

**Dahua Video Doorbell**

**Firmware Version 4.7 Outdoor and Indoor unit**



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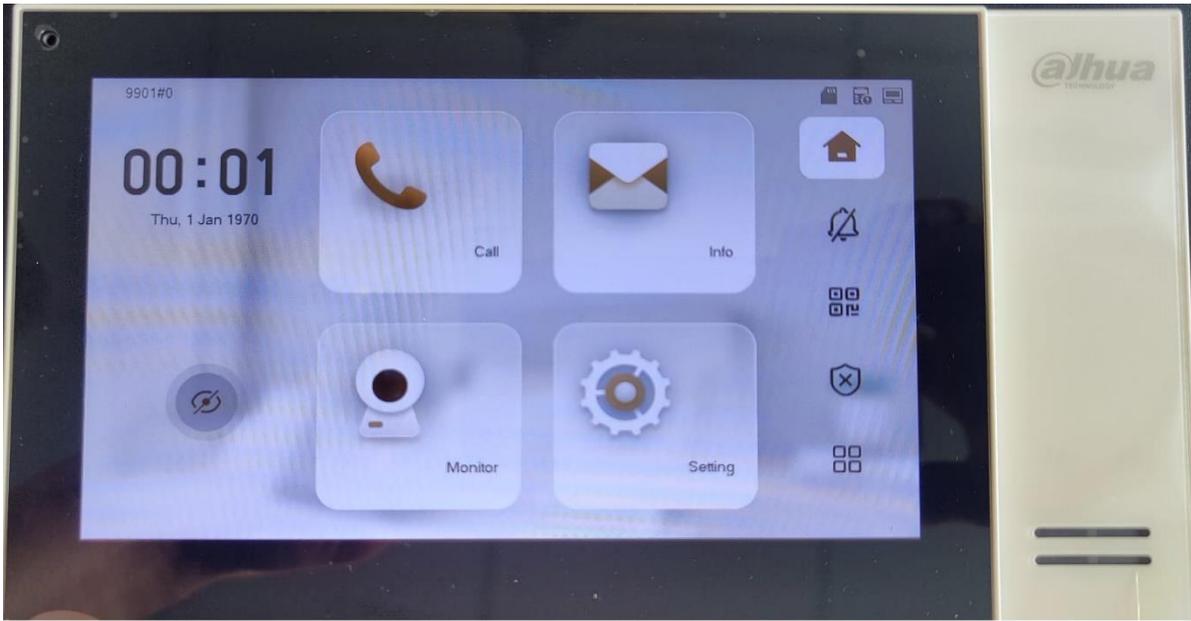
- How to activate the app in the indoor monitor.

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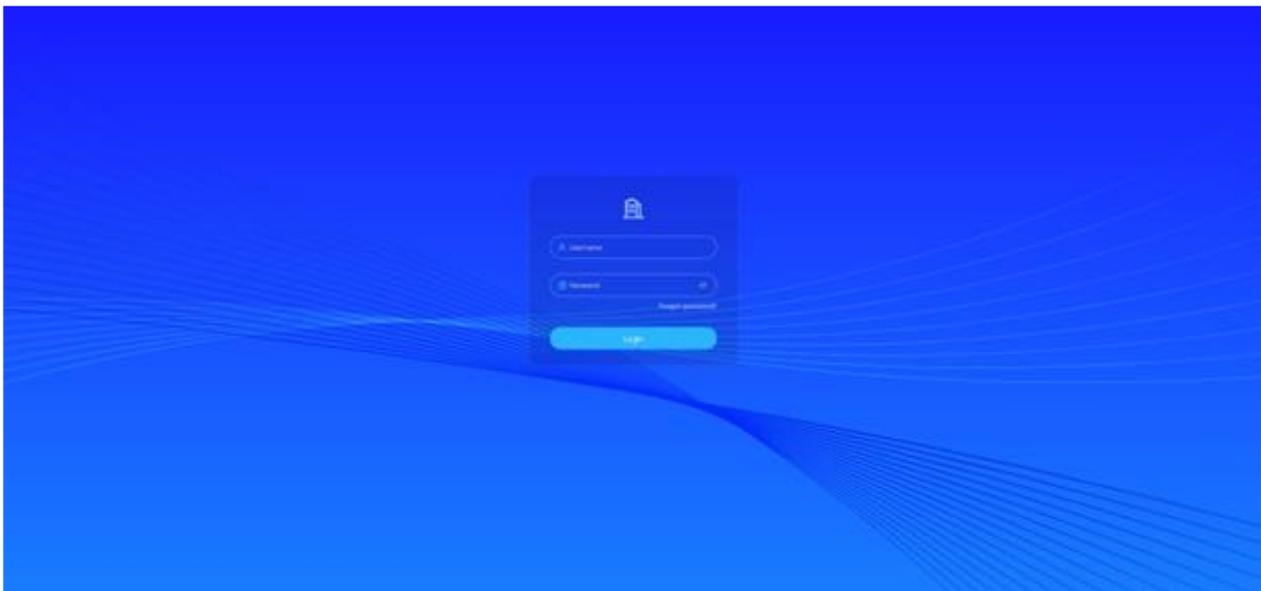
- Which app do I need to download.
- How to make an account.
- How to connect the app to the indoor monitor.

**Used Setup**

Example of the physical layout of fw v4.7 indoor unit



Example of the web browser layout of fw v4.7 outdoor unit



### What products and firmware are used.

<input type="checkbox"/>	1	Initialized	VTO	DHI-VTO2311R-WP	192.168.22.170:37777	d4:...	V4.700.0000000.0.R
<input type="checkbox"/>	2	Initialized	VTH	DHI-VTH5422HW	192.168.22.156:37777	fc:5...	V4.700.0000000.0.R

#### Outdoor station:

DHI-VTO2311R-WP

Firmware : V4.700.0000000.0.R

Product : <https://smartsd.com/product/20328085/dahua-dhi-vto2311r-wp>

FW : <https://www.dahuasecurity.com/search/products?keyword=vto2311>

#### Indoor monitor:

DHI-VTH5422HW

Firmware : V4.700.0000000.0.R

Product : <https://smartsd.com/product/20325022/dahua-dhi-vth5422hw>

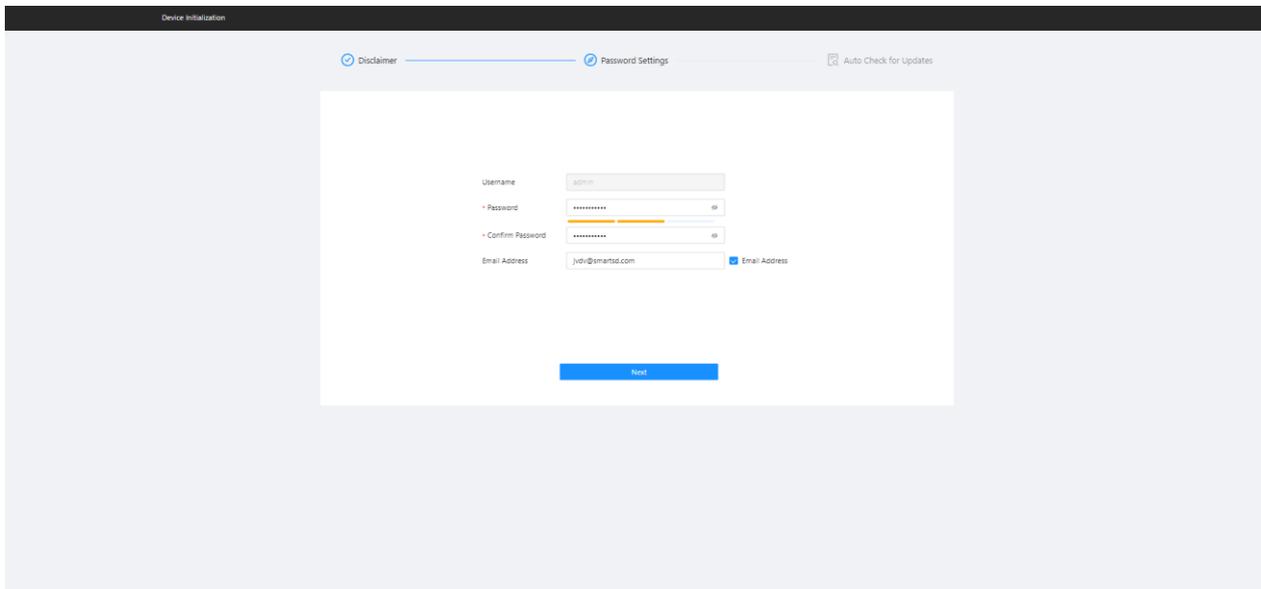
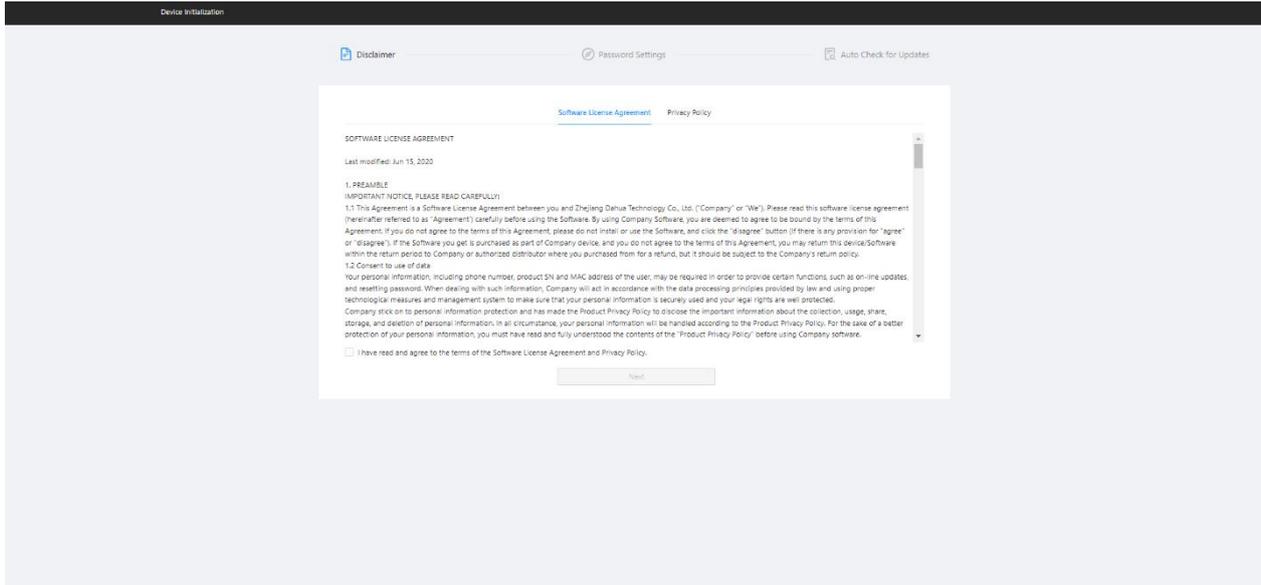
FW : <https://www.dahuasecurity.com/products/All-Products/Video-Intercoms/2-Wire-IP/Indoor-Monitor/Pro-Series/VTH5422HB/VTH5422HW>

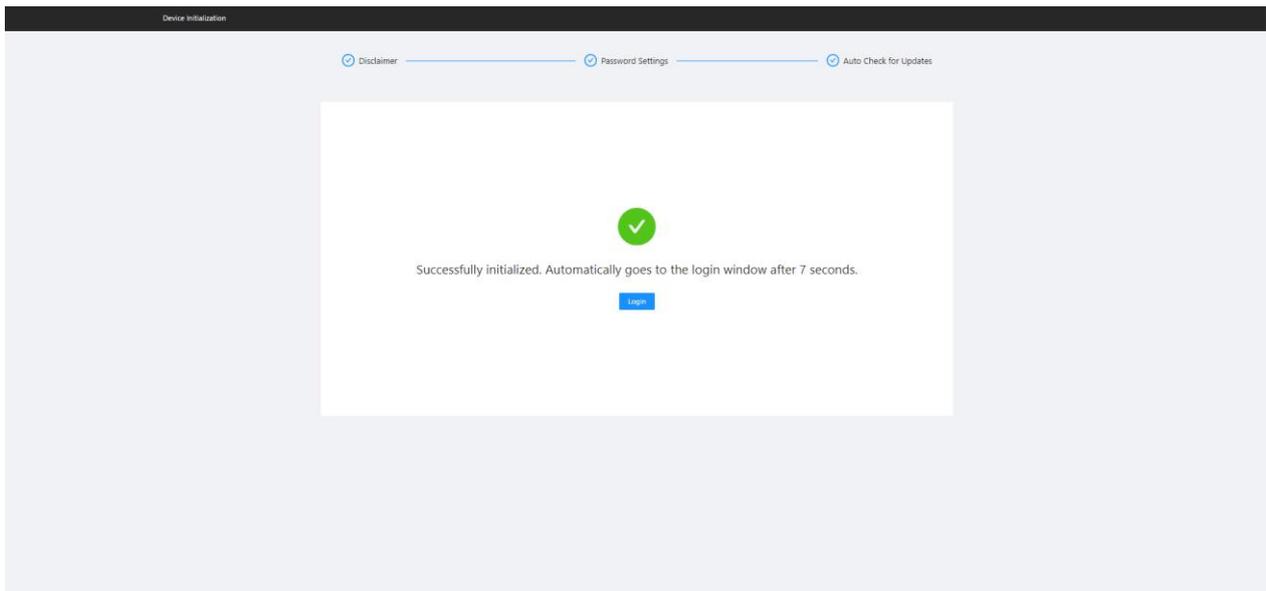
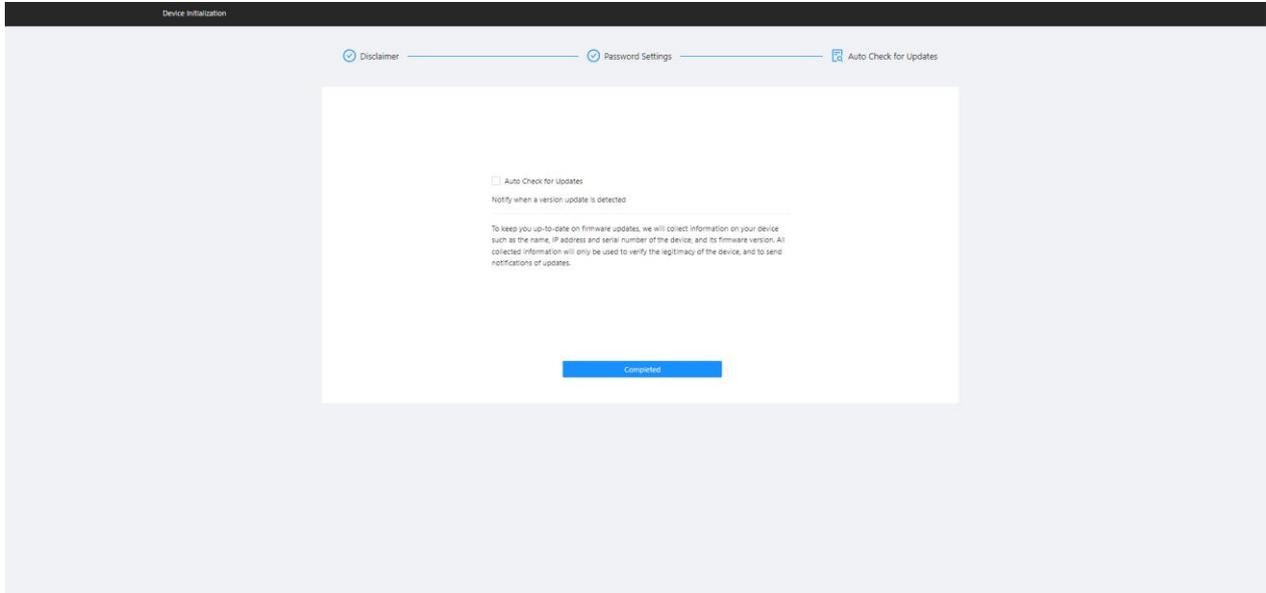
## Programming local wizard

