

Converter Tool

User's Manual





Foreword

General

This manual introduces the installation, functions and operations of the converter device (hereinafter referred to as the "Converter"). 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
A DANGER	Indicates a high potential hazard which, if not avoided, will result in death or serious injury.
A WARNING	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
A 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
V1.4.0	Revised content structure.	December 2024
V1.4.0	Added new functions.	October 2024
V1.3.0	Added new functions.	June 2024
V1.2.0	Updated content.	March 2024
V1.1.0	Updated content.	August 2023
V1.0.0	First release.	May 2023

Privacy Protection Notice

As the device user or data controller, you might collect the personal data of others such as their face, fingerprints, audios 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.

Operation Requirements



- Make sure that the power supply of the device works properly before use.
- Do not pull out the power cable of the device while it is powered on.
- Only use the device within the rated power range.
- Transport, use and store the device under allowed humidity and temperature conditions.
- Prevent liquids from splashing or dripping on the device. Make sure that there are no objects filled with liquid on top of the device to avoid liquids flowing into it.
- Do not disassemble the device.

Installation Requirements



WARNING

- Connect the device to the adapter before power on.
- Strictly abide by local electrical safety standards, and make sure that the voltage in the area is steady and conforms to the power requirements of the device.
- Do not connect the device to more than one power supply. Otherwise, the device might become damaged.



- Observe all safety procedures and wear required protective equipment provided for your use while working at heights.
- Do not expose the device to direct sunlight or heat sources.
- Do not install the device in humid, dusty or smoky places.
- Install the device in a well-ventilated place, and do not block the ventilator of the device.
- Use the power adapter or case power supply provided by the device manufacturer.
- The power supply must conform to the requirements of ES1 in IEC 62368-1 standard and be no higher than PS2. Note that the power supply requirements are subject to the device label.
- Connect class I electrical appliances to a power socket with protective earthing.



Table of Contents

Forewo	ord	l
Import	ant Safeguards and Warnings	. III
1 Prod	uct Overview	1
2 Getti	ng Converter	2
	Getting Installation Package	
2.2	System Requirement	2
2.3	Installing Converter	2
2.4	(Optional) Updating Converter	5
2.5	Logging and Initializing Converter Local Account	7
3 Unde	erstanding How Converter Works	.10
4 Conn	ecting Control Panel to Converter	.11
4.1	Direct Connection	. 11
	4.1.1 Configuring Converter Parameters	.11
	4.1.2 Adding Control Panel	.12
	4.1.3 Device Management	15
4.2	Cloud Connection	18
	4.2.1 Creating Converter Cloud Account	. 18
	4.2.2 Adding Control Panel	.22
	4.2.3 Device Management	25
5 Conn	ecting Converter to CMS	29
5.1	Configuring Message Forwarding	. 29
5.2	Configuring Local Storage	29
5.3	Event	30
	5.3.1 Configuring Event Code	.30
	5.3.2 Viewing Log History	.31
	5.3.3 Viewing Real-Time Log	33
6 Even	t Transfer Protocols	. 34
6.1	Event Transfer Configuration	34
6.2	Protocol Overview	42
	6.2.1 SIA Configuration	43
	6.2.2 SurGard Configuration	.43
	6.2.3 MANITOU Configuration	.43
7 Main	tenance	44
	Viewing Operation Logs	
7.2	Managing Protocols	.44
7.3	Exporting System Logs	.45
7.4	Importing and Exporting Configuration Data	.46



S Viewing Message Notifications	
9 Account Settings	51
9.1 Changing Account Password	51
9.2 Configuring Auto Logout Time	51
9.3 Logging Out	51
Appendix 1 Security Commitment and Recommendation	52



1 Product Overview

Dahua Converter is a software used for receiving events from Dahua control panel, processing the received data, transforming it and then presenting it to Central Monitoring Station (CMS) in appropriate formats.



2 Getting Converter

2.1 Getting Installation Package

Make sure that you have received the installation package from the https://depp.dahuasecurity.com/integration/guide/download/Converter.

2.2 System Requirement

Table 2-1 Function specifications

Function	Specifications
Max. Devices Supported	5000
Distribution without Video Event	100 TPS
Max. Event Search Number	50000
ARC Protocol Conversion	SurGard; Manitou; SIA-DC-09

Table 2-2 Performance Requirements

Туре	Requirements
СРИ	Intel(R) Core(TM) i5-7500 @ 3.0 GHz, 4-core or higher
Memory	At least 4GB (available)
Hard Disk	At least 200GB
Network Card	At least gigabit
Operating System	 Windows 7 (64-bit) Windows 10 (64-bit) Windows 11_pro (64-bit) Windows_Server_2012 (64-bit) Windows_Server_2016 (64-bit) Windows_Server_2019 (64-bit)
Browser	 Google Chrome 80 and later Microsoft Edge 107 and later Mozilla Firefox 65 and later

2.3 Installing Converter

Procedure

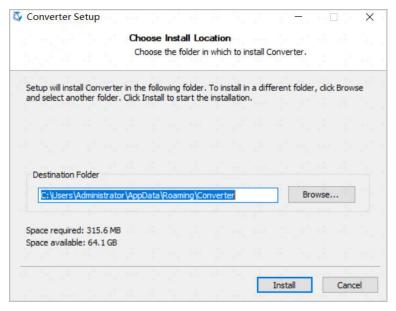
<u>Step 1</u> Log in to the computer as an administrator.

<u>Step 2</u> Double-click the installation package.

<u>Step 3</u> Select the destination folder and then click **Install**.

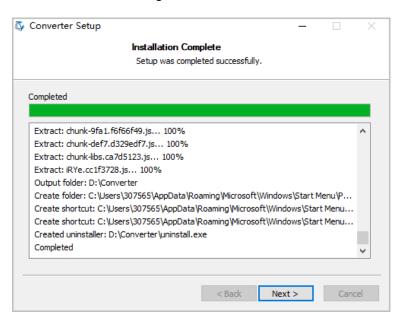


Figure 2-1 Install(1)



Step 4 Wait for the installation to be completed, and then click **Next**.

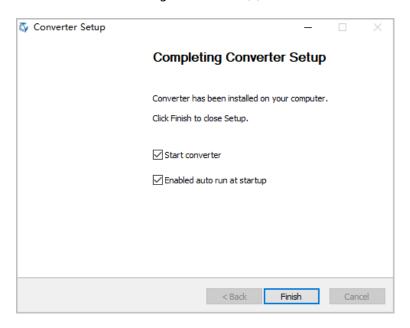
Figure 2-2 Install(2)



- <u>Step 5</u> Keep or cancel selecting **Start converter** or **Enabled auto run at startup** based on your needs (the two are selected by default), and then click **Finish**.
 - Start converter: The webpage of Converter will be automatically opened after you click Finish.
 - Enabled auto run at startup: The program runs automatically at startup.



Figure 2-3 Install(3)

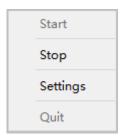


Related Operations

System Tray Setting

When the Converter is successfully installed and has been in operation, its icon appears in the system tray. Right-click the icon to open the operation menu.

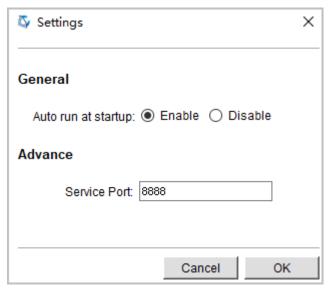
Figure 2-4 Menu



Settings: Configure service port of Converter, or enable/disable auto run startup service.
 The port is used for logging in to the Converter on the webpage.



Figure 2-5 Settings



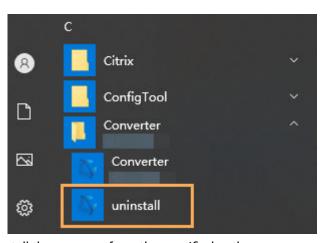
- ♦ Start/Stop: Start or stop service.
- ◇ Quit: Exit the program.

 \square

You need to click **Stop** and then **Quit** to exit the current program.

- Uninstall Converter
 - 1. Double-click the installation package or click **Uninstall** under the shortcut of Converter in the Windows Start Menu, and the install window pops up.

