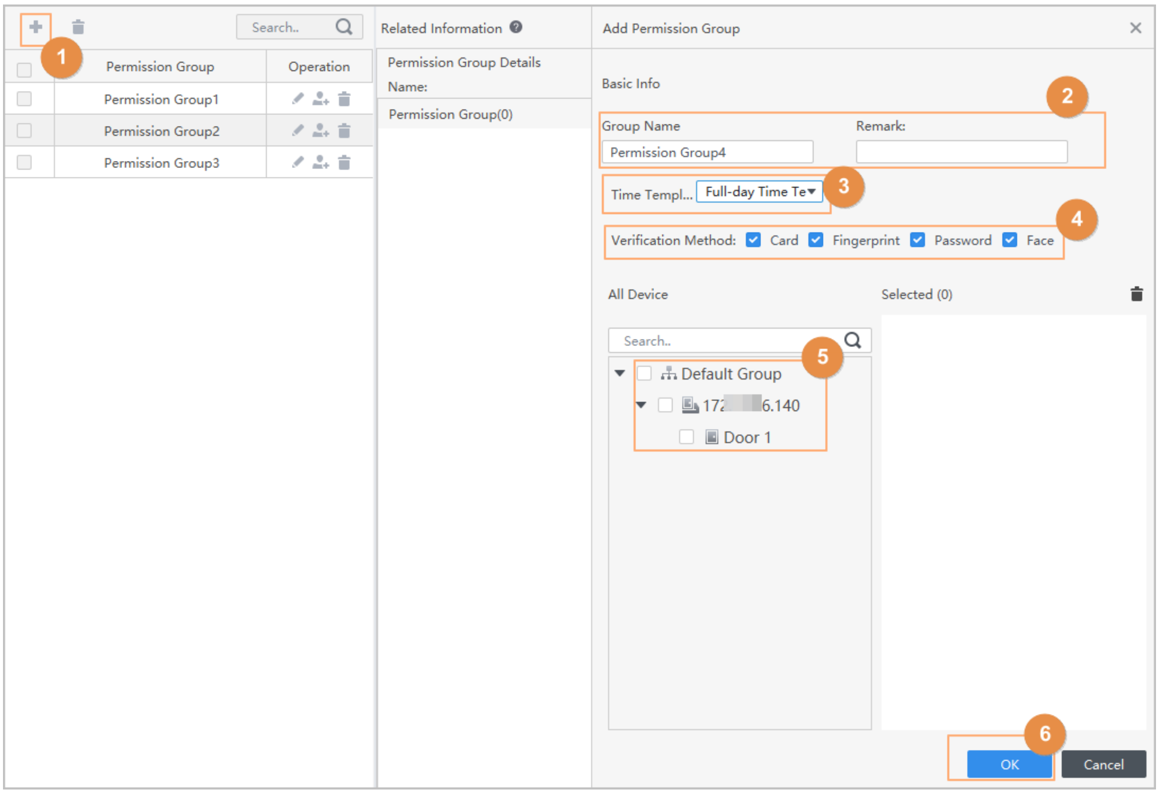
Step 2 Click + .

Step 3 Enter the group name, remarks (optional), and select a time template.

Step 4 Select verification methods and doors.

Step 5 Click **OK**.

Figure 4-8 Create a permission group



Permission Group	Operation
Permission Group1	✎ 👤 🗑
Permission Group2	✎ 👤 🗑
Permission Group3	✎ 👤 🗑

Related Information

Permission Group Details

Name:

Permission Group(0)

Add Permission Group

Basic Info

Group Name: Permission Group4

Remark:

Time Templ... Full-day Time Te

Verification Method: ☑ Card ☑ Fingerprint ☑ Password ☑ Face

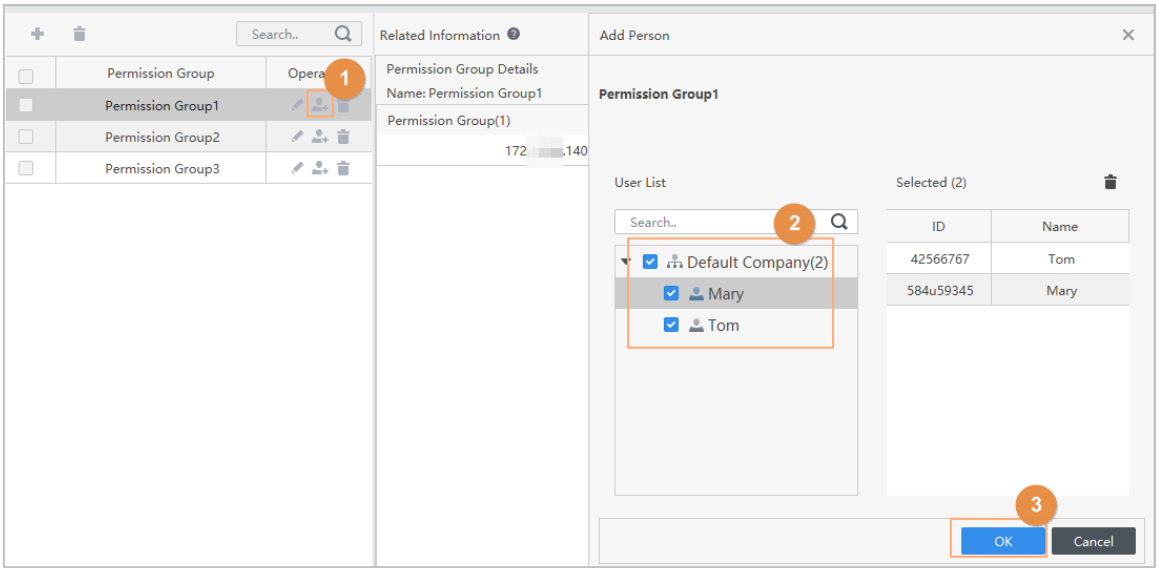
All Device

Selected (0)

Step 6 Click 👤 of the permission group.