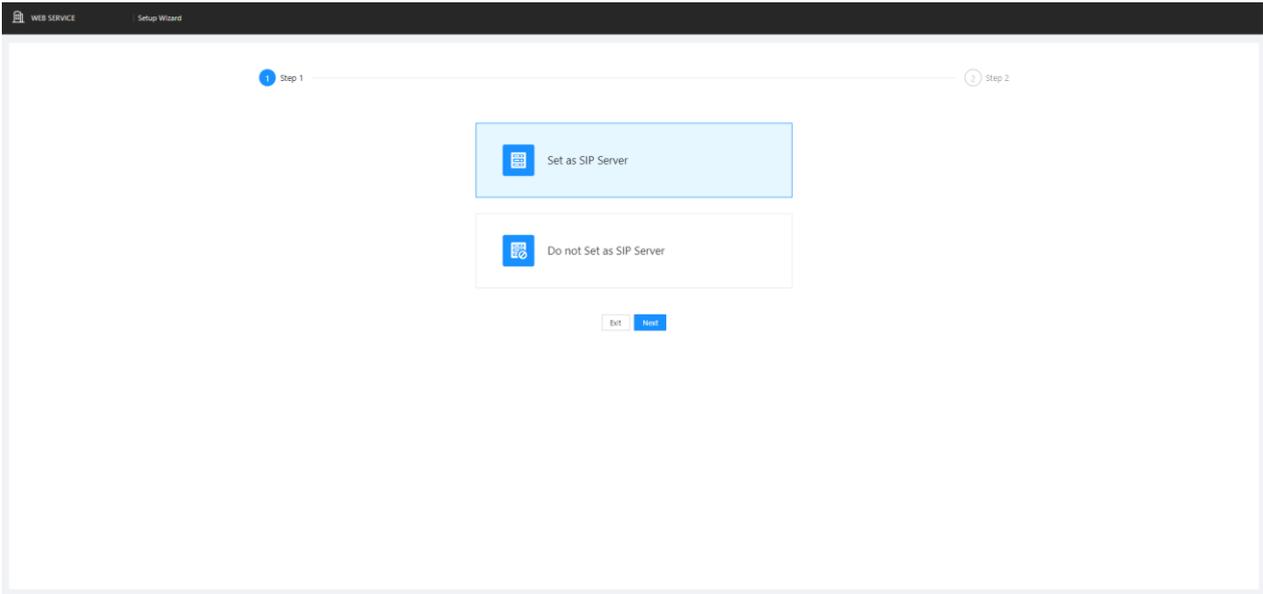
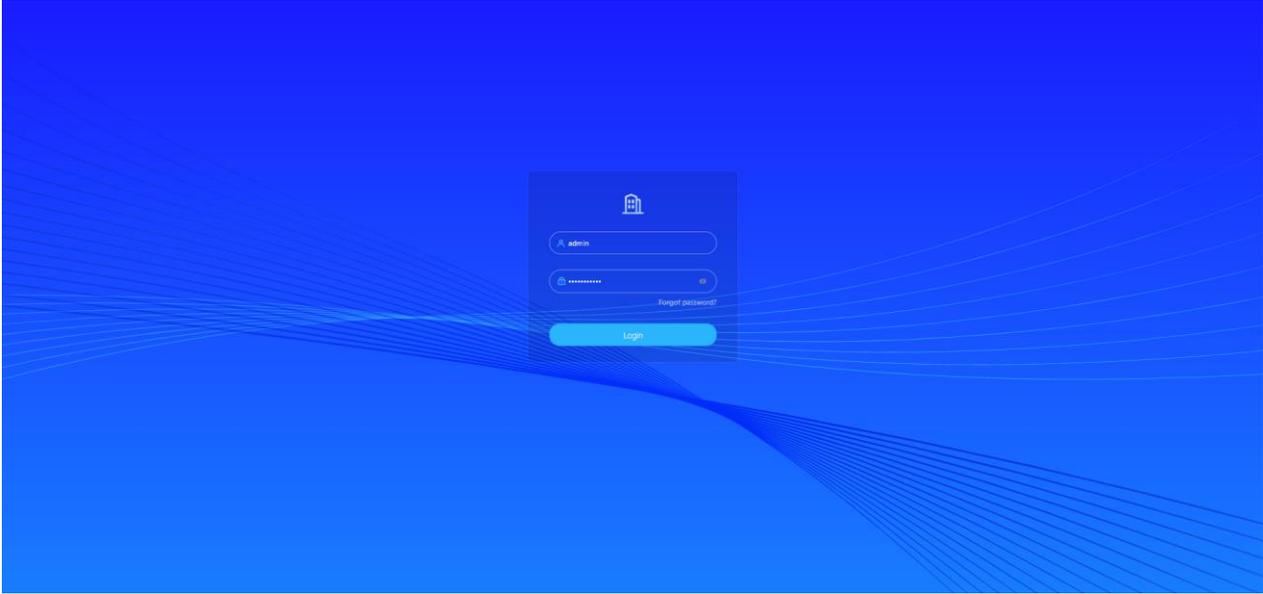
### How to program the outdoor station.

#### First startup

Use the configtool to initialize the VTO. Give the VTO a Password and an IP address.  
Login to the local web browser.







WEB SERVICE Setup Wizard

Step 1 Step 2

Add

Device Type	SIP No.	IP Address	Online Status	Operation
<input type="checkbox"/> VTD	8001	127.0.0.1	Online	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="checkbox"/> VTH	9901#0	192.168.22.156	Online	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="checkbox"/> VTH	9901#1		Offline	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="checkbox"/> VTH	9901#2		Offline	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="checkbox"/> VTH	9901#3		Offline	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="checkbox"/> VTH	9901#4		Offline	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="checkbox"/> VTH	9901#5		Offline	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="checkbox"/> VTH	9901#6		Offline	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="checkbox"/> VTH	9901#7		Offline	<input type="button" value="Edit"/> <input type="button" value="Delete"/>
<input type="checkbox"/> VTH	9901#8		Offline	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

11 records 10 / page Go to Page

WEB SERVICE Setup Wizard

Step 1 Step 2

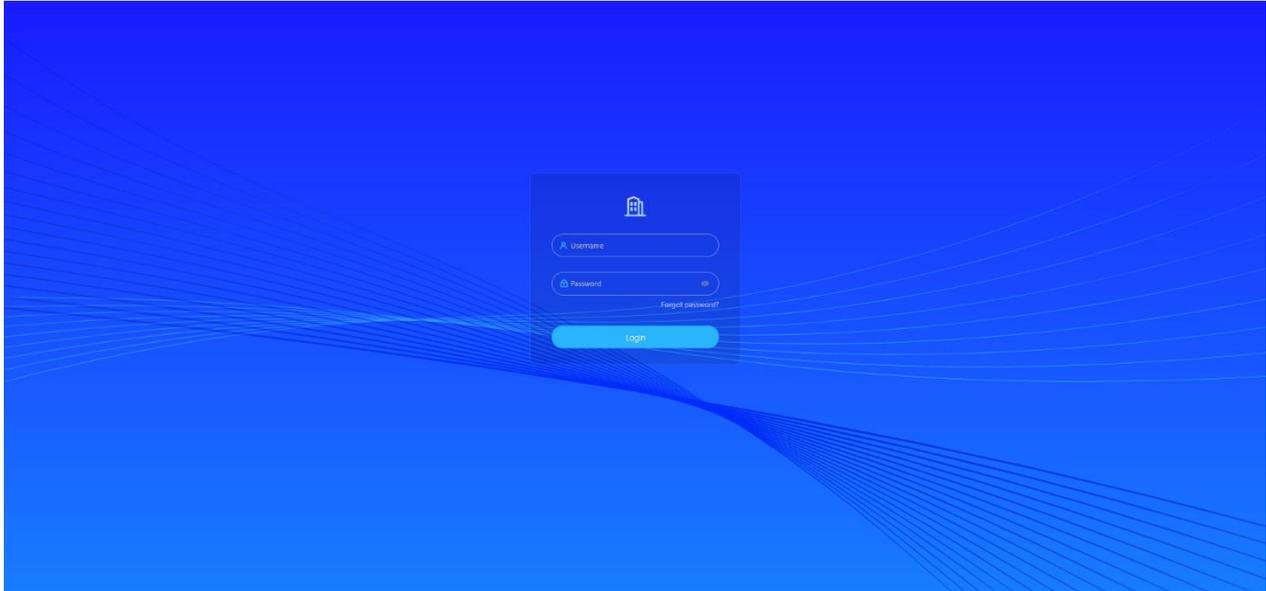


Successfully configured.

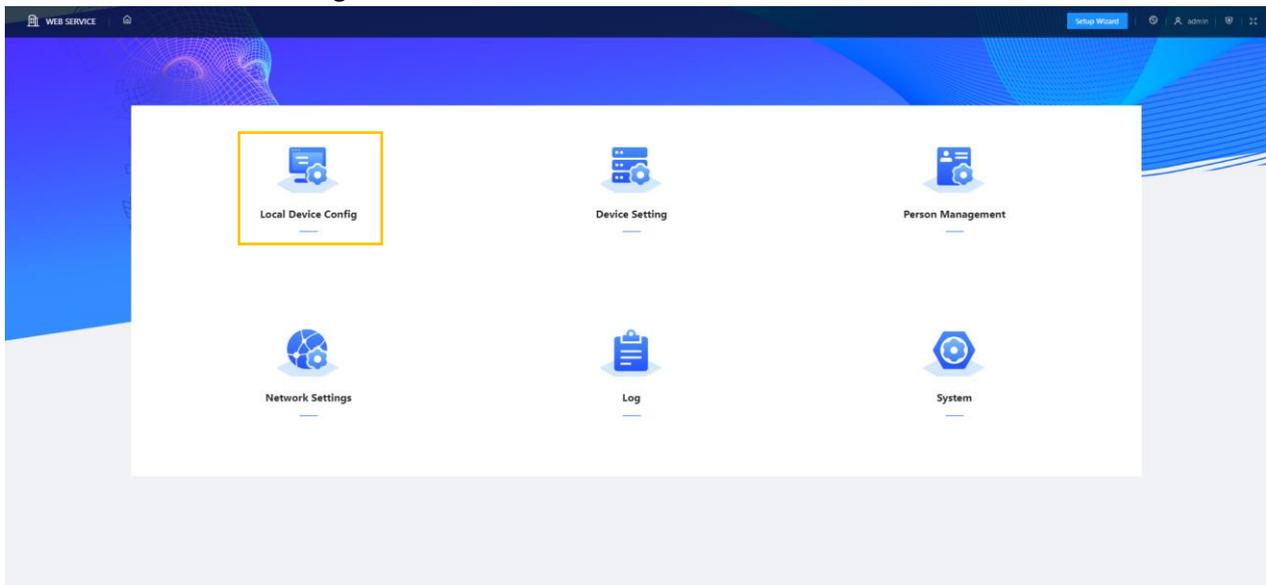
## Menu's in the outdoor station

### Local Device config.

Login in to the web browser.