Figure 2-6 Windows task bar



- 2. Click **Next** to install the program from the specified path.
- 3. (Optional) Select **Save Parameters** so that parameter files will be automatically replaced in next installation.
- 4. Click Finish to complete uninstalling.

2.4 (Optional) Updating Converter

There are two forms to backup or transfer data backup: Saving the data when installing or transferring data using a script.



Saving Data When Installing (Recommended)

You can choose to uninstall the Converter without removing the user data.

Using A Script

Update the converter to latest versions and transfer the data. The datamigration.exe is used to transfer parameters configured in earlier versions of Converter to higher versions.

1. Open the installation folder of the Converter that you are currently using, and select **tool** > **datamigration** to obtain the datamigration.exe program.

- bin 2023/12/25 17:10 data 2023/12/25 19:21 etc 2023/12/25 17:10 lib 2023/12/25 17:10 log 2023/12/25 17:10 2023/12/25 17:10 plugin 2023/12/25 17:10 resource 2023/12/25 17:10 tool web 2023/12/25 17:10 converterLauncher.exe 2023/12/25 14:56 34,634 KB uninstall.exe 2023/12/25 17:10 124 KB

Figure 2-7 Tool folder

- 2. Copy and paste the datamigration program to the directory of Converter that you want to export configuration data.
- 3. Double-click datamigration to run the program.

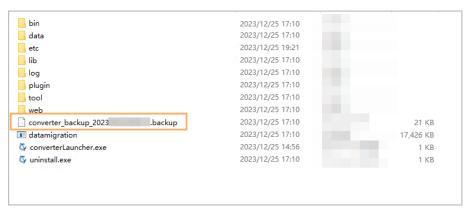
bin 2023/12/25 17:10 data 2023/12/25 19:21 etc 2023/12/25 17:10 lib 2023/12/25 17:10 log 2023/12/25 17:10 plugin 2023/12/25 17:10 tool 2023/12/25 17:10 web 2023/12/25 17:10 datamigration 17.437 KB 2023/12/25 17:10 1 KB ConverterLauncher.exe 2023/12/25 14:56 1 KB uninstall.exe 2023/12/25 17:10

Figure 2-8 Migration

A backup file that contains the system data is generated after running the program. The default password to import this file to Converter is admin123.



Figure 2-9 Backup file



4. Log in to the webpage of Converter that you are currently using, and select **Maintenance** > **Import and Export** to import the backup file.

The system data is therefore transferred.

2.5 Logging and Initializing Converter Local Account

For first-time use, you need to initialize the account.

Prerequisites



Make sure that you have cleared your browser cache after updating Converter to the latest version. Otherwise, problems might occur during your use.

Procedure

- Step 1 Double-click to go to the webpage of Converter.
- <u>Step 2</u> Enter the username and password, and select I have read and agree to User Agreement And Privacy Policy, and then click Login.

The username is admin by default.



Figure 2-10 Login

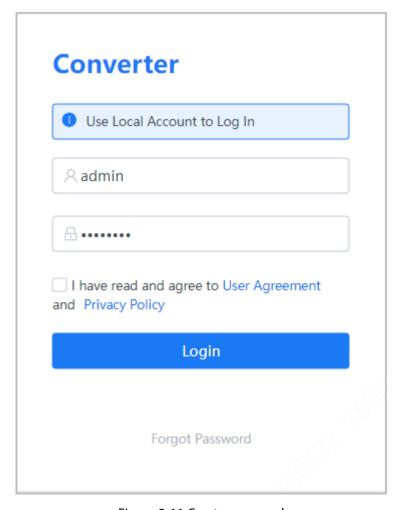
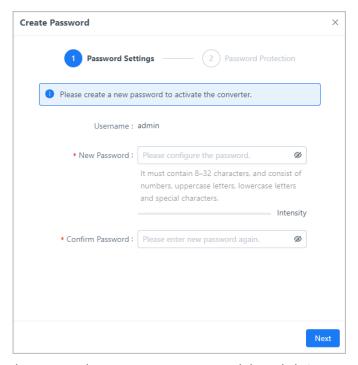


Figure 2-11 Create password



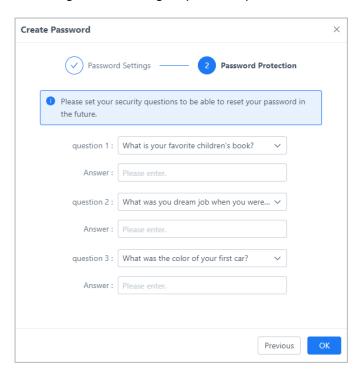
<u>Step 3</u> Configure the password protection questions, and then click **OK**.



It will be automatically logged into the Converter after you configure the password.

- While you do not have to set password protection questions, if you choose not to set them, you will be unable to recover your password in the future.
- You do not have to set all 3 questions. You can pick 1 or 2.
- You can click Custom Question in the question drop-down list to create your own custom questions if the default ones are not suitable.

Figure 2-12 Configure password protection





3 Understanding How Converter Works

Working Principle

The Converter receives a message from the control panel, decrypts it, converts it into standardized protocol messages, and transfer it into the monitoring software, or CMS software.

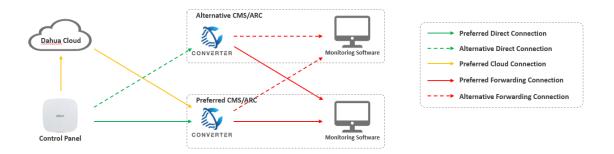
Specifically, the transmission method includes direct connection and cloud connection.

- Direct connection: The control panel directly sends events and alarm videos to the Converter through Dahua SDK protocol.
- Cloud connection: Dahua cloud forwards events and alarm videos received from control panel to the corresponding Converter.



The two methods can be used together or separately.

Figure 3-1 How converter works



Main Features

- Converter can download alarm videos from control panel or cloud and directly forward them to the third-party platform through the private protocol supported by the third-party platform, or send the URL of the video through the standard protocol SIA, and then the third-party platform downloads it according to the URL.
- Converter supports free custom development for integrating third-party private protocols.
- Supports import and export of Converter configuration parameters and added device data.
- Converter supports Primary/Secondary configuration of two network interface cards on the same server, as well as Primary/Secondary configuration between two different servers to ensure that the secondary network link or secondary server is enabled in case of a failure of the primary network link or primary sever.
- A cloud account can be created to log in to the Converter, so that the Converter can receive alarm events and videos from Dahua Cloud.



4 Connecting Control Panel to Converter

Add the control panel to Converter. Make sure that you have installed DoLynk Care app or DMSS app.

4.1 Direct Connection

4.1.1 Configuring Converter Parameters

Configure the network status of the Converter.

Procedure

- <u>Step 1</u> Log in to the webpage of Converter.
- **Step 2** Select **Setting** > **Direct Connection**.
- Step 3 Configure the UUID, select the local listening IP and configure the port, or enable the backup listening IP and port if you have a second network card.

When the IP and port number in **Preferred IP Address** under the **Hub Settings** > **Alarm Receiving Center** of DMSS and DoLynk is that of the primary Converter and the IP and port number in **Alternate IP Address** is that of the secondary Converter, then their UUID should be the same to avoid event loss during network switch. In other cases, the UUID does not need to be the same.

Figure 4-1 Preferred IP and Alternate IP

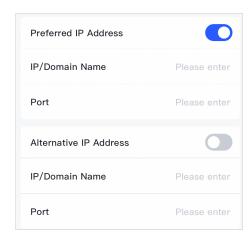
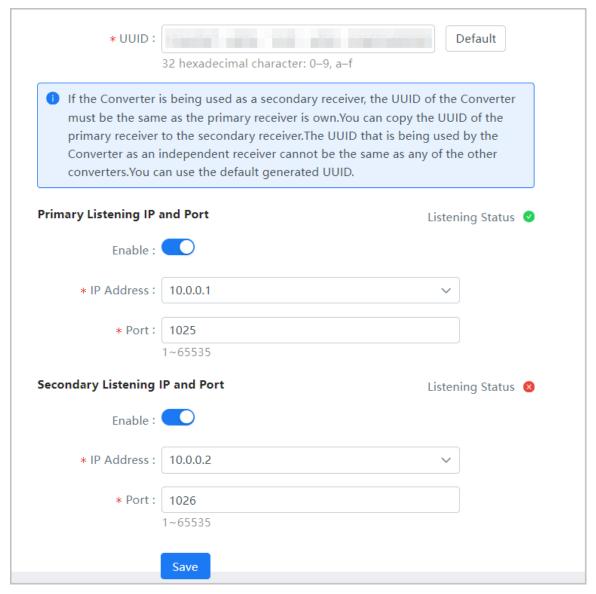




Figure 4-2 Network



Step 4 Click **Save**.