Step 7 Select users to associate them with the permission group.

Figure 4-9 Add users to a permission group



ID	Name
42566767	Tom
584u59345	Mary

Step 8 Click **OK**.

Users can unlock the door in this permission group after valid identity verification.

4.3.4 Assigning Attendance Permissions

Create a permission group that is a collection of time attendance permissions, and then associate employees with the group so that they can punch in/out through defined verification methods.

Procedure

Step 1 Log in to the Smart PSS Lite.

Step 2 Click **Access Solution** > **Personnel Manger** > **Permission configuration**.

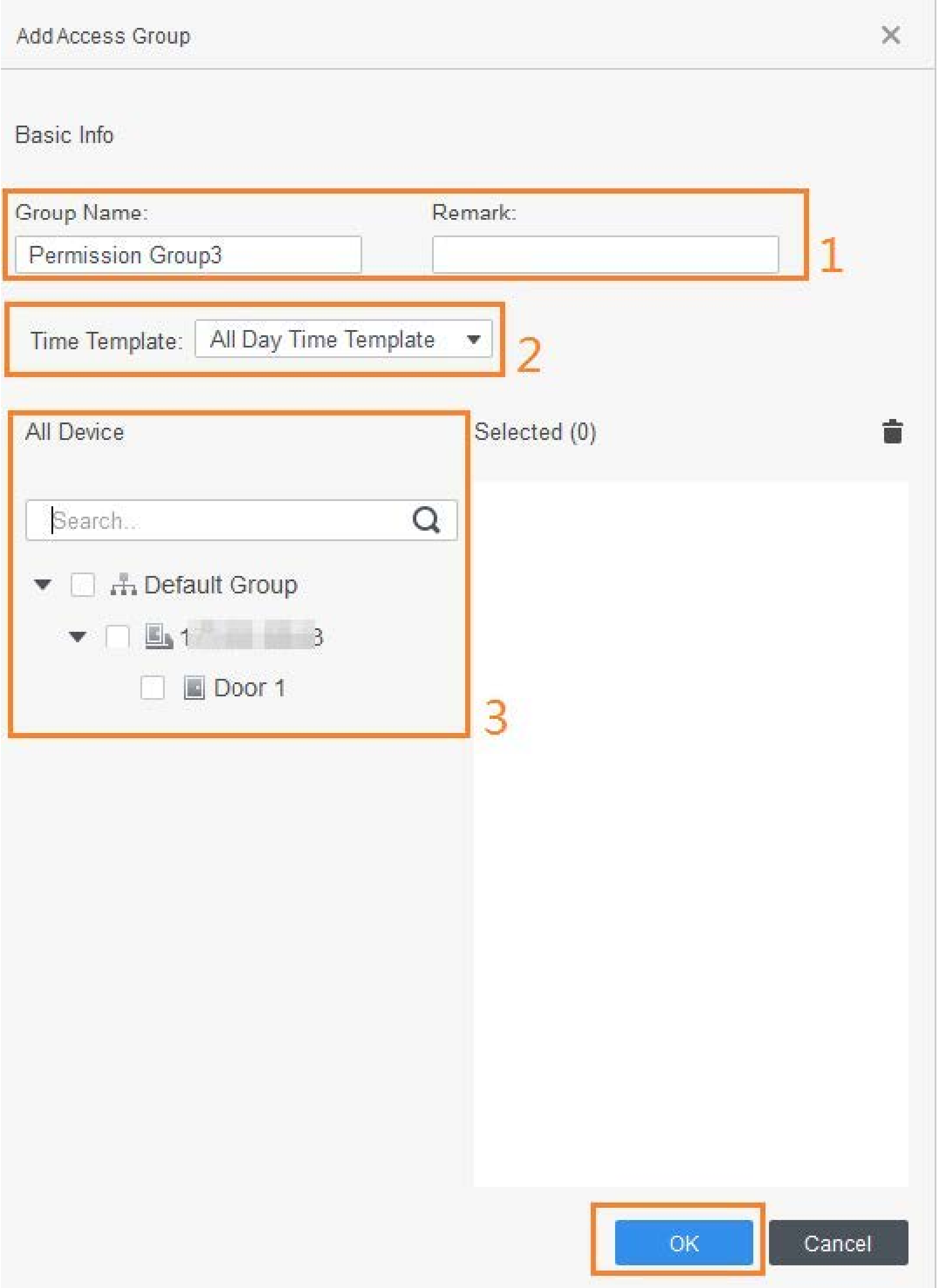
Step 3 Click + .

Step 4 Enter the group name, remarks (optional), and select a time template.

Step 5 Select the access control device.