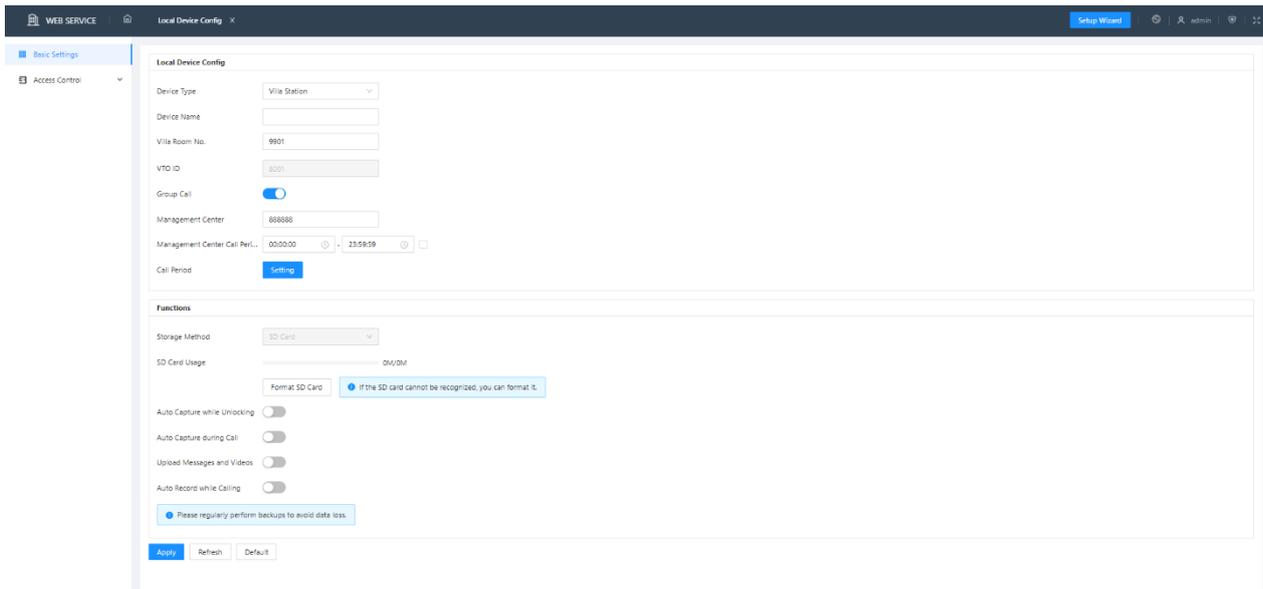
There you'll see the new layout.  
Choose "Local device config".



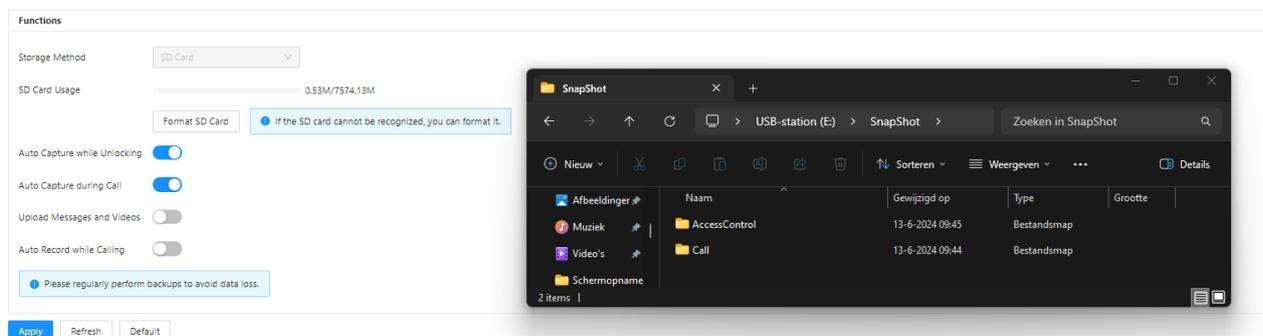
There you'll find settings like, basic settings and access control tab.

Basic Settings.

- Device type (For single or multiple button configuration)
- Room Number (For call settings)
- Call Period (Time schedule to enable or disable call button)
- SD Card Functions (Enable functions for snapshots)

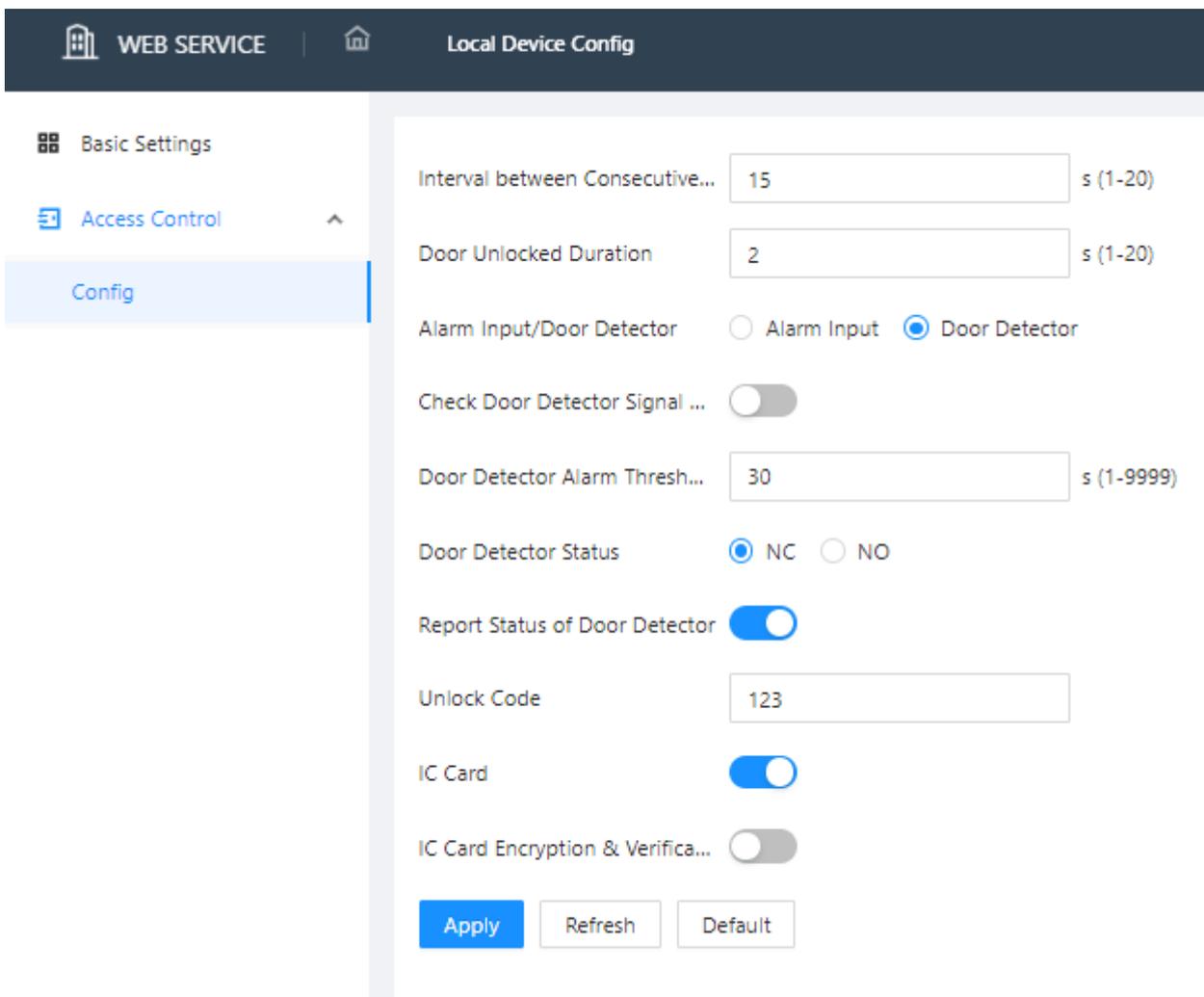


Below an example of 2 functions activated on the SD card. With the SD card inserted in a PC afterwards.



Access control

-Input and output settings

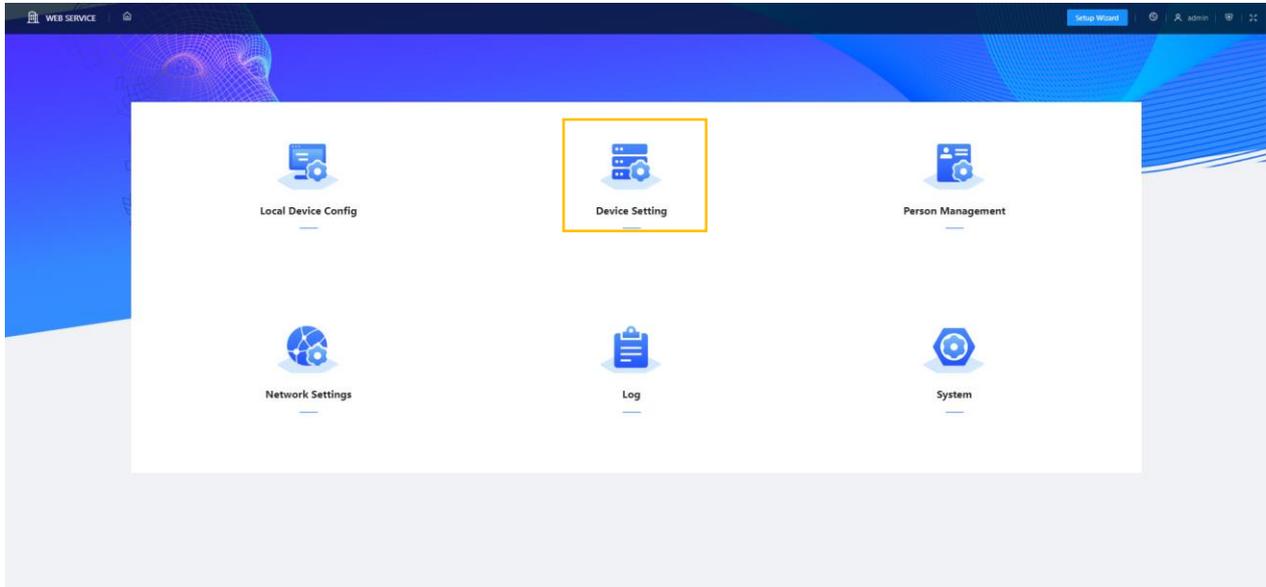


The screenshot displays the 'Local Device Config' web interface. On the left, a navigation menu includes 'Basic Settings', 'Access Control', and 'Config'. The 'Access Control' section is expanded, showing various settings:

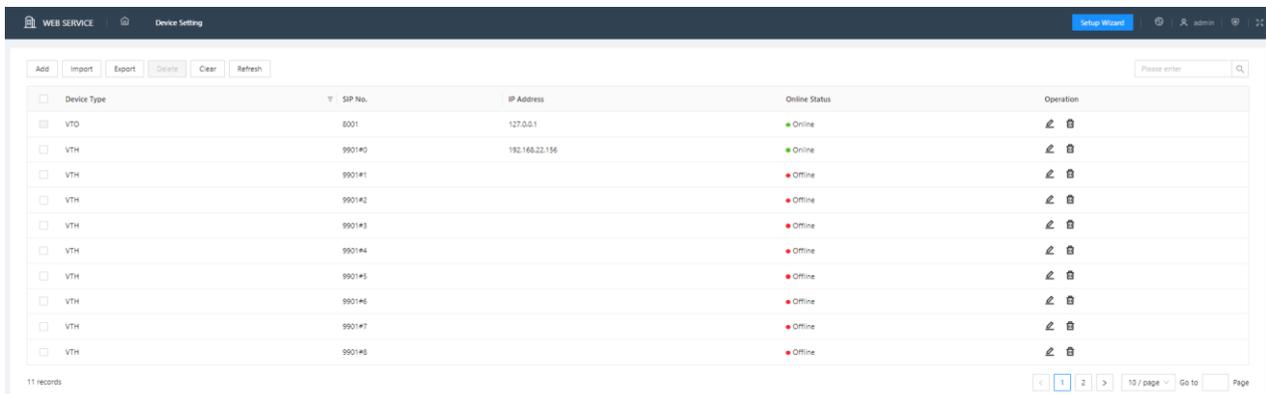
- Interval between Consecutive...: 15 s (1-20)
- Door Unlocked Duration: 2 s (1-20)
- Alarm Input/Door Detector:  Alarm Input  Door Detector
- Check Door Detector Signal ...:
- Door Detector Alarm Thresh...: 30 s (1-9999)
- Door Detector Status:  NC  NO
- Report Status of Door Detector:
- Unlock Code: 123
- IC Card:
- IC Card Encryption & Verifica...:

At the bottom, there are three buttons: 'Apply', 'Refresh', and 'Default'.

## Device settings



Here you'll find the former "household settings" like VTH, room numbers and online status.