The listening status will be updated.

4.1.2 Adding Control Panel

You can add the control panel to the Converter through direct connection.

Background Information

The operation on DMSS is similar to that on DoLynk Care, and here the DMSS is used as an example.

Procedure

Step 1 On your phone, tap to open the DMSS app.

- 1. On the **Login** screen, enter your email and password, and then tap **Log in**.
- 2. On the **Hub Setting** screen, tap **Alarm Receiving Center**.



- 3. Tap **Enable** to enable the alarm receiving function, select the communication protocol based on your needs, and enter the IP address and port number of the computer where Converter is installed on.
- 4. Tap **Scheduled Test**, enable **Scheduled Test**, select the auto report period, and then tap **OK**.
- 5. Tap **OK**.

Figure 4-3 Configure IP address and port

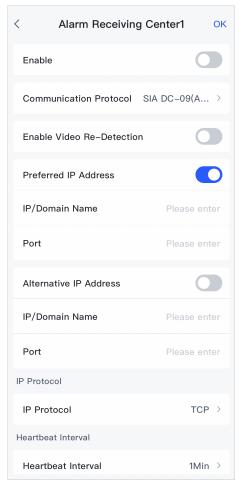
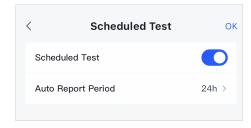


Figure 4-4 Auto report period



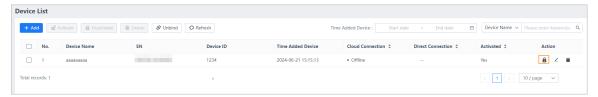


- The IP address and port number must be consistent with that you configured in "4.1.1 Configuring Converter Parameters".
- You would better enable Enable Video Re-Detection if you have added IPC or PIR-Camera to the control panels and want to receive alarm messages with videos or pictures attached.
- Different alarm receiving centers of the same control panel cannot be set to connect to the same Converter.



<u>Step 2</u> On the **Device List** page of Converter, click **Add**.

Figure 4-5 Device list



<u>Step 3</u> Select the device you just configured, and then click **Add**.

Figure 4-6 Add page

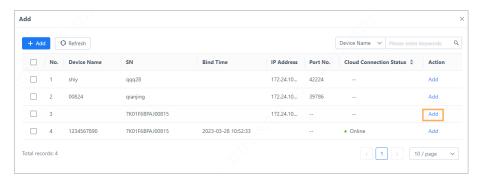
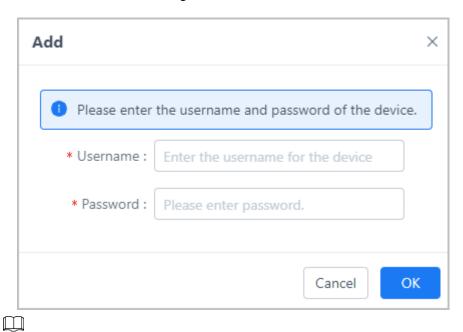


Figure 4-7 Add device



If you use batch adding function, which is through clicking the + Add icon at the top left of the **Add** page, then you will be asked to enter the username and password of the device for successful adding when there is at least one device that is connected through auto registration among all the selected devices.

Wait for a while after adding, or click **Refresh**, and the **Direct Connection Status** of the newly added device is online.

Step 4 On the **Device List** page, click of a device, enter the device ID, user name and password used to log into the web page of the device, and then click **OK**.





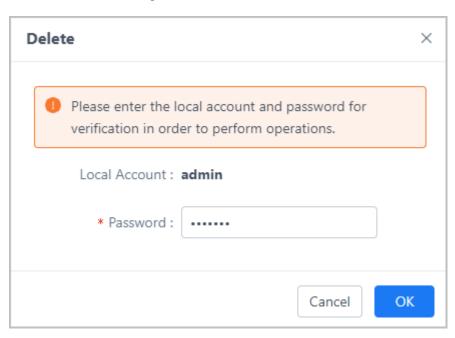
The device ID is the unique device identification code sent to the third-party alarm receiving center. It helps the alarm receiving center to determine which device sent the event. The device ID must be 4 characters. It can be 4 digits or a combination of uppercase letters and digits (totally 4 characters). We recommend that you use 4 digits.

Related Operations

Delete the control panel:

- 1. Select **Device** > **Device List**, select the device, and then click **Delete**.
- 2. Enter the password of the Converter admin account, and then click **OK** to delete the chosen devices.

Figure 4-8 Delete confirmation



4.1.3 Device Management

4.1.3.1 Activating/Deactivating the Control Panel

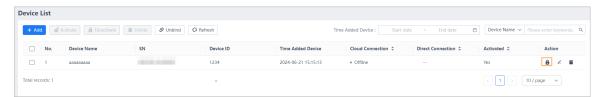
Procedure

Step 1 Log in to the webpage of Converter.

Step 2 Select **Device** > **Device List**.

Select the device, click in next to a device, or click **Activate** on the top left corner of the page to activate the chosen device(s).

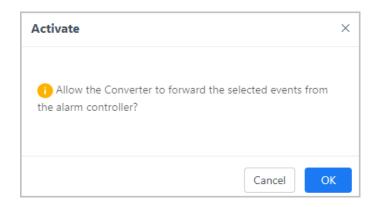
Figure 4-9 Activation page





<u>Step 4</u> On the **Activate** window, click **OK** to confirm the activation.

Figure 4-10 Activate the device

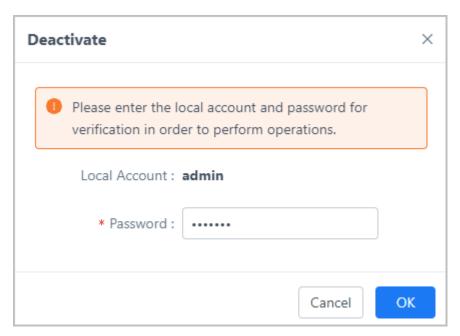


Related Operations

Deactivating the control panel:

- 1. Select **Device** > **Device List**, select the device, and then click **Deactivate**.
- 2. Enter the password of Converter account, and then click **OK** to deactivate the selected devices.

Figure 4-11 Deactivate confirmation



4.1.3.2 Unbinding the Control Panel

Background Information

Unbind the device if the alarm services expire or in case of false operation. Be advised that unbinding for expired services must be done through the cloud.



The device will be removed from the device list after unbinding.

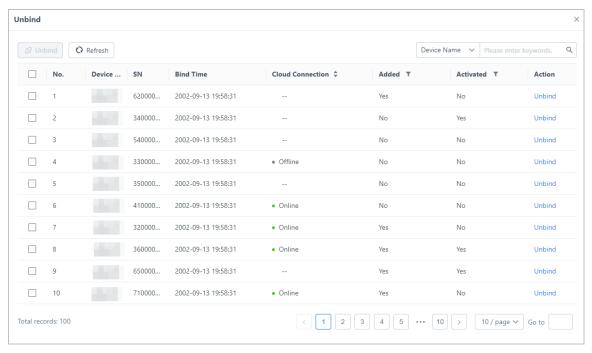
Procedure

- Step 1 Log in to the webpage of Converter.
- Step 2 Select **Device** > **Device List**, and then click **Unbind** to go to the **Unbind** page.



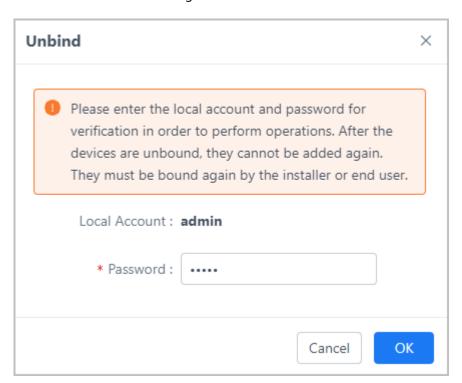
You can filter devices that are added or activated.