Step 6 Click **OK**.

Figure 4-10 Create a permission group



Add Access Group

Basic Info

Group Name: Permission Group3

Remark:

Time Template: All Day Time Template

All Device

Search...

Default Group

1[redacted]3

Door 1

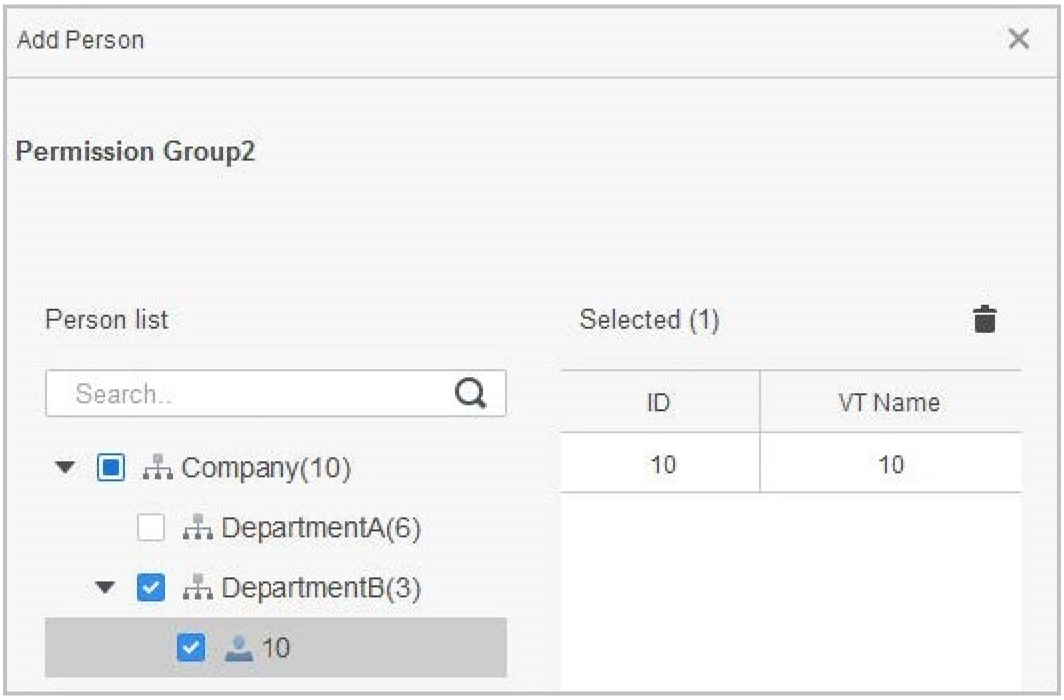
Selected (0)

The Time & Attendance only supports punch-in/out through password and face attendance.

Step 7 Click of the permission group you added.

Step 8 Select users to associate them with the permission group.

Figure 4-11 Add users to a permission group



ID	VT Name
10	10

Step 9 Click **OK**.

4.4 Access Management

4.4.1 Remotely Opening and Closing Door

You can remotely monitor and control door through the platform. For example, you can remotely open or close the door.

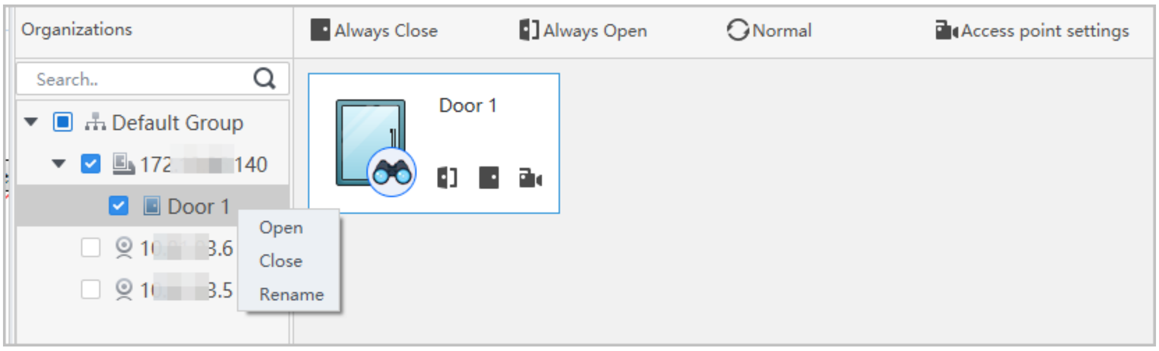
Procedure

Step 1 Click **Access Solution** > **Access Manager** on the home page.

Step 2 Remotely control the door.

- Select the door, right click and select **Open** or **Close** to open or close the door.

Figure 4-12 Open door



- ◨ ■: Open or close the door.
- ▣: View the live video of the door.

Related Operations

- Event filtering: Select the event type in the **Event Info**, and the event list displays the selected event type, such as alarm events and abnormal events.

- Event refresh locking: Click 🔓 to lock the event list, and then event list will stop refreshing. Click 🔒 to unlock.
- Event deleting: Click 🗑 to clear all events in the event list.