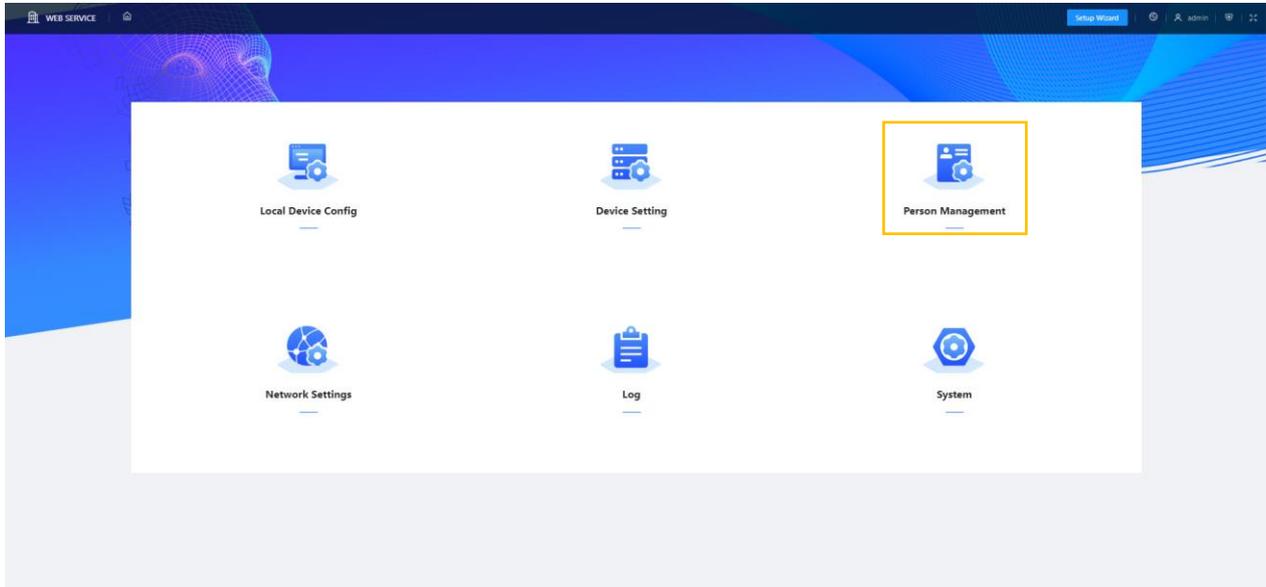


The screenshot displays the 'Device Setting' page with a table listing device configurations. The table includes columns for Device Type, SIP No., IP Address, Online Status, and Operation. There are 11 records shown, with the first record being a VTO device and the others being VTH devices with various SIP numbers and IP addresses.

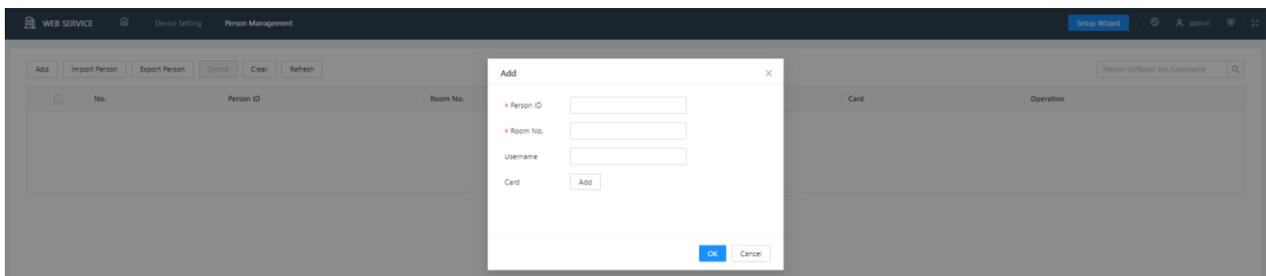
Device Type	SIP No.	IP Address	Online Status	Operation
<input type="checkbox"/> VTO	8001	127.0.0.1	● Online	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/> VTH	9901K0	192.168.22.156	● Online	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/> VTH	9901K1		● Offline	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/> VTH	9901K2		● Offline	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/> VTH	9901K3		● Offline	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/> VTH	9901K4		● Offline	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/> VTH	9901K5		● Offline	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/> VTH	9901K6		● Offline	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/> VTH	9901K7		● Offline	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/> VTH	9901K8		● Offline	<a href="#">Edit</a> <a href="#">Delete</a>

11 records

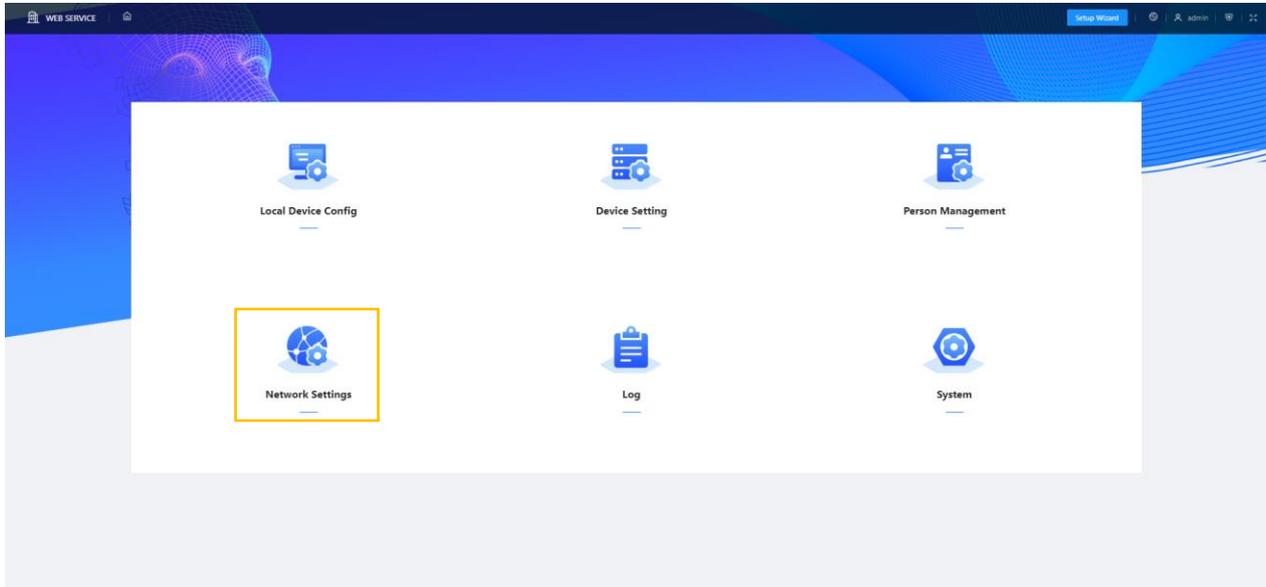
## Person Management



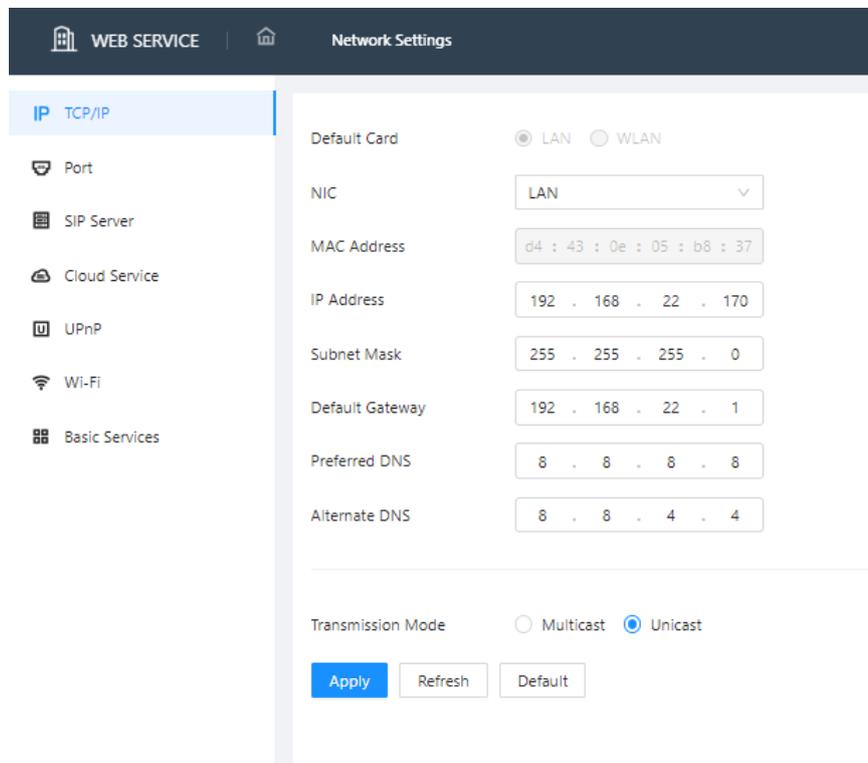
Possibility to add User with card access.



## Network settings



TCP/IP tab to edit the LAN/WLAN settings.



WEB SERVICE | Network Settings

IP TCP/IP

- Port
- SIP Server
- Cloud Service
- UPnP
- Wi-Fi
- Basic Services

Default Card:  LAN  WLAN

NIC: LAN

MAC Address: d4 : 43 : 0e : 05 : b8 : 37

IP Address: 192 . 168 . 22 . 170

Subnet Mask: 255 . 255 . 255 . 0

Default Gateway: 192 . 168 . 22 . 1

Preferred DNS: 8 . 8 . 8 . 8

Alternate DNS: 8 . 8 . 4 . 4

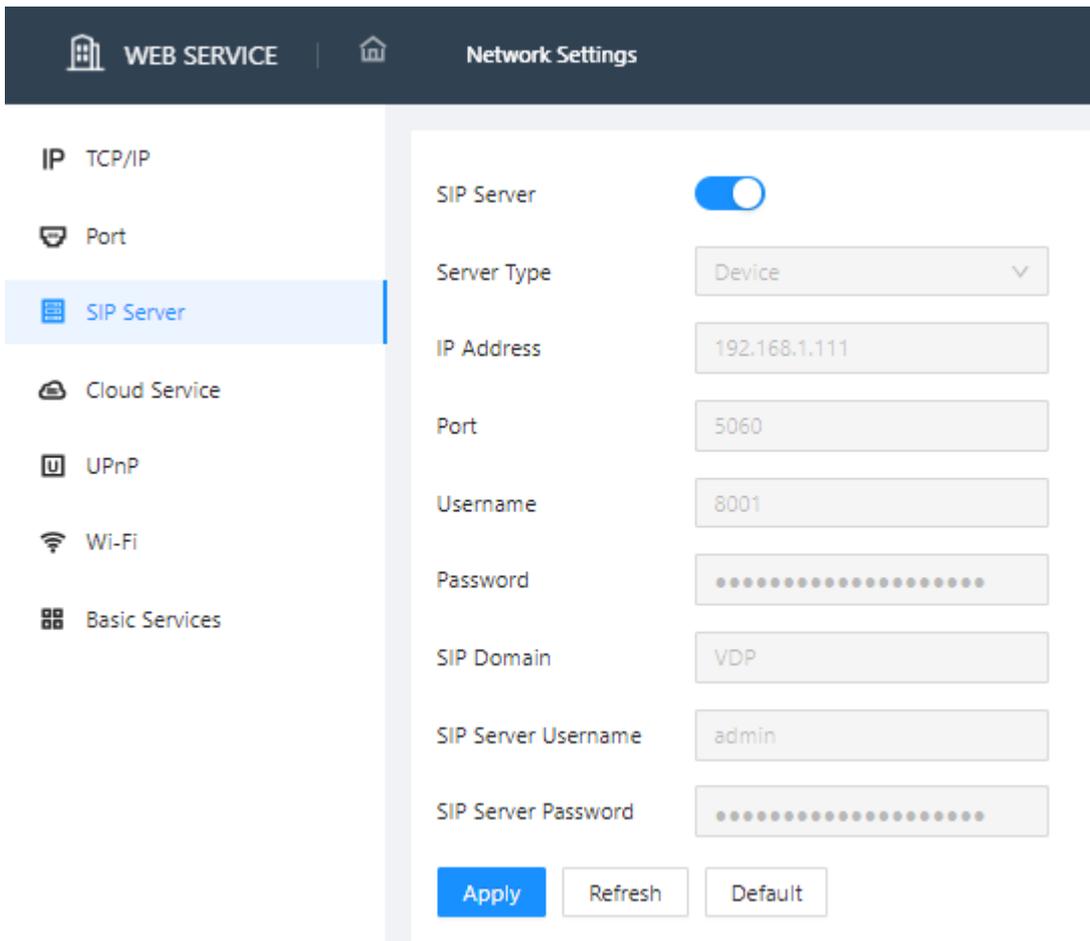
Transmission Mode:  Multicast  Unicast

Apply Refresh Default

SIP Server tab to define between main and substation.

ENABLED => this outdoor unit is the main unit

DISABLED => Fill in the IP address from the main unit.



The screenshot shows the 'Network Settings' page in the Dahua web interface. The 'SIP Server' tab is selected in the left-hand menu. The main content area displays the following configuration options:

- SIP Server:** Enabled (toggle switch).
- Server Type:** Device (dropdown menu).
- IP Address:** 192.168.1.111 (text input field).
- Port:** 5060 (text input field).
- Username:** 8001 (text input field).
- Password:** [Redacted with dots] (password input field).
- SIP Domain:** VDP (text input field).
- SIP Server Username:** admin (text input field).
- SIP Server Password:** [Redacted with dots] (password input field).

At the bottom of the configuration area, there are three buttons: 'Apply' (highlighted in blue), 'Refresh', and 'Default'.

Standard parameters:

Server type : Device

IP address : (IP address of the main unit, who has "sip server" enabled.)