Figure 4-12 Enter unbind page



<u>Step 3</u> Click **Unbind** next to a device, enter the password of the Converter account, and then click **OK** to unbind the chosen devices.

Figure 4-13 Unbind



Or you can select multiple pieces of information, and then click **Unbind** at the top left corner of the page to batch unbind the devices.



4.2 Cloud Connection

You can add the control panel to Converter through cloud connection.

Prerequisites

- Make sure that you have added the control panel to Dolynk Care app or DMSS. For detailed operation of device adding, see their user's manual for reference.
- Make sure that you have created a cloud account and configured cloud settings. See "4.2.1 Creating Converter Cloud Account".

4.2.1 Creating Converter Cloud Account

You need to create a cloud account to have Converter access to cloud if you want to add devices through cloud access.

Procedure

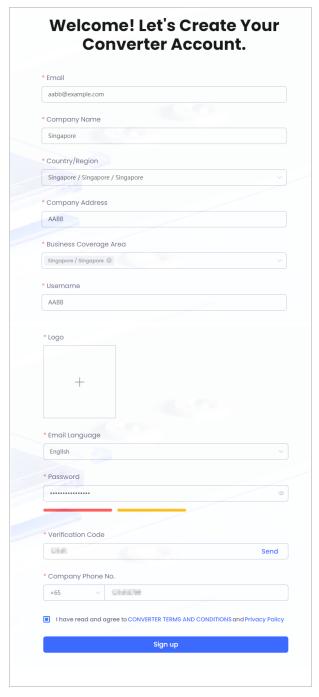
<u>Step 1</u> Log in to the webpage of Converter.

<u>Step 2</u> Select **Cloud Connection**, and then click **Create Cloud Account**.

<u>Step 3</u> Enter the registration information.



Figure 4-14 Registration



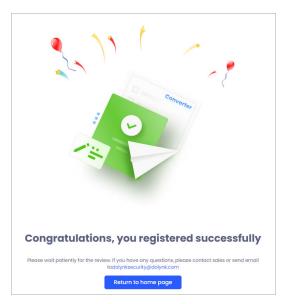
- Step 4 Click **Send** and the verification will be sent to the email address that is filled in the registration page in few minutes. Enter the received code in the check box.
- Step 5 Click the check box next to I have read and agree to User Agreement And Privacy Policy after you read them, and then click Sign up to finish the registration.

<u>⊘-77</u>

Contact the technical support from the country you select in registration to approve the account you submitted. Only after successful approval, you can progress with login.



Figure 4-15 Registration succeed



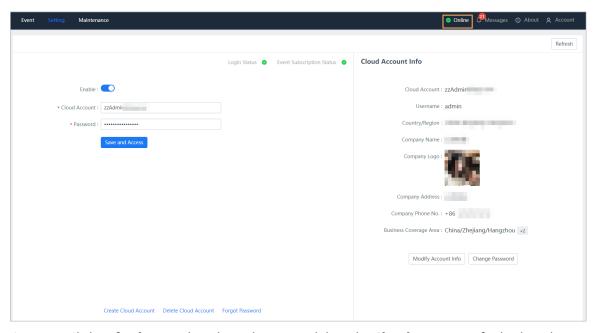
- <u>Step 6</u> Log in to the webpage of Converter.
- **Step 7** Select **Setting** > **Cloud Connection**
- <u>Step 8</u> Click **Enable** to enable the cloud access function.



- The function is turned off by default.
- You need to enable the function if you want to add devices through cloud access.
 Otherwise, keep it by default.
- <u>Step 9</u> Enter the user name and password of the cloud account, and then click **Save and Access**.

The online or offline status of the cloud account will be displayed at the top-right corner of the page.

Figure 4-16 Cloud access

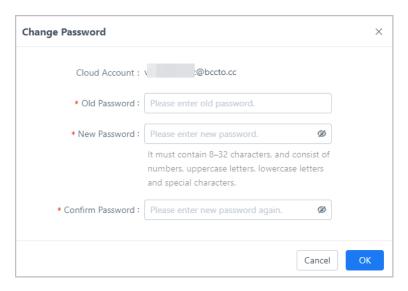


<u>Step 10</u> Click **Refresh** to update the webpage, and then the **Cloud Account Info** displays the account information.



<u>Step 11</u> (Optional) Click **Change Password** to change the password for the account, and then click **OK**.

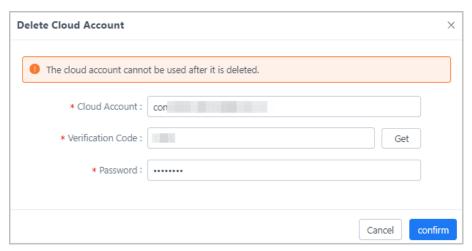
Figure 4-17 Change password



Related Operations

- Delete cloud account:
 - 1. Click **Delete Cloud Account**, enter the cloud account to be deleted, click **Get** to obtain the verification code, and then enter the password for the account.

Figure 4-18 Delete cloud account



- 2. Click Confirm.
- Modify cloud account:
 - 1. Click Modify Account Info.
 - 2. Enter the password to log in to the current cloud account, and then modify the information.

The modified information requires approval from the company on DoLynk Care. When the approval process is ongoing, the **Modify Account Info** button will be disabled and appear grayed out.



Figure 4-19 Enter password

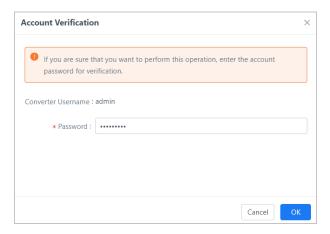
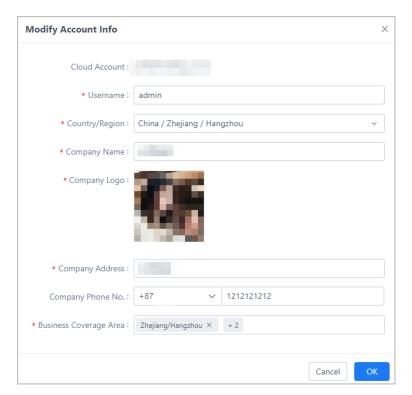


Figure 4-20 Modify information



4.2.2 Adding Control Panel

Add the control panel through DMSS or DoLynk Care. The operation on DMSS and DoLynk Care are alike, and here the DMSS is used as an example.

Procedure

Step 1 On your phone, tap to open the DMSS app.

Step 2 On the **Device** screen, tap next to a device, and then tap **Security Services**.



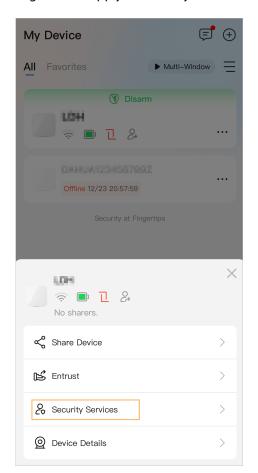


Figure 4-21 Apply for security services

Step 3 Select the services from the list, and then tap **OK**.If there are no services added, you can tap **Apply**.



Figure 4-22 Apply

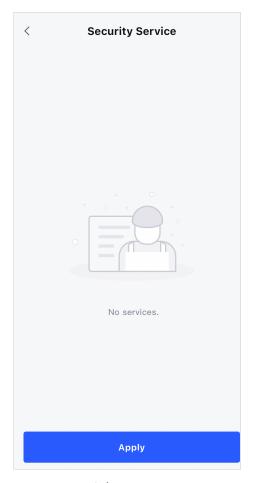
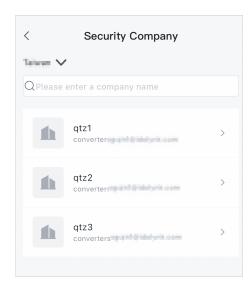


Figure 4-23 Select country or region



<u>Step 4</u> Select a cloud account under the country or region you select, and then tap **Apply** to bind it.

If you do not know which region the cloud account is registered under, you can enter the complete cloud account to perform accurate search for cloud accounts under the server.



qtz1

Company Phone No.

Company Email
converters

Address

Coverage Area

Figure 4-24 Select account

Step 5 On the **Companies Applied for** screen, tap , and enable **Scheduled Test** and configure the auto report period, and then tap **OK**.