4.4.2 Setting Always Open and Always Close

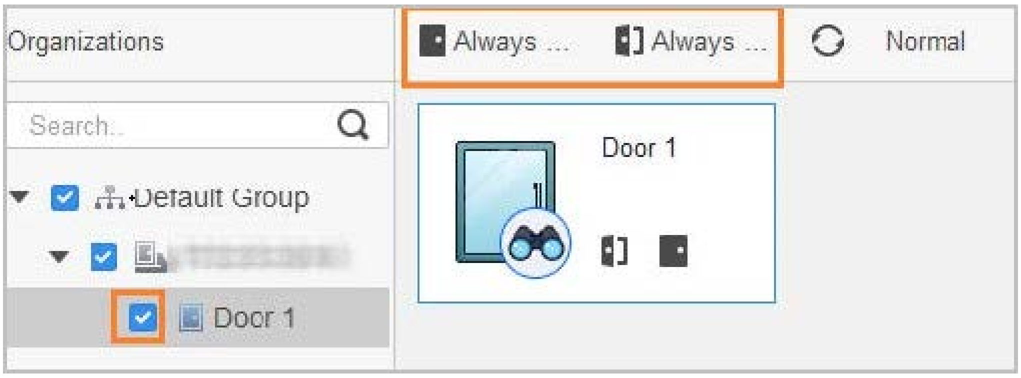
After setting always open or always close, the door remains open or closed all the time.

Procedure

Step 1 Click **Access Solution** > **Access Manager** on the Home page.

Step 2 Click **Always Open** or **Always Close** to open or close the door.

Figure 4-13 Always open or close



The door will remain open or closed all the time. You can click **Normal** to restore the access control to normal status, and then the door will be open or closed based on the configured verification methods.

4.4.3 Monitoring Door Status

Procedure

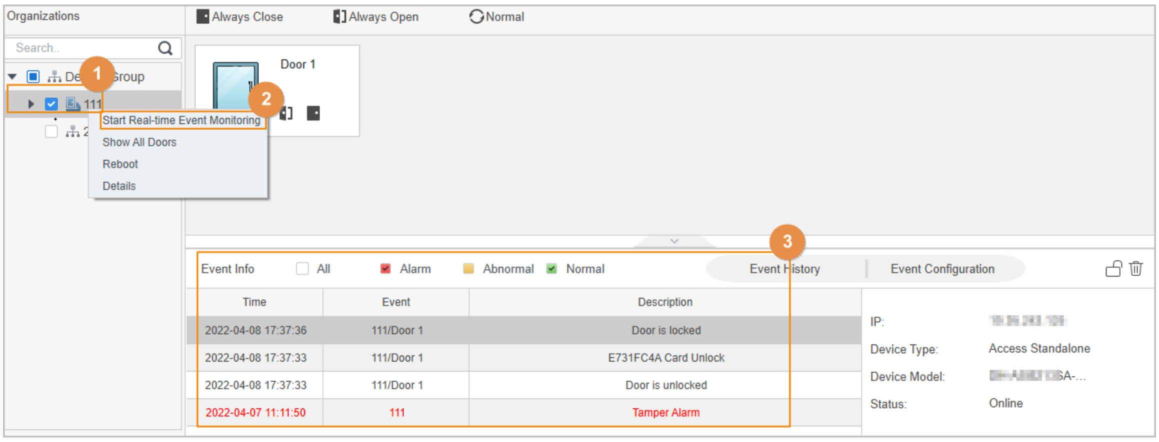
Step 1 Click **Access Solution** > **Access Manager** on the home page.

Step 2 Select the Device in the device tree, and right click the Device and then select **Start Real-time Event Monitoring**.

Real-time access control events will display in the event list.

Click **Stop Monitor**, real-time access control events will not display.

Figure 4-14 Monitor door status



Time	Event	Description
2022-04-08 17:37:36	111/Door 1	Door is locked
2022-04-08 17:37:33	111/Door 1	E731FC4A Card Unlock
2022-04-08 17:37:33	111/Door 1	Door is unlocked
2022-04-07 11:11:50	111	Tamper Alarm

IP:	[redacted]
Device Type:	Access Standalone
Device Model:	[redacted]A-...
Status:	Online

Related Operations

- Show All Door: Displays all doors controlled by the Device.
- Reboot: Restart the Device.
- Details: View the device details, such as IP address, model, and status.

Appendix 1 Important Points of Face Registration

Before Registration

- Glasses, hats, and beards might influence face recognition performance.
- Do not cover your eyebrows when wearing hats.
- Do not change your beard style greatly if you use the Device; otherwise face recognition might fail.
- Keep your face clean.
- Keep the Device at least 2 meters away from light source and at least 3 meters away from windows or doors; otherwise backlight and direct sunlight might influence face recognition performance of the access controller.

During Registration

- You can register faces through the Device or through the platform. For registration through the platform, see the platform user manual.
- Make your head center on the photo capture frame. The face image will be captured automatically.