Port : 5060

Username : 8001

Password : 123456

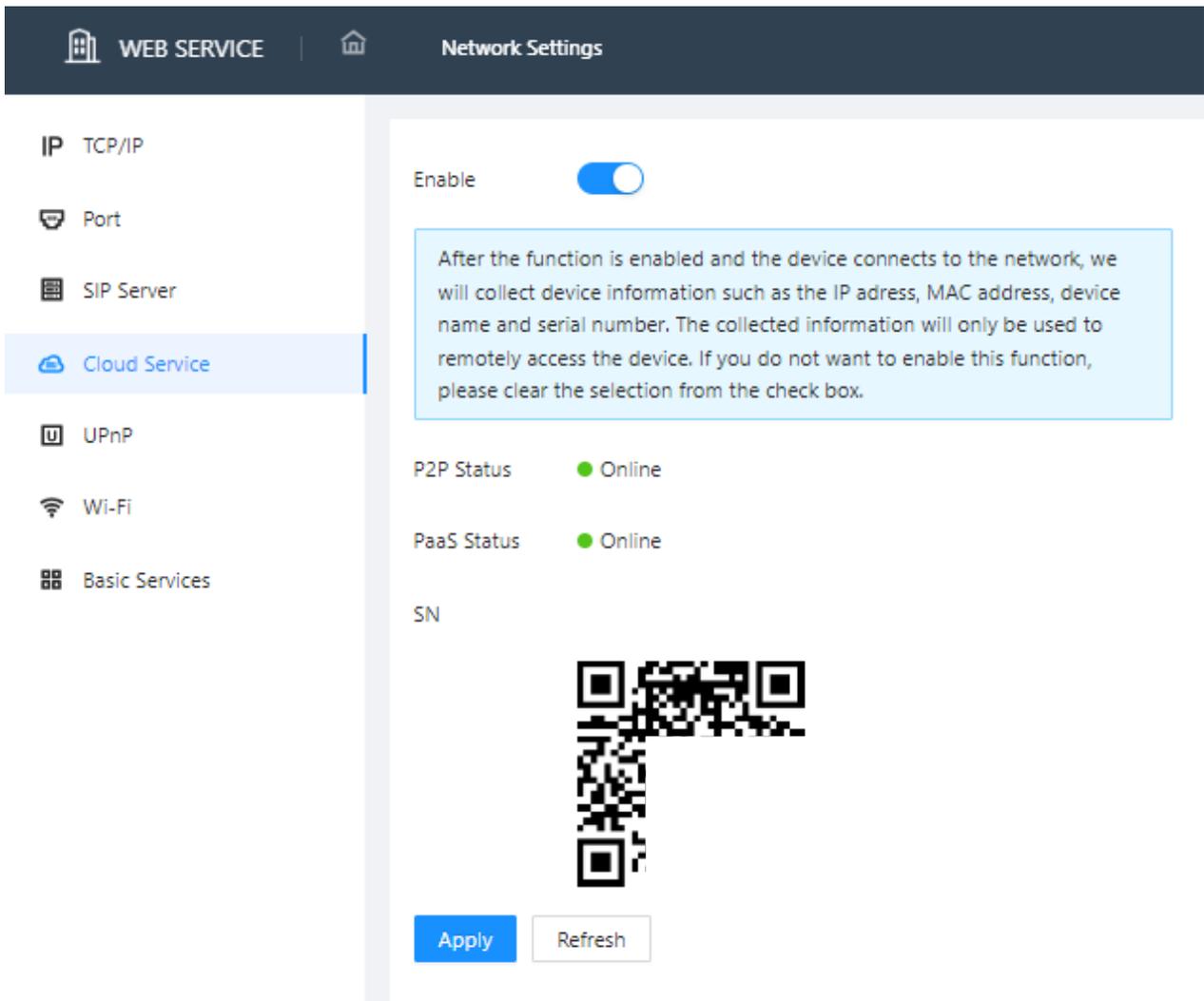
SIP Domain : VDP

SIP Username : admin

SIP Password : (Password of the main unit, who has "sip server" enabled.)

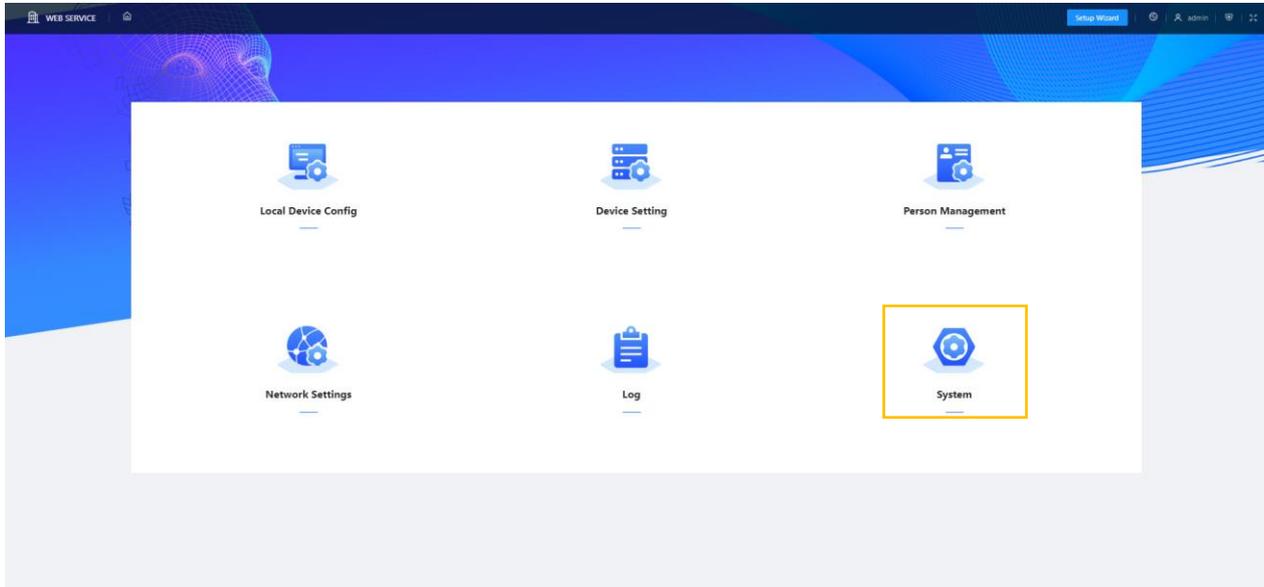
Cloud service tab, to link the first (or only) button to the DMSS app.

Default the function is ENABLED.



The screenshot displays the 'Network Settings' page in a web browser. The left sidebar contains a menu with the following items: IP TCP/IP, Port, SIP Server, Cloud Service (highlighted in blue), UPnP, Wi-Fi, and Basic Services. The main content area is titled 'Network Settings' and features an 'Enable' toggle switch that is currently turned on. Below the toggle is a light blue information box with the following text: 'After the function is enabled and the device connects to the network, we will collect device information such as the IP address, 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.' Underneath this box, the 'P2P Status' and 'PaaS Status' are both shown as 'Online' with green indicator lights. A section labeled 'SN' contains a QR code. At the bottom of the settings area, there are two buttons: 'Apply' (in blue) and 'Refresh' (in white).

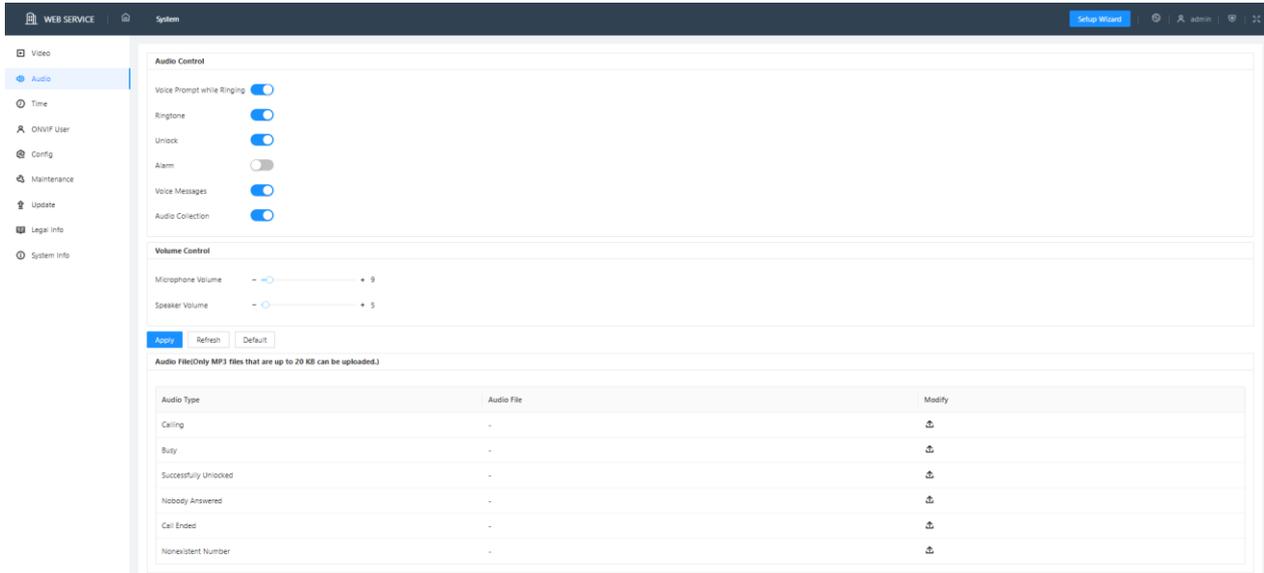
## System



System tab for multiple settings:

- Video Stream and camera settings
- Audio Audio messages and volume control
- Time
- Onvif user
- Config Im/ex-port settings of config file
- Maintenance Auto reboot schedule, DEFAULT = ON!!!
- Update
- Legal and system info

Example of the Audio messages and volume control.



The screenshot shows the 'Audio Control' section of the Dahua web interface. It includes a sidebar with navigation options like Video, Audio, Time, ONVIF User, Config, Maintenance, Update, Legal Info, and System Info. The main content area is divided into 'Audio Control' and 'Volume Control' sections.

**Audio Control**

- Voice Prompt while Ringing:
- Ringtone:
- Unlock:
- Alarm:
- Voice Messages:
- Audio Collection:

**Volume Control**

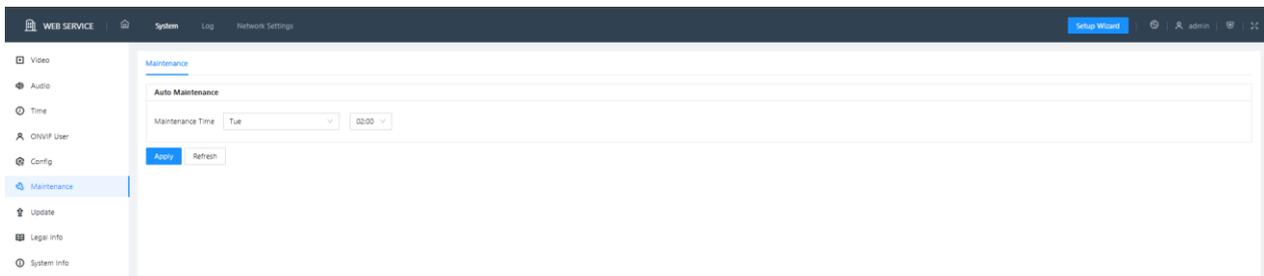
- Microphone Volume:
- Speaker Volume:

Buttons: Apply, Refresh, Default

**Audio Files (Only MP3 files that are up to 20 KB can be uploaded.)**

Audio Type	Audio File	Modify
Calling	-	
Busy	-	
Successfully Unlocked	-	
Nobody Answered	-	
Call Ended	-	
Nonexistent Number	-	

Standard the maintenance time is activated!



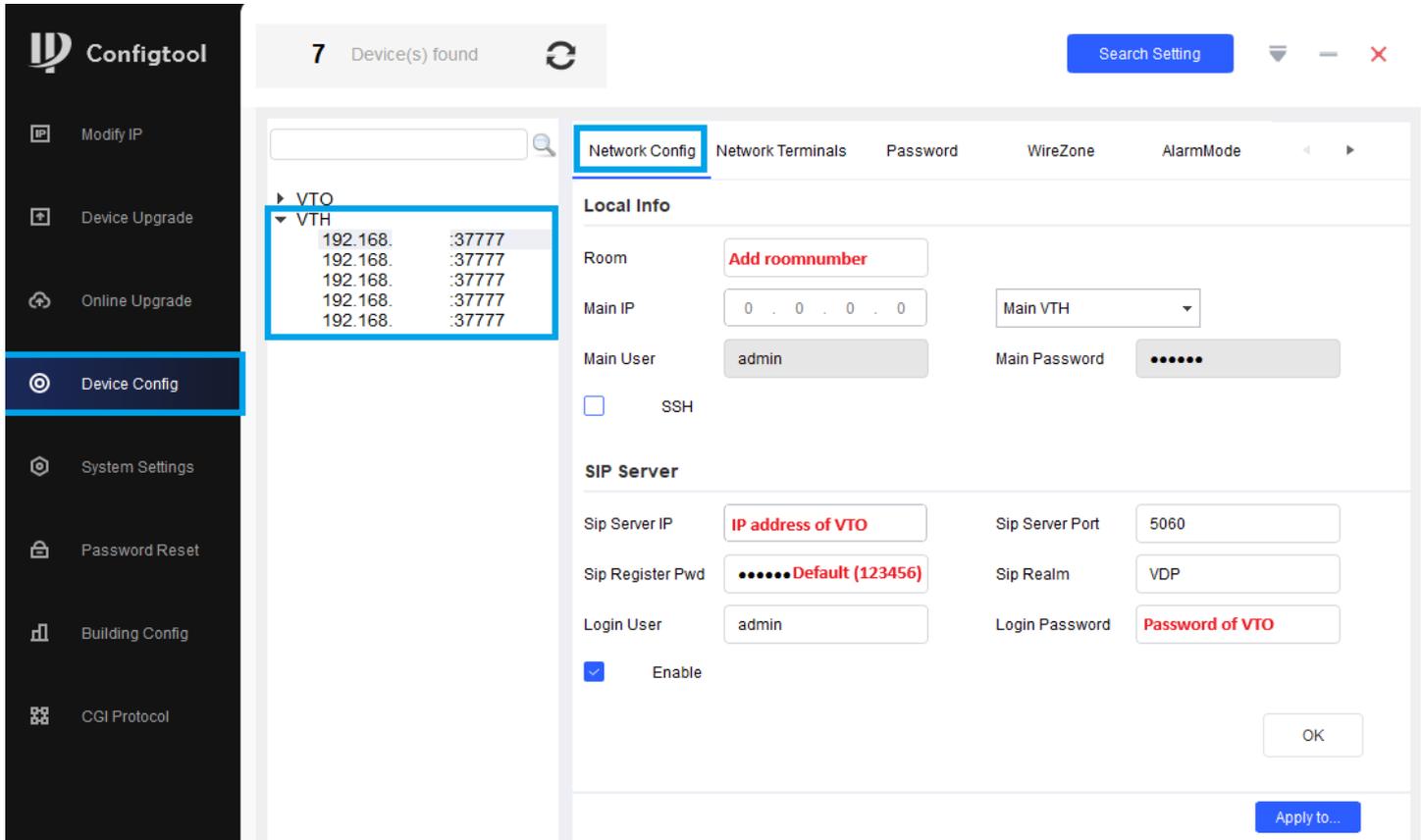
The screenshot shows the 'Maintenance' section of the Dahua web interface. The sidebar is the same as in the previous screenshot. The main content area is titled 'Maintenance' and contains an 'Auto Maintenance' section.