Figure 4-25 Auto report period



4.2.3 Device Management

4.2.3.1 Activating/Deactivating the Control Panel

Procedure

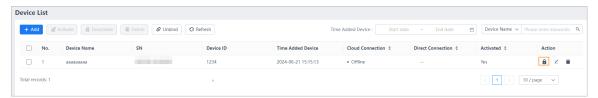
Step 1 Log in to the webpage of Converter.

Step 2 Select **Device** > **Device List**.

Step 3 Select the device, click in next to a device, or click **Activate** on the top left corner of the page to activate the chosen device(s).

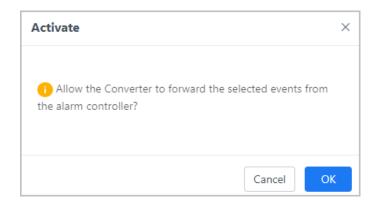


Figure 4-26 Activation page



<u>Step 4</u> On the **Activate** window, click **OK** to confirm the activation.

Figure 4-27 Activate the device

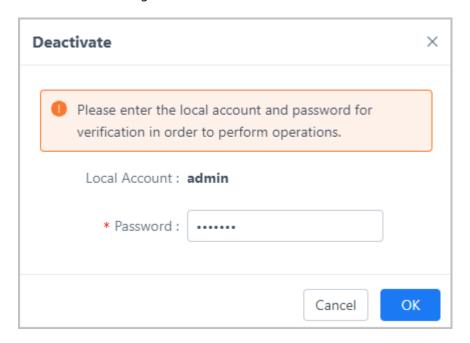


Related Operations

Deactivating the control panel:

- 1. Select **Device** > **Device List**, select the device, and then click **Deactivate**.
- 2. Enter the password of Converter account, and then click **OK** to deactivate the selected devices.

Figure 4-28 Deactivate confirmation



4.2.3.2 Unbinding the Control Panel

Background Information

Unbind the device if the alarm services expire or in case of false operation. Be advised that unbinding for expired services must be done through the cloud.





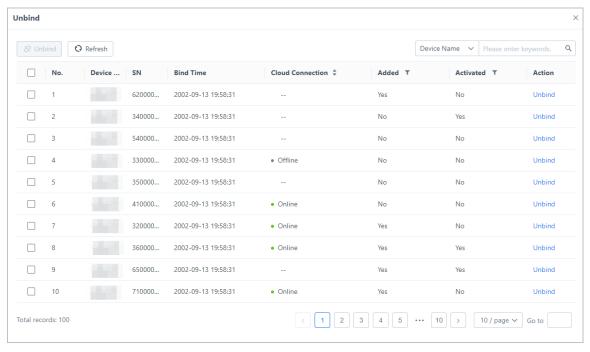
The device will be removed from the device list after unbinding.

Procedure

- Step 1 Log in to the webpage of Converter.
- <u>Step 2</u> Select **Device** > **Device List**, and then click **Unbind** to go to the **Unbind** page.

You can filter devices that are added or activated or not.

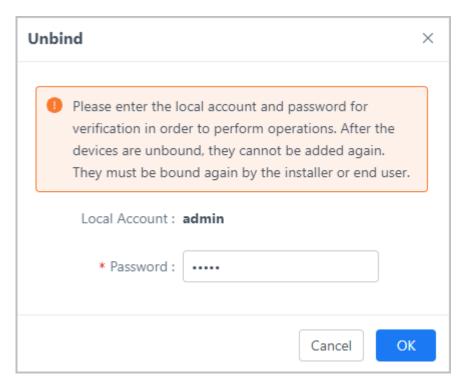
Figure 4-29 Enter unbind page



Step 3 Click **Unbind** next to a control panel, enter the password of the Converter account, and click **OK** to unbind the chosen devices.



Figure 4-30 Unbind



Or you can select multiple pieces of information, and click **Unbind** at the top left corner of the page to batch unbind the devices.



5 Connecting Converter to CMS

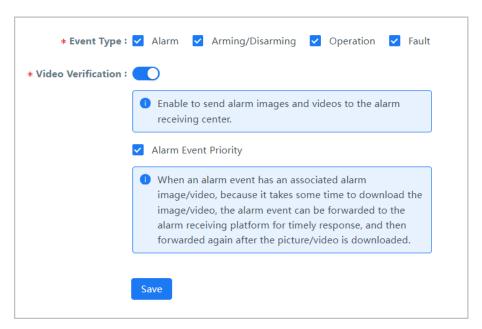
5.1 Configuring Message Forwarding

After configuring the forwarding events, the device can forward the selected events when it is activated.

Procedure

- <u>Step 1</u> Log in to the webpage of Converter.
- **Step 2** Select **Setting** > **Message Forwarding**.
- <u>Step 3</u> Select the forwarding configuration that you need.
 - Event type: Select the event type for forwarding.
 - Video verification: Enable the function to send alarm images and videos to the alarm receiving center.
 - Alarm event priority: Enable the function to set the priority for alarm messages.

Figure 5-1 Message forward configuration



Step 4 Click Save.

5.2 Configuring Local Storage

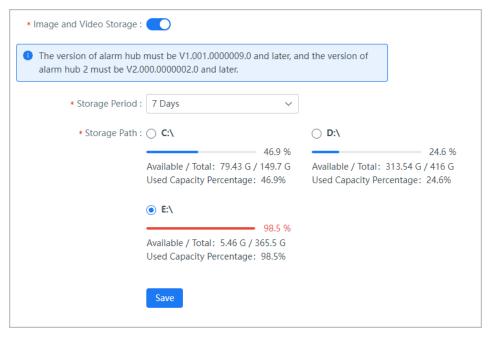
Configure storage for images and videos.

Procedure

- <u>Step 1</u> Log in to the webpage of Converter.
- Step 2 Select **Setting** > **Storage**.
- <u>Step 3</u> Enable the **Image and Video Storage** function.
- Step 4 Configure the storage period and select the storage path.



Figure 5-2 Storage



Step 5 Click **Save**.

Example

If the local disk E is selected as the storage path, then you can view the images and videos of the alarm event on disk E.

> This PC > Local Disk (E:) > ConverterStorage > 2025-02-12 > 14

21-27-531-8681AF03800PAJ0000
8_00231.mp4

24-12-181-8681AF03800PAJ0000
8_00232.mp4

34-55-675-8681AF03800PAJ0000
8_00233.mp4

Figure 5-3 Local storage path

5.3 Event

5.3.1 Configuring Event Code

Configure the new event code or edit the existing code.

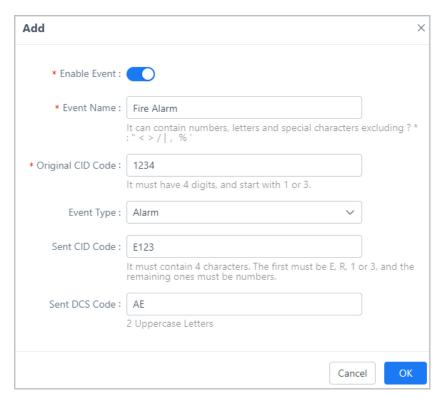
Procedure

<u>Step 1</u> Log in to the webpage of the Converter.



- Step 2 Select **Event** > **Event Code**.
- Step 3 Click **Add** to add new event.
- Step 4 Configure the parameters.

Figure 5-4 Event code



Step 5 Click **OK**.

- **Default**: Restore the event list to default settings.
- Export: Export all of the events in the current list.
- Import: Import the event list (.xlsx/.xls format) from your local computer.

You need to finish the excel of the event list. Refer to the exported excel as the template.

• **Delete**: Delete the selected event.

5.3.2 Viewing Log History

View logs of the event, including device name, device ID, event name, event code, event time and time when messages are sent.

Procedure

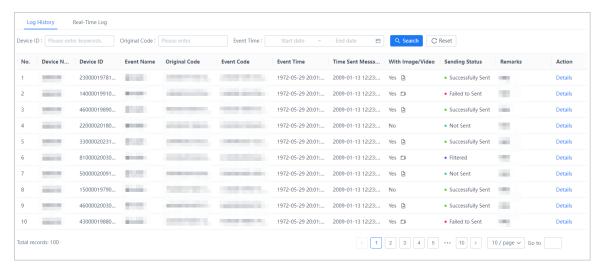
- Step 1 Log in to the webpage of Converter.
- <u>Step 2</u> Select **Event** > **Event Monitoring** > **Log History**.
- Step 3 View log history.
 - Event Time: The local time zone of the computer where Converter is installation on.
 - Remarks: Record the reason why the alarm information is discarded.