📖

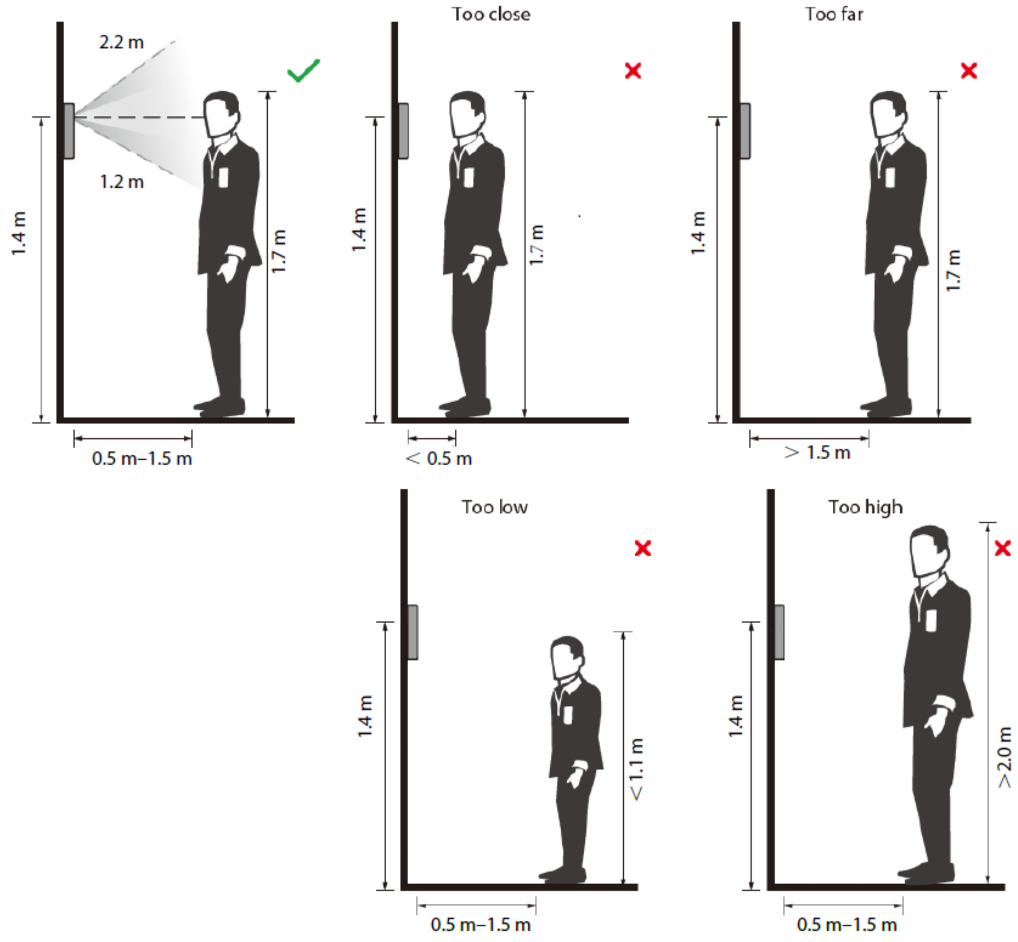
- Do not shake your head or body, otherwise the registration might fail.
- Avoid 2 faces appear in the capture frame at the same time.

Face Position

If your face is not at the appropriate position, face recognition accuracy might be affected.

The face position below is for reference only, and might differ from the actual situation.

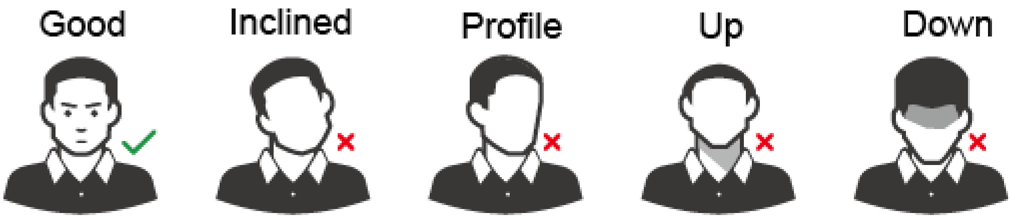
Appendix Figure 1-1 Appropriate face position



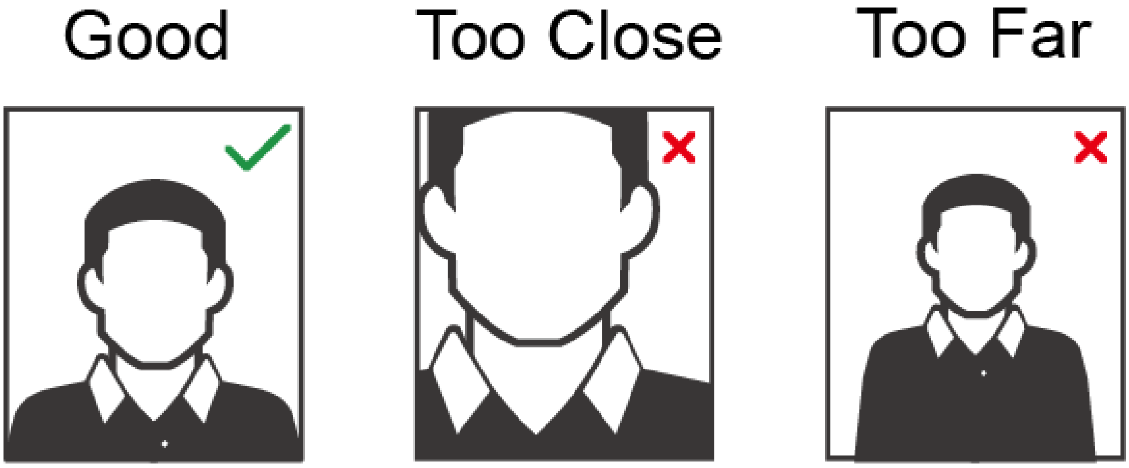
Requirements of Faces

- Make sure that the face is clean and forehead is not covered by hair.
- Do not wear glasses, hats, heavy beards, or other face ornaments that influence face image recording.
- With eyes open, without facial expressions, and make your face toward the center of camera.
- When recording your face or during face recognition, do not keep your face too close to or too far from the camera.