**Auto Maintenance**

Maintenance Time: Tue 02:00

Buttons: Apply, Refresh

### program the indoor monitor(s).



#### 1. DEVICE CONFIG (for one button main unit setup).

In the tab "Network config" click on the VTH you want to edit.

"Local info" tab.

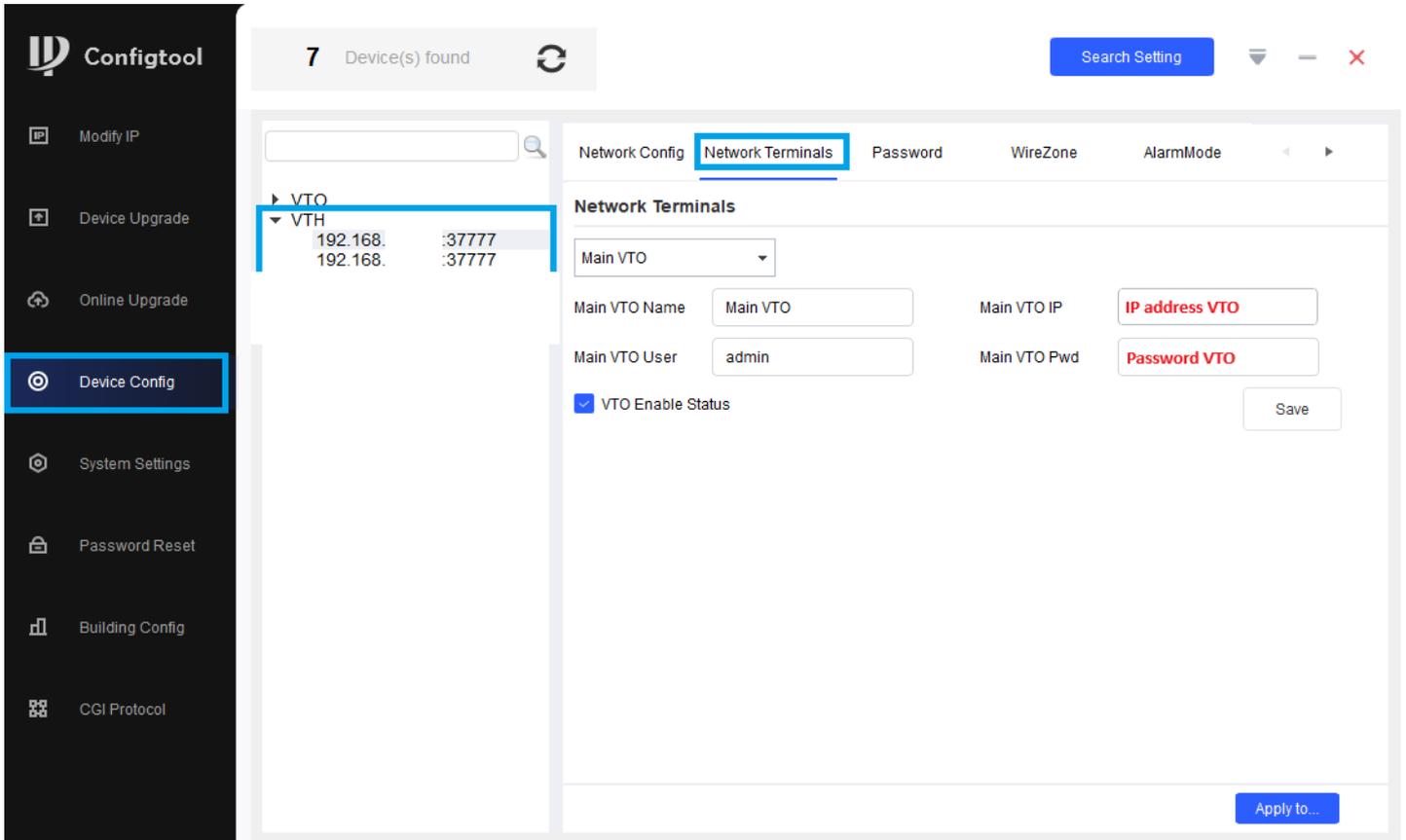
Fill in the "room number" at the "room" option the same numbers as like in the VTO. example, if this is the first one fill in "9901#0". The next (SUB) VTH will be room "9901#1" and edit the "main vth" to "sub vth".

"SIP Server" tab.

The "Sip server IP" is the IP address of the (main) VTO.

Fill in the password from the VTO in the "login password" tab.

After all is edit, click "OK" In the bottom right corner.



The screenshot shows the Dahua Configtool interface. On the left, the 'Device Config' menu item is selected. The main content area displays '7 Device(s) found' and a search bar. Below this, there are tabs for 'Network Config', 'Network Terminals', 'Password', 'WireZone', and 'AlarmMode'. The 'Network Terminals' tab is active, showing a table with columns for VTO and VTH. The 'VTH' section is expanded, showing two entries with IP addresses 192.168. and ports :37777. To the right, the 'Network Terminals' configuration form is visible, featuring a dropdown for 'Main VTO', input fields for 'Main VTO Name' (Main VTO), 'Main VTO IP' (IP address VTO), 'Main VTO User' (admin), and 'Main VTO Pwd' (Password VTO). A checkbox for 'VTO Enable Status' is checked. A 'Save' button is located at the bottom right of the form, and an 'Apply to...' button is at the bottom right of the main content area.

## 1. DEVICE CONFIG

In the tab "Network terminals" click on the VTH you want to edit.

Fill in the IP address and the password of the VTO. Click on "Enable" and "SAVE".

This option makes sure u can see the outdoor station without calling.

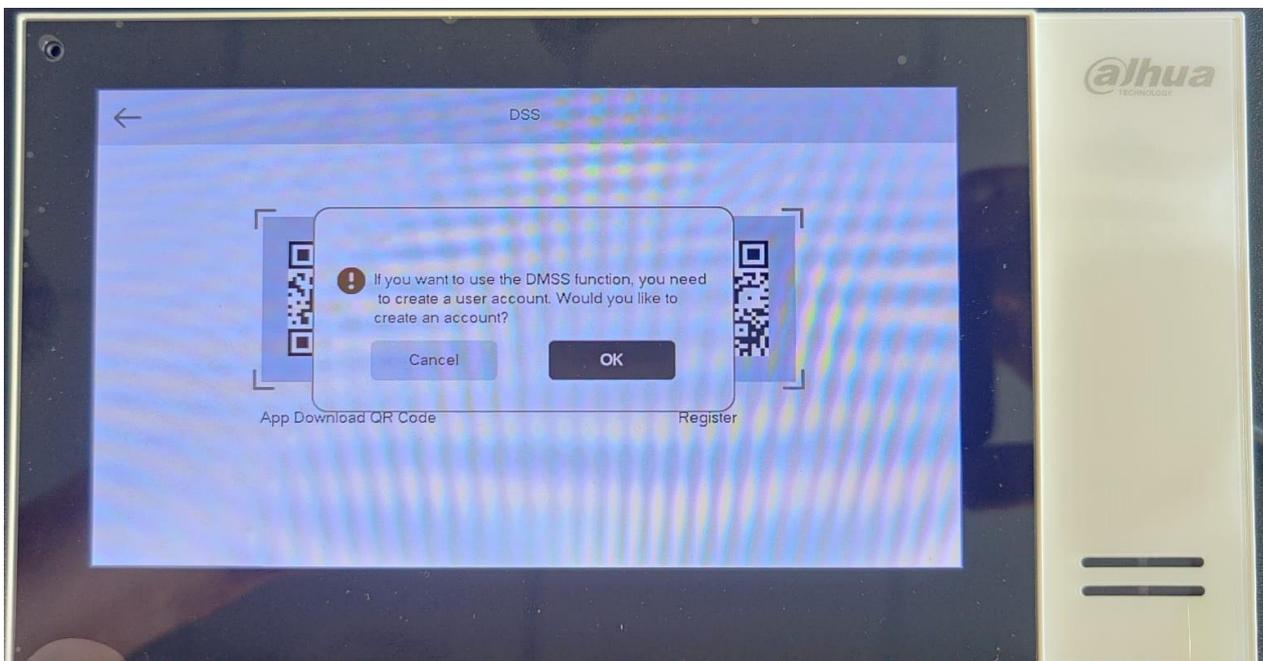
### How to check the local setup.

When you finished the programming of the VTO and VTH's. You'll need to reboot all the devices. This will make sure every device will make a new (fresh) connection to the sip server (VTO). This can be checked at "device setting" in the VTO. Rebooting and connecting can take up to 10min.

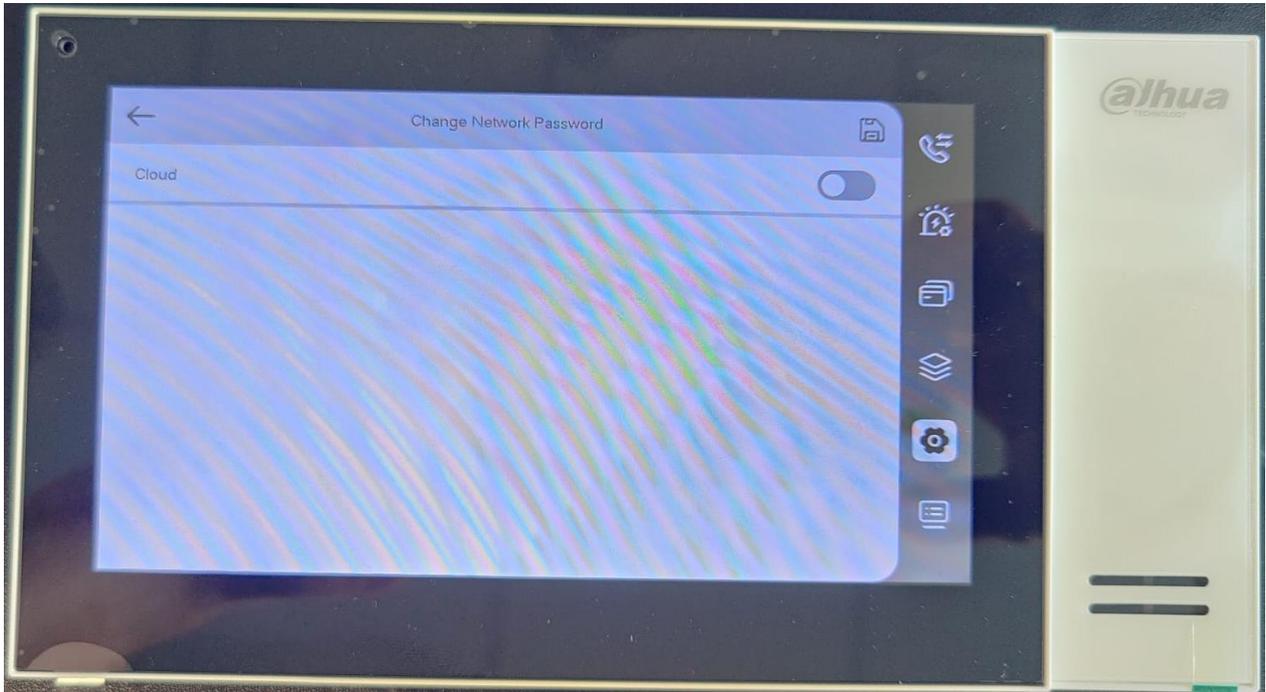
**Activating DMSS app in indoor monitor**



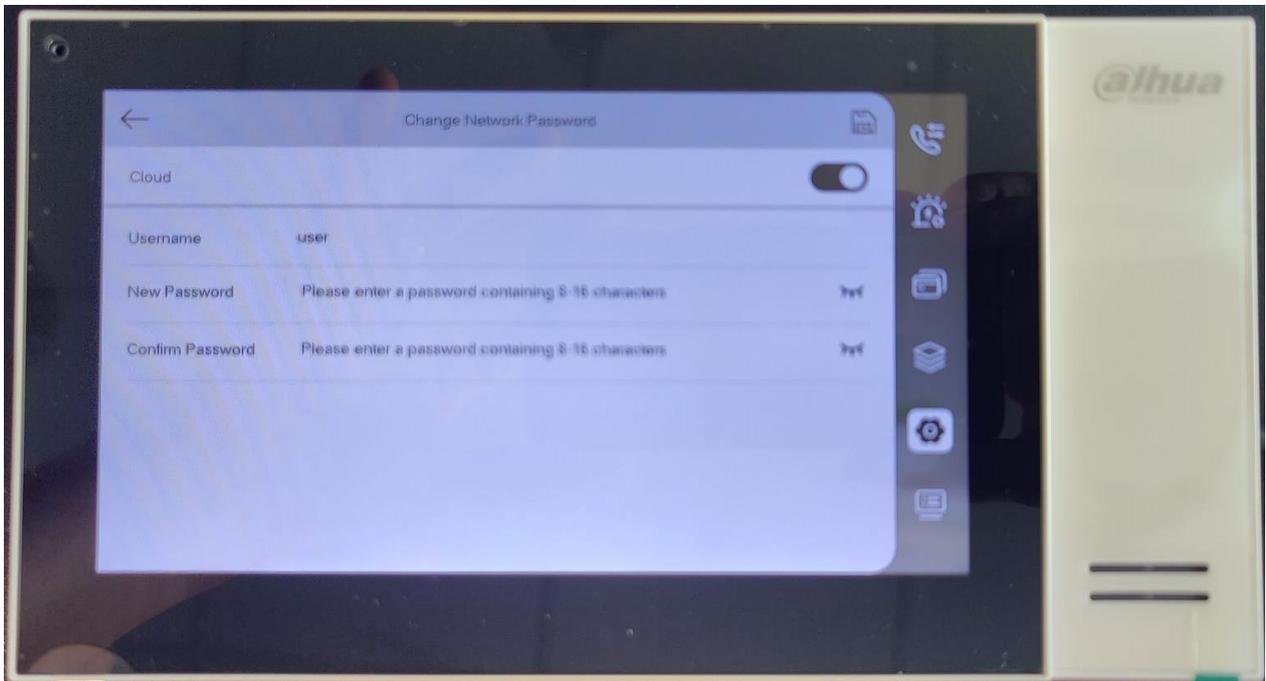
In the home screen click on the QR code icon in the middle of the right side icons.