The remarks remain empty only when messages are successfully sent.



Figure 5-5 Log list



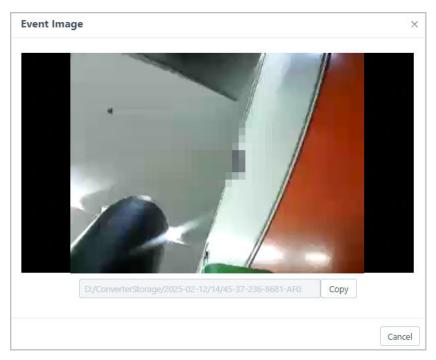
Step 4 (Optional) Click to view event image, and click to view event video.

Figure 5-6 Video





Figure 5-7 Image



<u>Step 5</u> Click **Details** to view the details of the event.

- Enter the device ID to search for the event logs.
- Enter the original code to search for event logs.
- Enter the start date and end date to search for event logs.

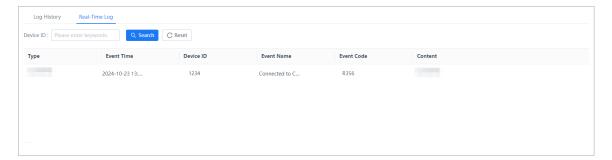
5.3.3 Viewing Real-Time Log

View real-time logs.

Procedure

- Step 1 Log in to the webpage of Converter.
- <u>Step 2</u> Select **Event** > **Event Monitoring** > **Real-Time Log**.
- Step 3 View real time logs.

Figure 5-8 View real-time logs



Related Operations

- Enter the device ID to search for the event logs.
- Click **Reset** to restore to default settings.



6 Event Transfer Protocols

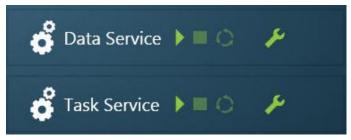
6.1 Event Transfer Configuration

Third-party Configuration

Here uses SIA protocol as an example for illustration.

1. Open PatriotConfigurator.exe, complete configuration, and then run the **Data Service** and **Task Service**.

Figure 6-1 Run services



2. Log in to the client.

Figure 6-2 Log in



3. Select **System** > **Tasks** > **Task Settings**.

Figure 6-3 Task settings





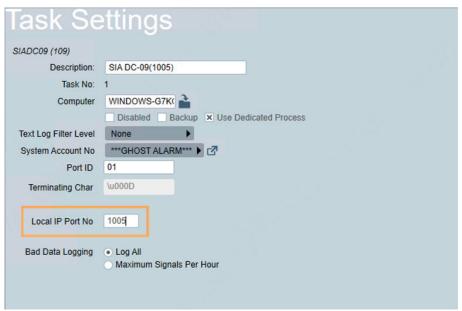
- 4. Create a task.
 - a. Select the task type as SIA-DC 09.

Figure 6-4 Select task type



b. Configure the local IP port number.

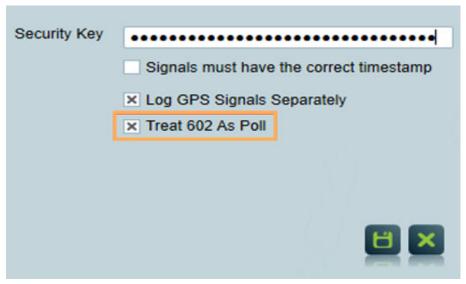
Figure 6-5 Configure port number



c. Configure the security key, cancel selection of **Treat 602 As Poll**, and then click **Save**.

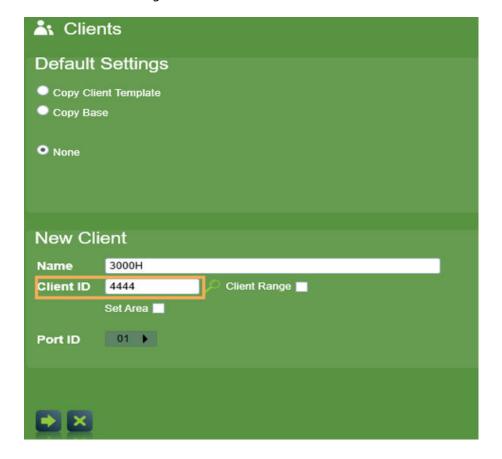


Figure 6-6 Security key



5. Create the main account ID and the name, which is the CMS main account that you will apply.

Figure 6-7 Main account ID and name



CMS Configuration

- 1. Log in to the webpage of Converter.
- 2. Select **Setting** > **CMS Connection**.
- 3. Configure the CMS settings.



Figure 6-8 CMS connection (Manitou)

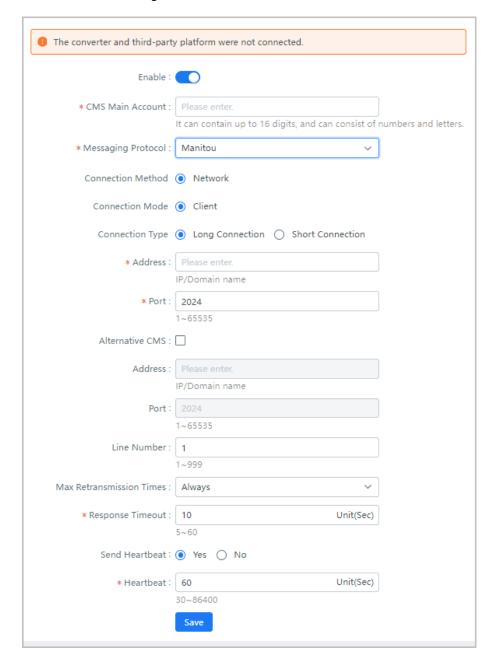




Figure 6-9 CMS connection (Surgard)

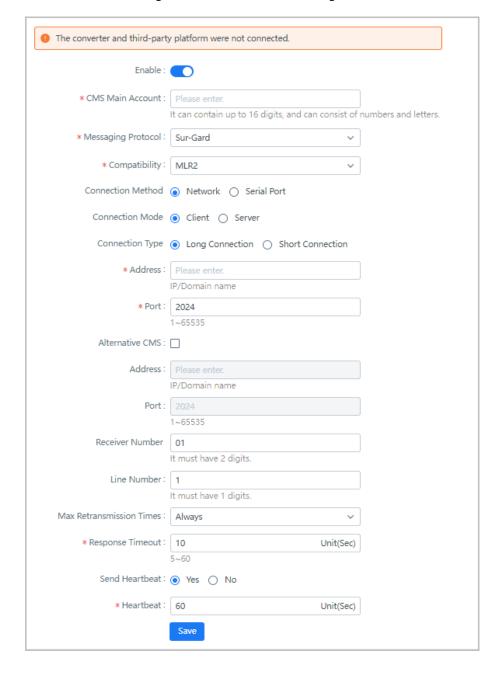




Figure 6-10 CMS(SIA)

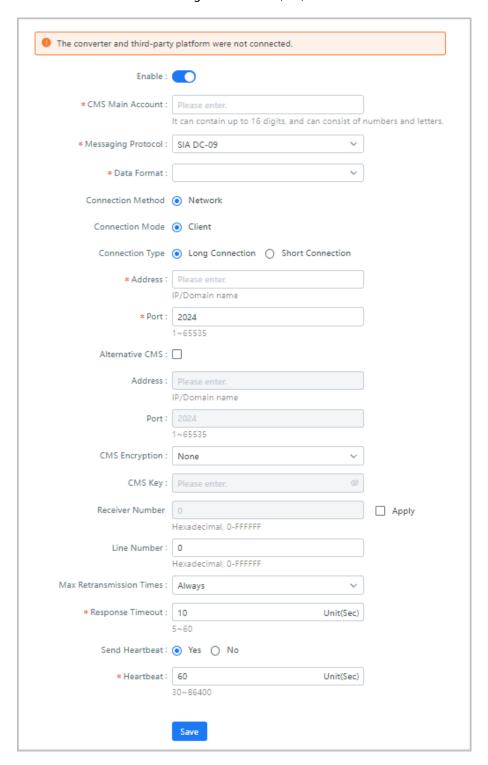


Table 6-1 Description of CMS connection parameter

Parameter	Description	
Enable	Enable the forward function.	