Appendix Figure 1-2 Head position



Appendix Figure 1-3 Face distance



- When importing face images through the management platform, make sure that image resolution is within the range 150 × 300 pixels–600 × 1200 pixels; image pixels are more than 500 × 500 pixels; image size is less than 100 KB, and image name and person ID are the same.
- Make sure that the face takes up more than 1/3 but no more than 2/3 of the whole image area, and the aspect ratio does not exceed 1:2.

Appendix 2 Important Points of Intercom Operation

The Device can function as VTO to realize intercom function.

Prerequisites

The intercom function is configured on the Device and VTO.

Procedure

Step 1 On the standby screen, tap ☎.

Step 2 Enter the room No, and then tap ☎.

Appendix 3 Important Points of Fingerprint Registration Instructions

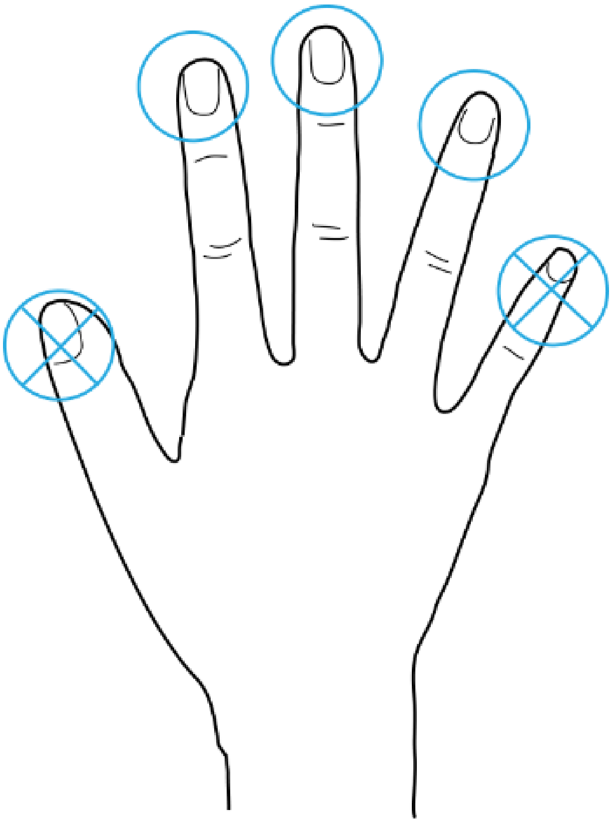
When you register the fingerprint, pay attention to the following points:

- Make sure that your fingers and the scanner surface are clean and dry.
- Press your finger on the center of the fingerprint scanner.
- Do not put the fingerprint sensor in a place with intense light, high temperature, and high humidity.
- If your fingerprints are unclear, use other unlocking methods.

Fingers Recommended

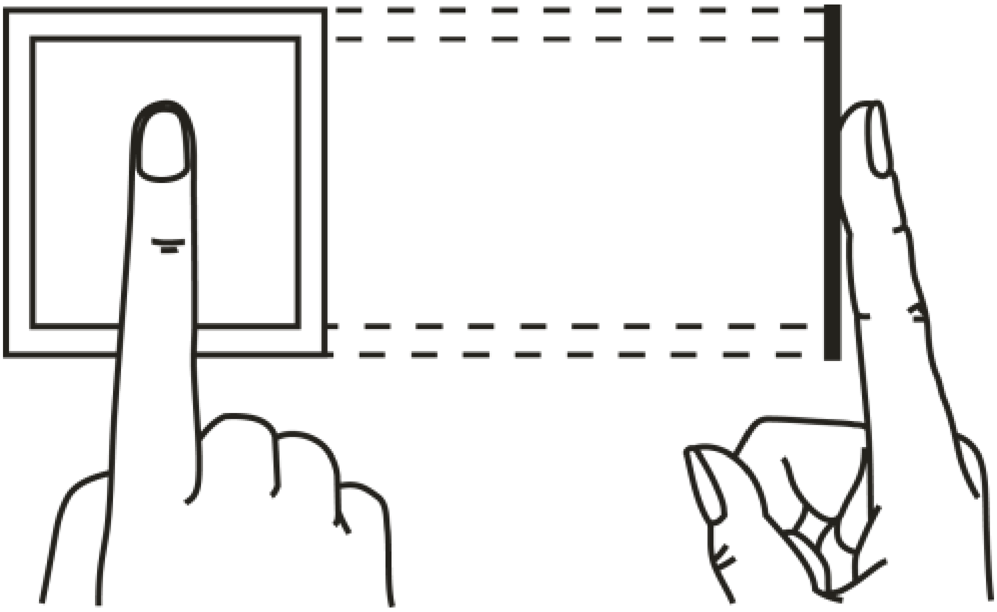
Forefingers, middle fingers, and ring fingers are recommended. Thumbs and little fingers cannot be put at the recording center easily.