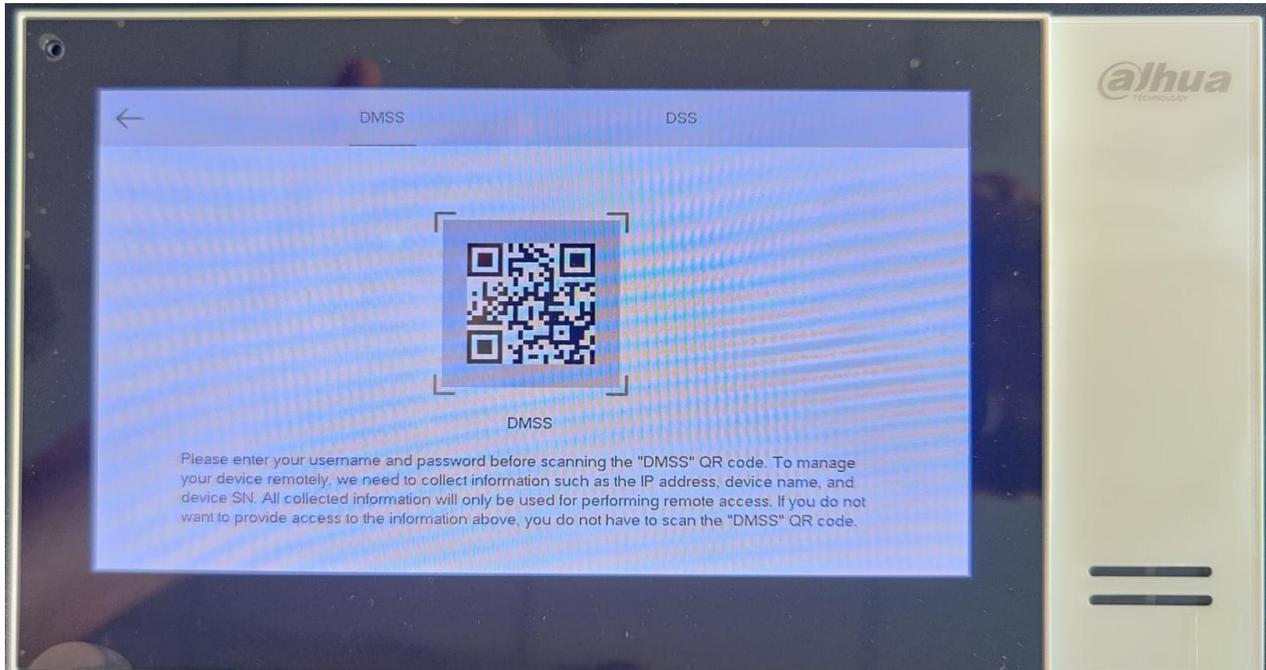
It will raise the question if u want to use the DMSS app. Click "OK".



Activate the cloud by clicking the slider.



Edit the name and fill in a new password.



After confirming the ID and Password settings, there will appear a new login QR code. There is now a new “DMSS” tab in the top of the screen.

### Connecting app to installation

Which app do I need to download.



For android and Apple mobile phones, download in the app stores the “DMSS” app.

<https://play.google.com/store/apps/details?id=com.mm.android.DMSS&hl=en&gl=US>

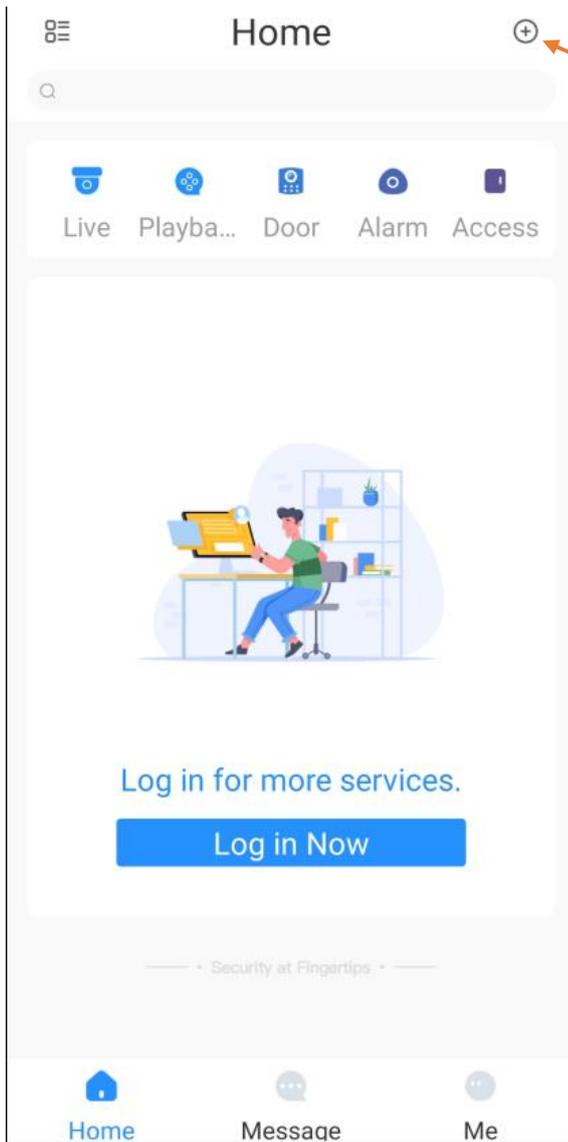
<https://apps.apple.com/us/app/dmss/id1493268178>

### How to make an account.

In the “Small apartment” mode u **NEED TO** make an account for using the app for receiving push notifications. This because of the multiple buttons on one location.

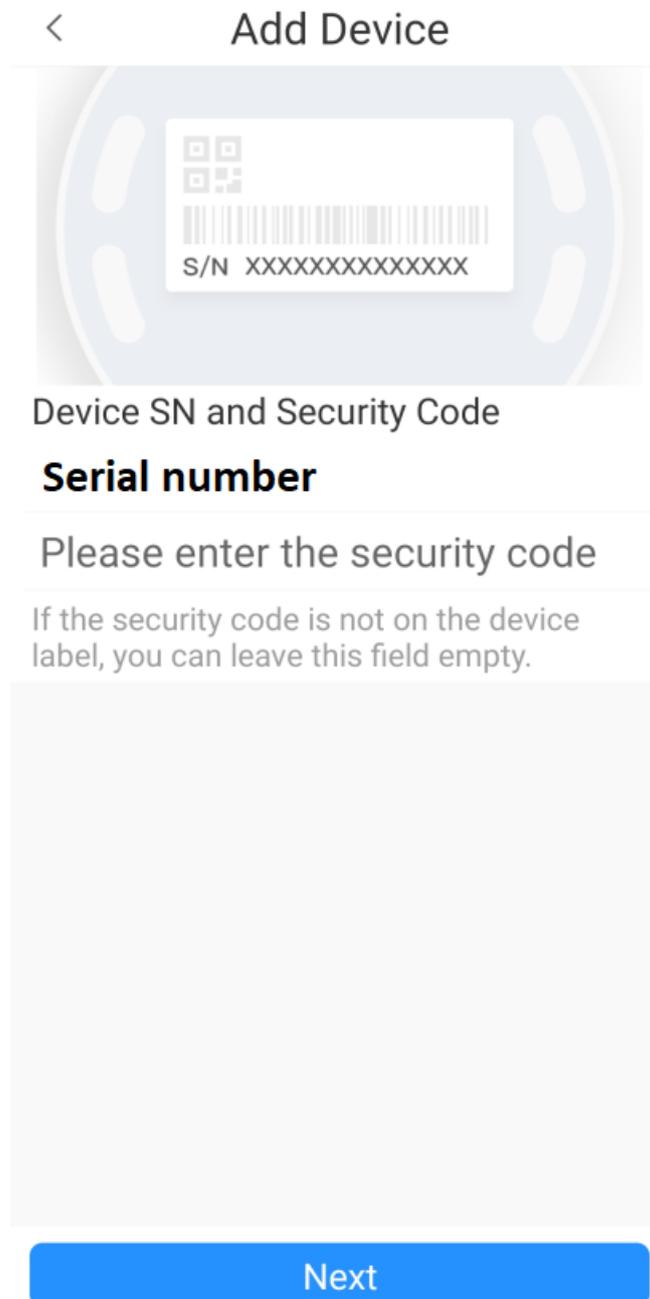
## How to connect the app to the indoor monitor.

When downloaded the app. Open the app on your mobile device.

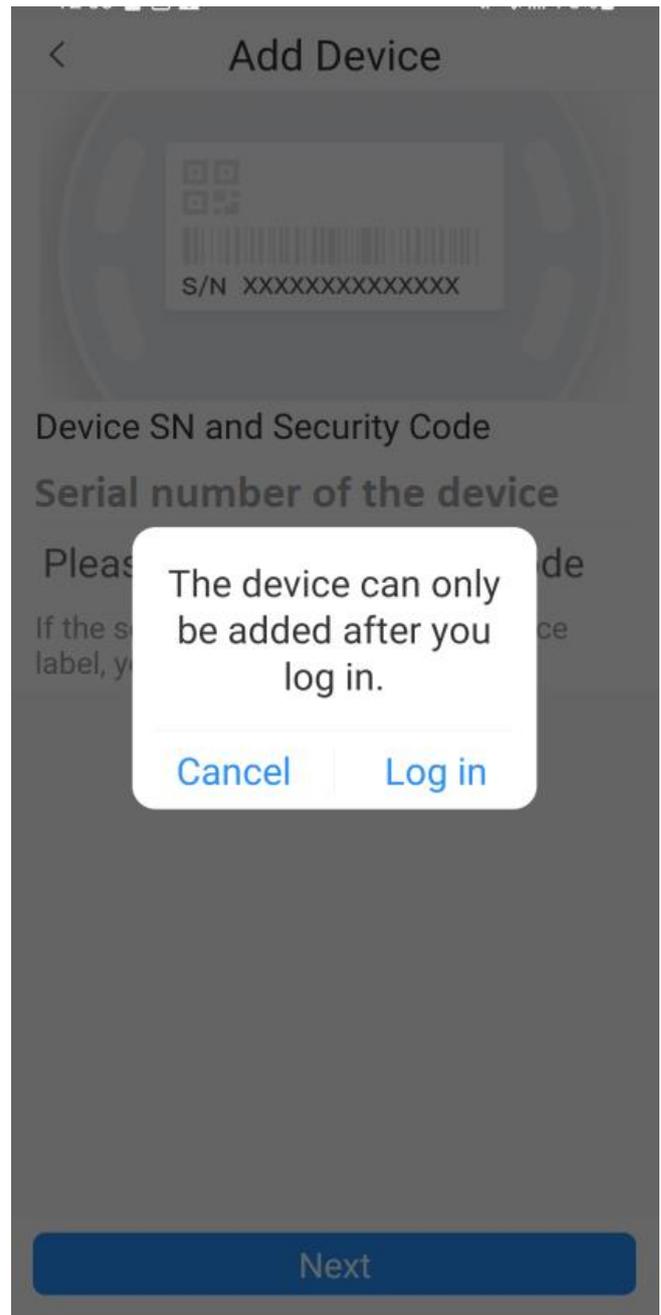
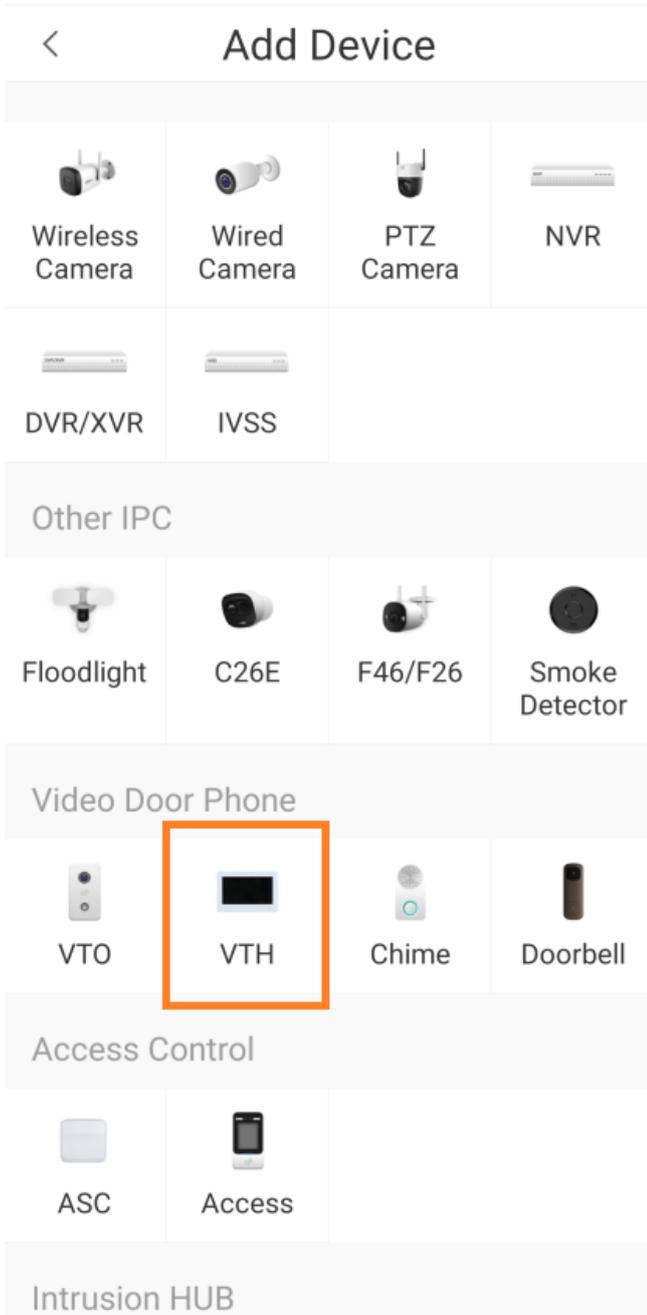