Parameter		Description		
CMS Main Account		The main account is the account of the Converter, which can send heartbeat events to the CMS. The CMS uses the Main account to determine whether the communication between the Converter and the CMS is functioning properly.		
		The account ID is assigned by the third-party platform to Converter.		
Alternative CMS		Enable the function, and enter the address and port of the alternative CMS.		
		It is decided by the CMS.		
	Data Format	Select ContactID or DCS.		
	Connection Method	Network by default.		
	Connection Mode	Client by default.		
Messaging Protocol (SIA)	Connection Type	 Long Connection: The single TCP connection that is used to send and receive multiple TCP requests or responses. Short Connection: During data transmission, a connection is established only when it is necessary to send data, and is disconnected after the service is completed. 		
	Address	Enter the IP address of the server where the event receivers of the monitoring software is located.		
		It is decided by the CMS.		
	Port	Enter the listening port number of the event receiver of the monitoring software (CMS).		
		It is decided by the CMS.		
	CMS Encryption	Select None or AES . It is None by default.		
	CMS Key	It can contain 32 characters, where each character is a hexadecimal digit. It is provided by CMS.		
	Receiver Number Line Number	It can be a hexadecimal from 0–FFFFFF.		
Messaging Protocol (Manitou)	Connection Method	It is Network by default.		
	Connection Mode	It is Client by default.		
	Address	Enter the IP address of the server where the event receiver of the monitoring software (CMS) is located.		
		It is decided by the CMS.		



Parameter		Description		
	Port	Enter the listening port number of the monitoring software (CMS).		
		It is decided by the CMS.		
	Line Number	It can be 1-999.		
	Compatibility	Select MLR2 or MLR2000.		
		The option you select for compatibility is based on the third-party platform.		
		Connection Mode: Select Client or Server .		
		Connection Type:		
	Connection Method (Network)	 Long Connection: The single TCP connection that is used to send and receive multiple TCP requests/responses. Short Connection: During data transmission, a connection is established only when it is necessary to send data, and is disconnected after the service is completed. 		
		Address: Enter the IP address of the server where the event receiver of the monitoring software (CMS) is located.		
Messaging Protocol		It is decided by the CMS.		
(Surgard)		Port: Enter the listening port number of the event receiver of the monitoring software (CMS).		
		It is decided by the CMS.		
	Connection Method (Serial Port)	COM Number: Select the serial port number for the local computer, with the Converter installed on, to establish a connection with third-party platform.		
		Baud Rate: The unit of measurement for symbol rate that determines the speed of communication. The higher the rate is, the faster the communication will be.		
		Data Bits: The number of bits used to represent one character of data. You can select 5 , 6,7 and 8 . For example, if you select 8 , then it means the serial communication can transfer a total of eight bits that valued 0 or 1.		
		Most forms of data requires 8 bits.		



Parameter		Description		
		Stop Bits: A bit(s) that marks the end of a unit of transmission. You can select 1 , 1.5 and 2 .		
		The greater the number of stop bits, the more tolerance there is for synchronization. But the data transmission rate is slower.		
		Parity: A method to check for parity error that is used to verify the accuracy of serial communication.		
		 None: No parity bit. Odd: The parity bit is set to 1 if there is an odd number of one bits in a one-byte data item. If the number of one bits adds up to an even number, the parity bit is set to 0. Even: The parity bit is set to 0 if there is an even number of one bits in a one-byte data item. If the number of one bits adds up to an odd number, 		
		the parity bit is set to 1.		
		Mark: The parity bit is 1.Space: The parity bit is 0.		
	Receiver Number	It must have 2 digits.		
	Line Number	It must have 3 digits when MLR2000 is selected as compatibility, and 1 digit when MLR2 is selected.		
Max Retransmission Times		Once the number of retransmissions reaches the defined value, all remaining alarm messages that are sent will be filtered out.		
Response Timeout		The duration of time that the system waits for a response before considering it as a failure or timeout		
Send Heartbeat		Select Yes if you need this function, or No to disable it.		
Heartbeat		A regular interval sent between machines.		
Listen for COM port heartbeat answers		If you set Connection Method as the Serial Port, you can enable the Listen for COM port heartbeat answers. It is enabled by default.		

6.2 Protocol Overview

The Converter supports protocols for transmitting events to CMS.

Table 6-2 Protocol introduction

Protocol	Description
SIA DC-09 (ADM-CID)	Messages can transmit additional information in the form of a link to a web resource, geographic coordinates, or other standardized data. This protocol supports:
	Alarm and event transmissionTransmission of visual alarm verifications



Protocol	Description		
SurGard	This protocol supports alarm and event transmission.		
	This protocol supports:		
MANITOU	Alarm and event transmissionTransmission of visual alarm verifications		

6.2.1 SIA Configuration

For details, see the SIA part in "6.1 Event Transfer Configuration".

6.2.2 SurGard Configuration

For details, see the SurGard part in "6.1 Event Transfer Configuration".

6.2.3 MANITOU Configuration

For details, see the MANITOU part in "6.1 Event Transfer Configuration".



7 Maintenance

7.1 Viewing Operation Logs

View logs of the operation on Converter.

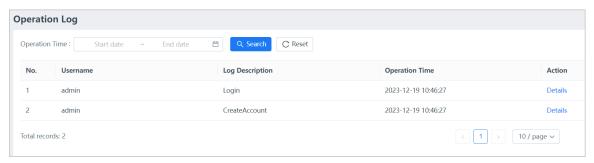
Procedure

<u>Step 1</u> Log in to the webpage of Converter.

Step 2 Select **Maintenance** > **Operation Logs**.

<u>Step 3</u> Configure the operation time to view the operation logs.

Figure 7-1 Operation logs



<u>Step 4</u> Click **Details** to view the details of the specific operation.

7.2 Managing Protocols

Manage different protocols.

Background Information

In addition to supporting event forwarding via standard protocols, Converter also supports private protocols of different manufacturers software platforms to achieve more forwarding control functions, such as video forwarding, data encryption and remote control.

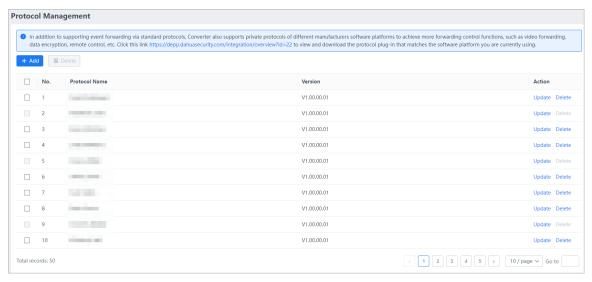
Procedure

<u>Step 1</u> Log in to the webpage of Converter.

Step 2 Select **Maintenance** > **Protocol Management**.



Figure 7-2 Protocol management



Step 3 Click **Add** to add new protocols.

- Click **Update** to update the protocol.
- Click **Delete** to delete the protocol.

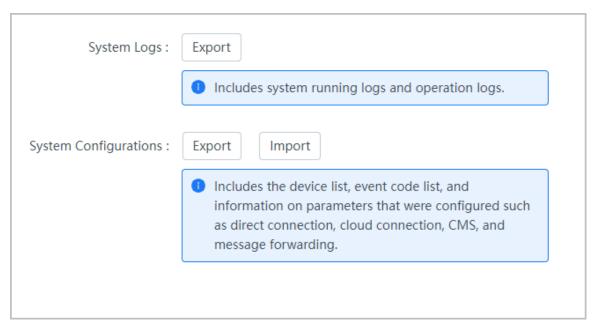
7.3 Exporting System Logs

Export system logs.

Procedure

- <u>Step 1</u> Log in to the webpage of the Converter.
- **Step 2** Select **Maintenance** > **Import/Export**.

Figure 7-3 Import or export



Step 3 Click **Export** next to **System Logs**.