Appendix Figure 3-1 Recommended fingers

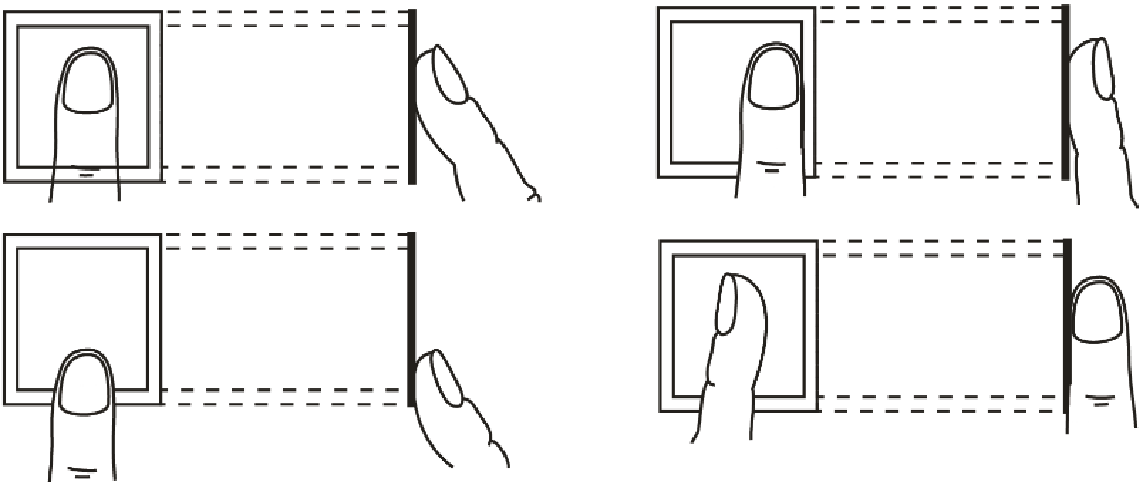


How to Press Your Fingerprint on the Scanner

Appendix Figure 3-2 Correct placement



Appendix Figure 3-3 Wrong placement

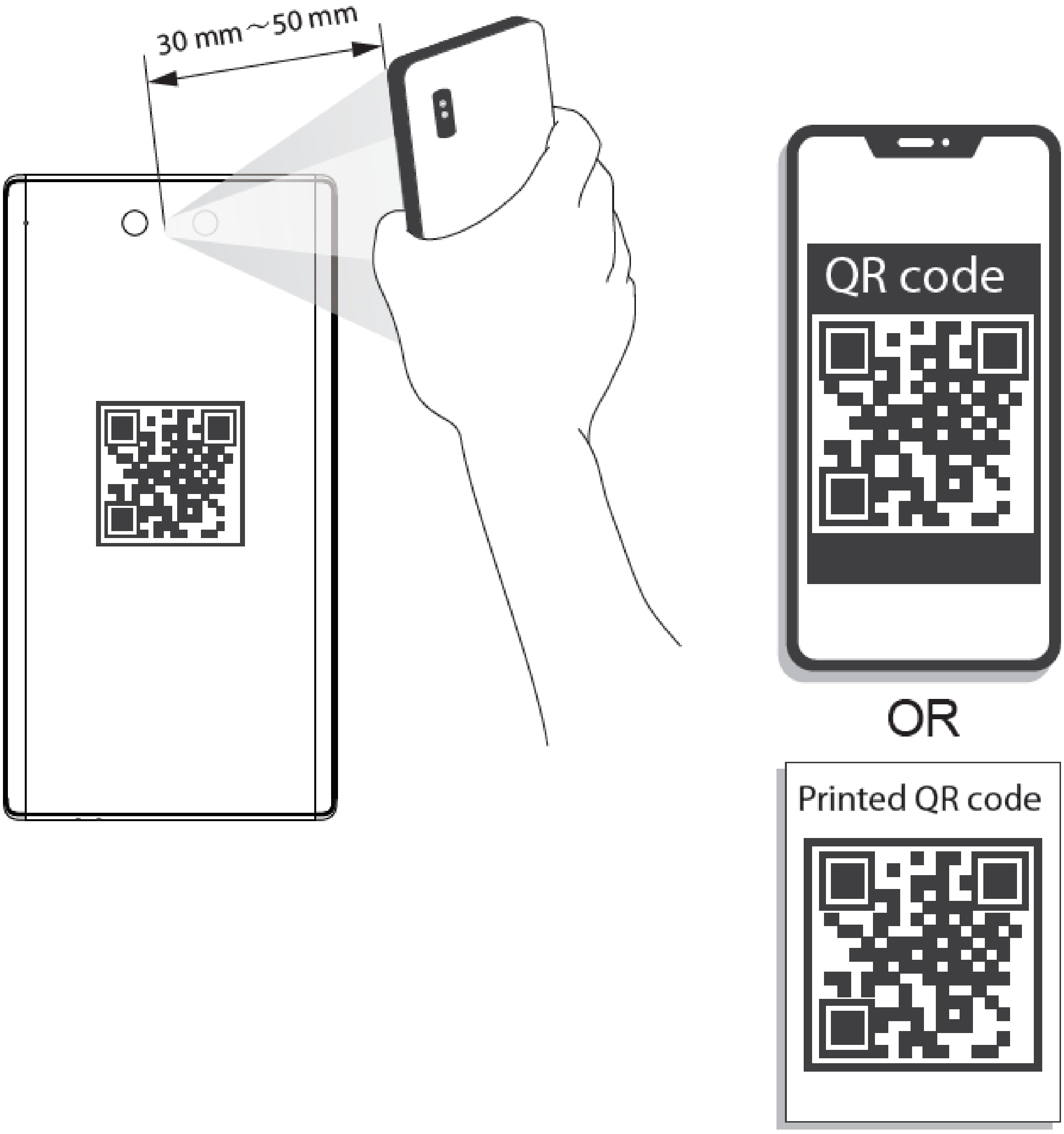


Appendix 4 Important Points of QR Code Scanning

Device: Place the QR code on your phone at a distance of 30 mm–50 mm away from the QR code scanning lens. It supports QR code that must be larger than 30 mm× 30 mm and less than 128 bytes in size.

QR code detection distance differs depending on the bytes and size of QR code.

Appendix Figure 4-1 QR code scanning



Appendix 5 Cybersecurity Recommendations

Mandatory actions to be taken for basic device network security:

1. **Use Strong Passwords**

   Please refer to the following suggestions to set passwords:

   - The length should not be less than 8 characters.
   - Include at least two types of characters; character types include upper and lower case letters, numbers and symbols.
   - Do not contain the account name or the account name in reverse order.
   - Do not use continuous characters, such as 123, abc, etc.
   - Do not use overlapped characters, such as 111, aaa, etc.

2. **Update Firmware and Client Software in Time**

   - According to the standard procedure in Tech-industry, we recommend to keep your device (such as NVR, DVR, IP camera, etc.) firmware up-to-date to ensure the system is equipped with the latest security patches and fixes. When the device is connected to the public network, it is recommended to enable the“auto-check for updates” function to obtain timely information of firmware updates released by the manufacturer.
   - We suggest that you download and use the latest version of client software.

"Nice to have" recommendations to improve your device network security:

1. **Physical Protection**

   We suggest that you perform physical protection to device, especially storage devices. For example, place the device in a special computer room and cabinet, and implement well-done access control permission and key management to prevent unauthorized personnel from carrying out physical contacts such as damaging hardware, unauthorized connection of removable device (such as USB flash disk, serial port), etc.

2. **Change Passwords Regularly**

   We suggest that you change passwords regularly to reduce the risk of being guessed or cracked.

3. **Set and Update Passwords Reset Information Timely**

   The device supports password reset function. Please set up related information for password reset in time, including the end user’s mailbox and password protection questions. If the information changes, please modify it in time. When setting password protection questions, it is suggested not to use those that can be easily guessed.

4. **Enable Account Lock**

   The account lock feature is enabled by default, and we recommend you to keep it on to guarantee the account security. If an attacker attempts to log in with the wrong password several times, the corresponding account and the source IP address will be locked.