Add the VTH (DMSS) QR code by clicking “(+)”. And choose “SN/ Scan”. Scan the QR with the mobile device.

When the scan is succeeded. You will see the next screen with the serial number written down. When u added a security code you need to fill this in. When there is no security code leave this empty and press next.



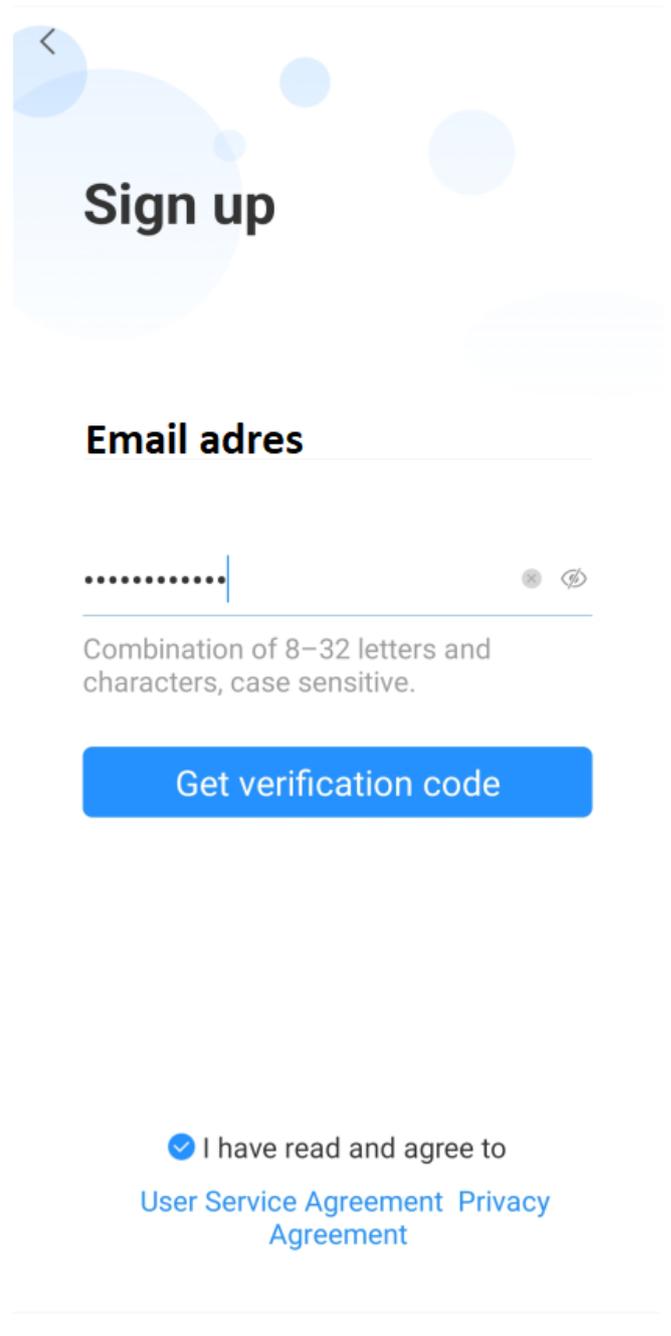
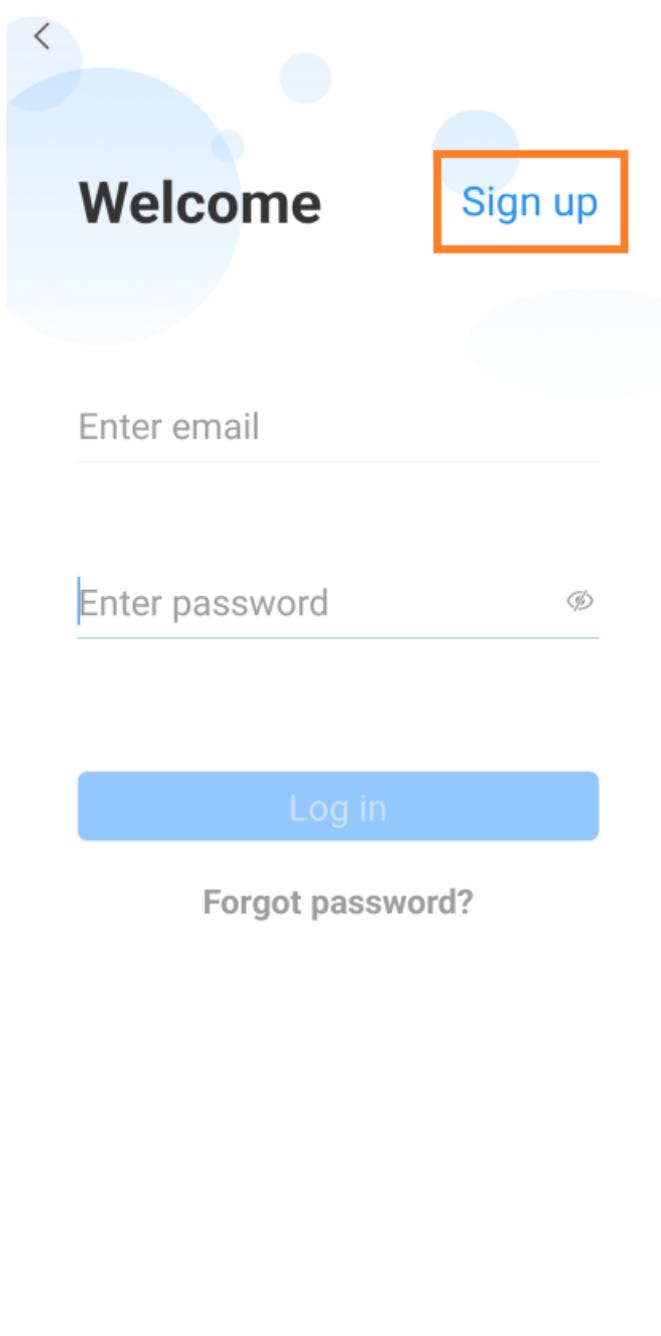
Choose what kind of device you scanned. In this case it's a "VTH".  
When you want to finish this step the app will show a message that u need to make an account.  
Click "Log in"



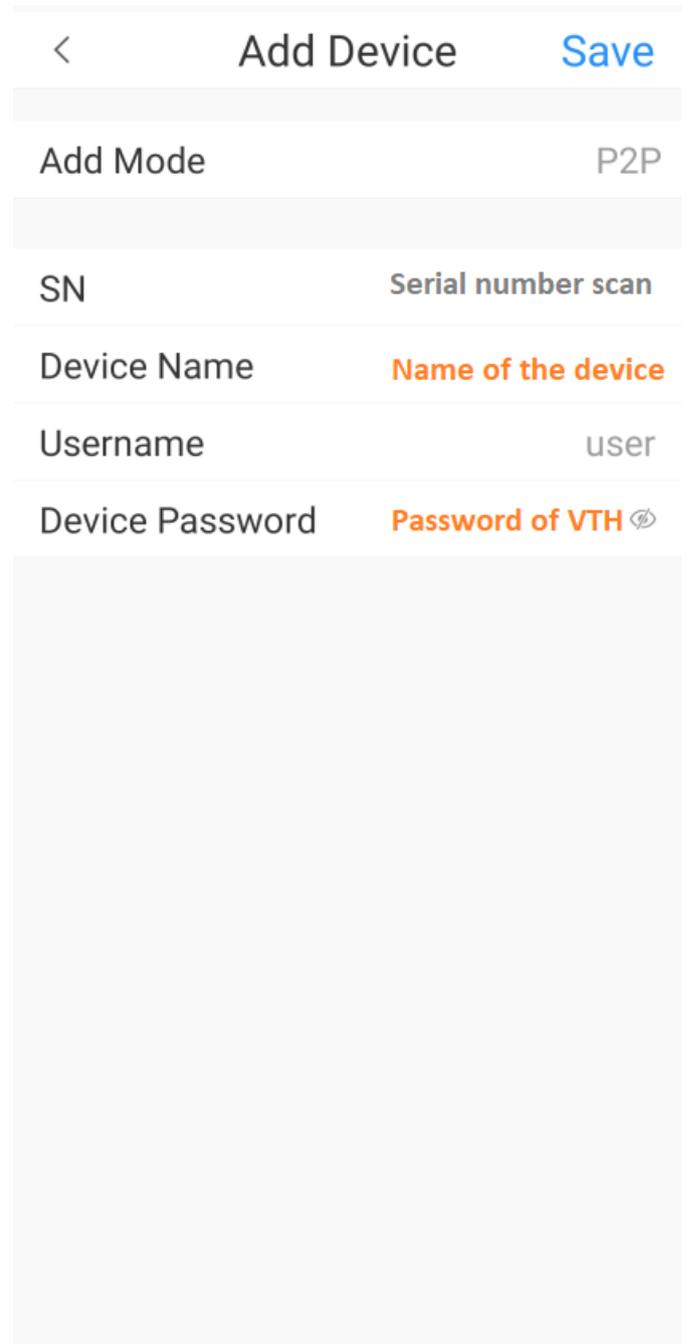
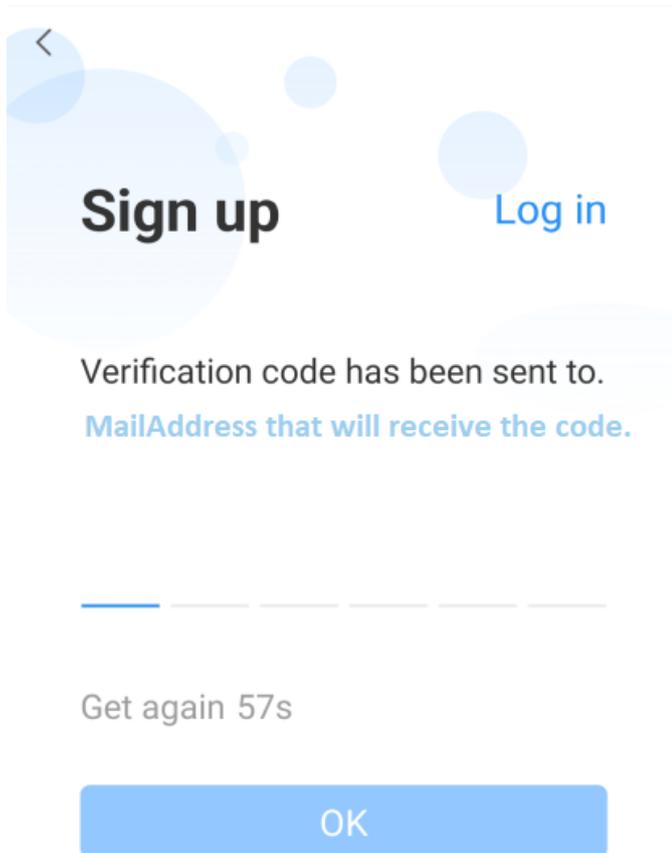
Make an account with a personal mail address.

**ALL USERS NEED TO HAVE THEIR OWN ACCOUNT!!**

You'll receive an code in the mail to verify.



When u put in the received verify code, the next screen will appear.  
Make up a device name for reference. Then use the data that was put in the VTH.  
Edit the "username" if it's edit in the VTH.  
Fill in the "device password" that was made in the VTH.



When successfully added, you'll see the next screen. Make sure all options for notifications are enabled. In the DMSS as in the mobile device settings. There is an option to call from the mobile device to the indoor monitor, also to the outdoor station, with or without video. Also open the door with release key 1 and 2.