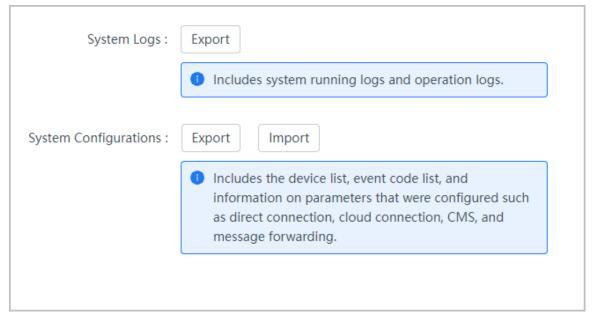
7.4 Importing and Exporting Configuration Data

Import or export the system data into the Converter.

Procedure

- <u>Step 1</u> Log in to the webpage of the Converter.
- <u>Step 2</u> Select **Maintenance** > **Import/Export**.

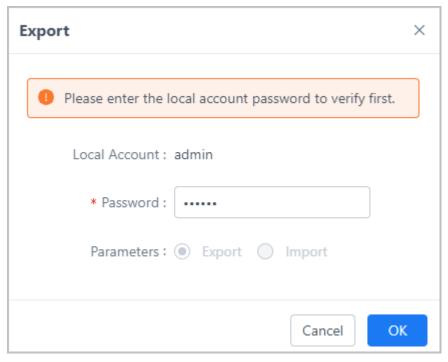
Figure 7-4 Import or export



- <u>Step 3</u> Export system configuration.
 - 1. Click **Export**, and then enter the password of the Converter account that you currently log in to.
 - 2. Click **OK**.



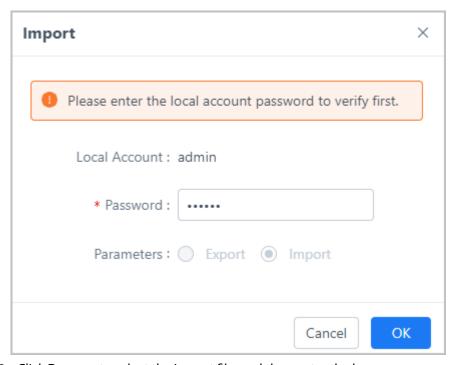
Figure 7-5 Export



Step 4 Import system configuration.

- 1. Click **Import**, and then enter the password of the Converter account that you currently log in to.
- 2. Click OK.

Figure 7-6 Import (2)



- 3. Click **Browse** to select the import file, and then enter the key.
- 4. Click Import.



Figure 7-7 Import(2)





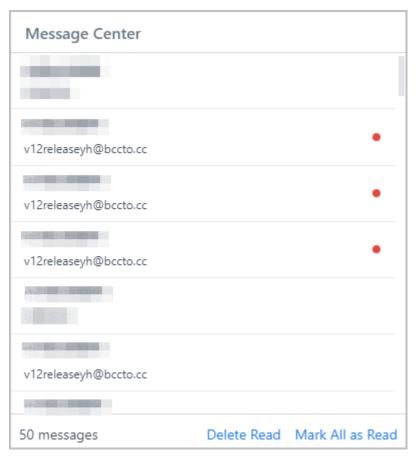
8 Viewing Message Notifications

View message notifications.

Procedure

- <u>Step 1</u> Log in to the webpage of Converter.
- Step 2 Select **Messages** at the top-right corner of the page.
- <u>Step 3</u> View messages notifications.

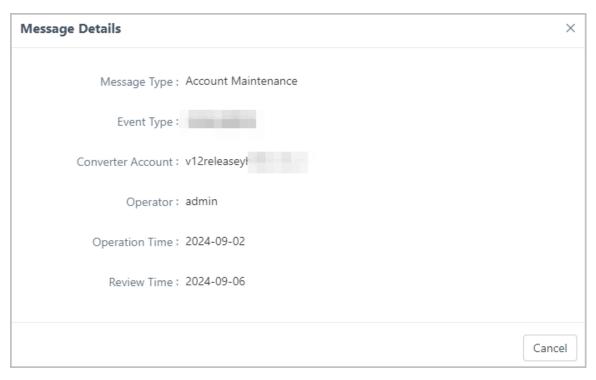
Figure 8-1 Message center



<u>Step 4</u> Click the notification to view message details.



Figure 8-2 Message details



- Click **Delete Read** to delete read messages.
- Click **Mark All as Read** to mark unread messages as read.



9 Account Settings

9.1 Changing Account Password

Log in to the webpage of Converter, and select **Account** > **Change Password** to reset the password for the account.

9.2 Configuring Auto Logout Time

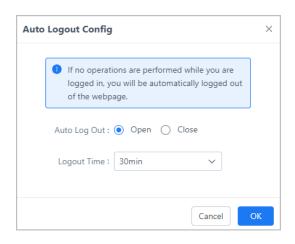
Procedure

Step 1 Log in to the webpage of Converter.

Step 2 Select **Account** > **Auto Logout Config.**

Step 3 Select **Open** to enable the auto log out function, and then select the logout time.

Figure 9-1 Auto logout



Step 4 Click **OK**.

9.3 Logging Out

Log in to the webpage of Converter, and select **Account** > **Log Out**.



Appendix 1 Security Commitment and Recommendation

Dahua Vision Technology Co., Ltd. (hereinafter referred to as "Dahua") places great emphasis on cybersecurity and privacy protection. We continuously allocate special funds to enhance employees' awareness and capabilities in security, and ensure sufficient security protection for our products. Dahua has established a professional security team to provide comprehensive security empowerment and control throughout the entire product lifecycle, including design, development, testing, production, delivery, and maintenance. Dahua products adhere to the principle of minimum necessary data collection, service minimization, strict prohibition of backdoors, and the disabling of unnecessary and insecure services (such as Telnet). We continuously introduce innovative security technologies to bolster the security capabilities of our products. Additionally, we go above and beyond by providing global users with security alarm and 24/7 security emergency response services. This approach ensures that we are better safeguarding their security rights and interests. At the same time, Dahua encourages users, partners, suppliers, government agencies, industry organizations and independent researchers to report potential risks or vulnerabilities to the Dahua PSIRT. They can do so by visiting the cybersecurity section on the Dahua website.

The security of software platforms not only relies on the continuous attention and efforts from manufacturers throughout R & D, production, and delivery, but also requires active participation from users. Users should remain attentive to the environment and methods to ensure its secure operation. To this end, we suggest users to safely use the software platform, including but not limited to:

Account Management

1. Use Strong 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. Change Password Regularly

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

3. Assign Accounts and Permissions Reasonably

According to business and management needs, reasonably add new users, and reasonably allocate a minimum set of permissions for them.

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. Set and Update Passwords Reset Information Timely

The platform supports password reset function. To reduce the risk of being attacked, please set up related information for password reset in time. 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.

6. Enable Account Binding IP/MAC



It is recommended to enable the account binding IP/MAC mechanism to further improve access security.

Service Configuration

1. Enable HTTPS

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

2. Disable Unnecessary Services and Choose Secure Modes

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

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

- SMTP: Choose TLS to access mailbox server.
- FTP: Choose SFTP, and set up strong passwords.

Network Configuration

1. Enable Firewall Allowlist

We suggest you to enable allowlist function to prevent everyone, except those with specified IP addresses, from accessing the system. Therefore, please be sure to add your computer's IP address and the accompanying equipment's IP address to the allowlist.

2. Network Isolation

The network should be isolated by partitioning the video monitoring network and the office network on the switch and router to different VLANs. This prevents attackers from using the office network to launch Pivoting attacks on the video monitoring network.

Security Auditing

1. Check Online Users

It is recommended to check online users irregularly to identify whether there are illegal users logging in.

2. View the Platform Log

By viewing the log, you can get the IP information of the attempt to log in to the platform and the key operation information of the logged-in user.

Physical Protection

We suggest that you perform physical protection to the device that has installed the platform. 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.



Perimeter Security

We suggest that you deploy perimeter security products and take necessary measures such as authorized access, access control, and intrusion prevention to protect the software platform security.

FNARI	ING A SMA	RTER SOCI	FTY AND	BETTER I IV	ING
NG DAHUA VISION s: No. 1399, Binxin	TECHNOLOGY CO., LTD g Road, Binjiang Distric). ct, Hangzhou, P. R. Ch	ina Website: www	w.dahuasecurity.com	Postcode: 310053