5. **Change Default HTTP and Other Service Ports**

   We suggest you to change default HTTP and other service ports into any set of numbers between 1024–65535, reducing the risk of outsiders being able to guess which ports you are using.

6. **Enable HTTPS**

   We suggest you to enable HTTPS, so that you visit Web service through a secure communication channel.

7. **MAC Address Binding**

   We recommend you to bind the IP and MAC address of the gateway to the device, thus reducing the risk of ARP spoofing.

8. **Assign Accounts and Privileges Reasonably**

   According to business and management requirements, reasonably add users and assign a minimum set of permissions to them.

9. **Disable Unnecessary Services and Choose Secure Modes**

   If not needed, it is recommended to turn off some services such as SNMP, SMTP, UPnP, etc., to reduce risks.

   If necessary, it is highly recommended that you use safe modes, including but not limited to the following services:

   - SNMP: Choose SNMP v3, and set up strong encryption passwords and authentication passwords.
   - SMTP: Choose TLS to access mailbox server.
   - FTP: Choose SFTP, and set up strong passwords.
   - AP hotspot: Choose WPA2-PSK encryption mode, and set up strong passwords.

10. **Audio and Video Encrypted Transmission**

    If your audio and video data contents are very important or sensitive, we recommend that you use encrypted transmission function, to reduce the risk of audio and video data being stolen during transmission.

    Reminder: encrypted transmission will cause some loss in transmission efficiency.

11. **Secure Auditing**

    - Check online users: we suggest that you check online users regularly to see if the device is logged in without authorization.
    - Check device log: By viewing the logs, you can know the IP addresses that were used to log in to your devices and their key operations.

12. **Network Log**

    Due to the limited storage capacity of the device, the stored log is limited. If you need to save the log for a long time, it is recommended that you enable the network log function to ensure that the critical logs are synchronized to the network log server for tracing.

13. **Construct a Safe Network Environment**

    In order to better ensure the safety of device and reduce potential cyber risks, we recommend:

    - Disable the port mapping function of the router to avoid direct access to the intranet devices from external network.
    - The network should be partitioned and isolated according to the actual network needs. If there are no communication requirements between two sub networks, it is suggested to use VLAN, network GAP and other technologies to partition the network, so as to achieve the network isolation effect.
    - Establish the 802.1x access authentication system to reduce the risk of unauthorized access to private networks.
    - Enable IP/MAC address filtering function to limit the range of hosts allowed to access the device.