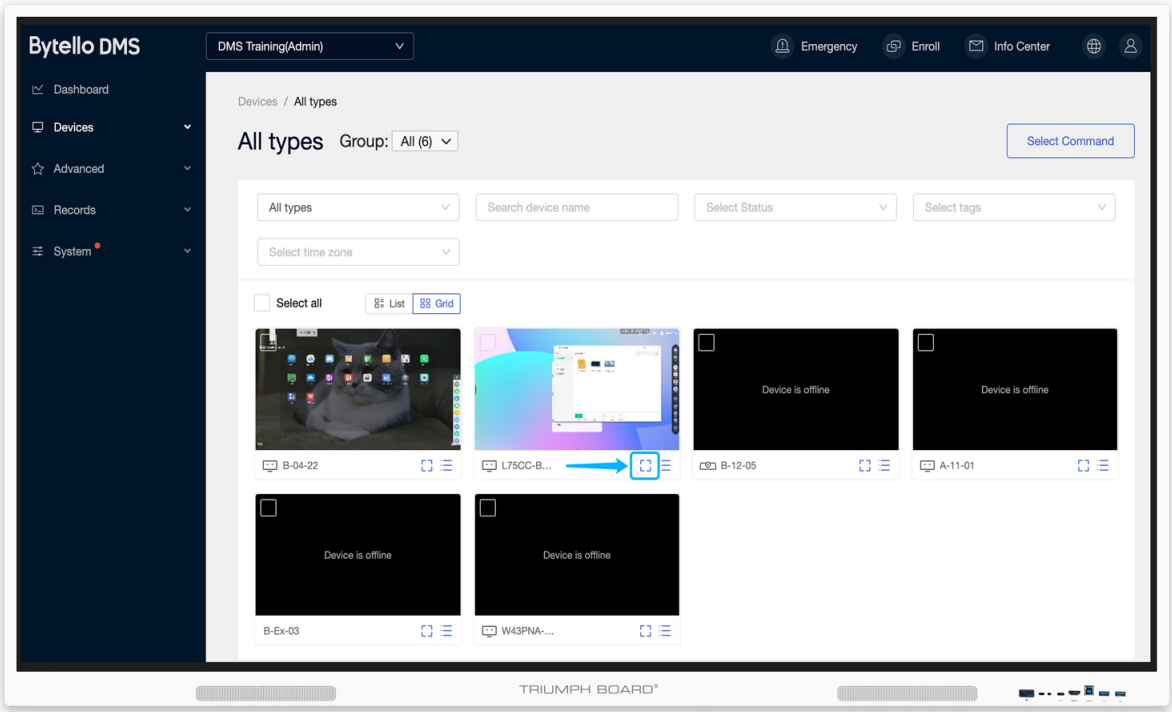
USER GUIDE

BYTELLO DMS-DEVICE MANAGEMENT SYSTEM



Update:2022 Mar

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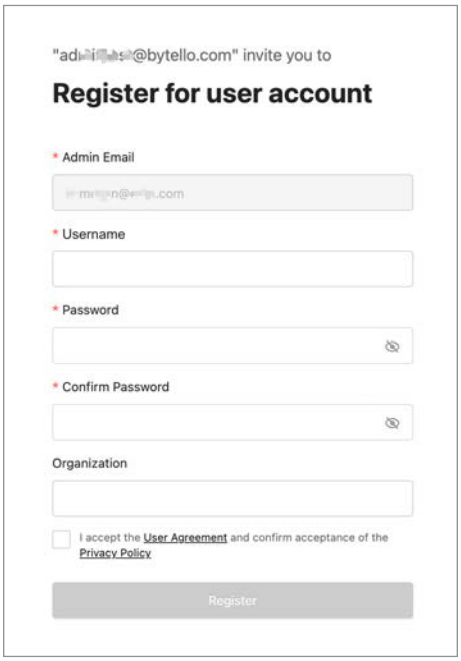
1. INTRODUCTION

1.1 INTRO

Bytello DMS is a web-based software that simplifies the management of your campus equipment.
With the DMS software, you can enjoy cluster management functionality for your interactive flat panels. Options include status monitoring, panel grouping, time and channel switching, volume control, and information bulletins. Everything you need is available in the same unified space.

1.2 REGISTER ACCOUNT

Step one: Check the mail inbox of the bytello account invitation to get the unique registration link.
Step two: Fill out the registration form.

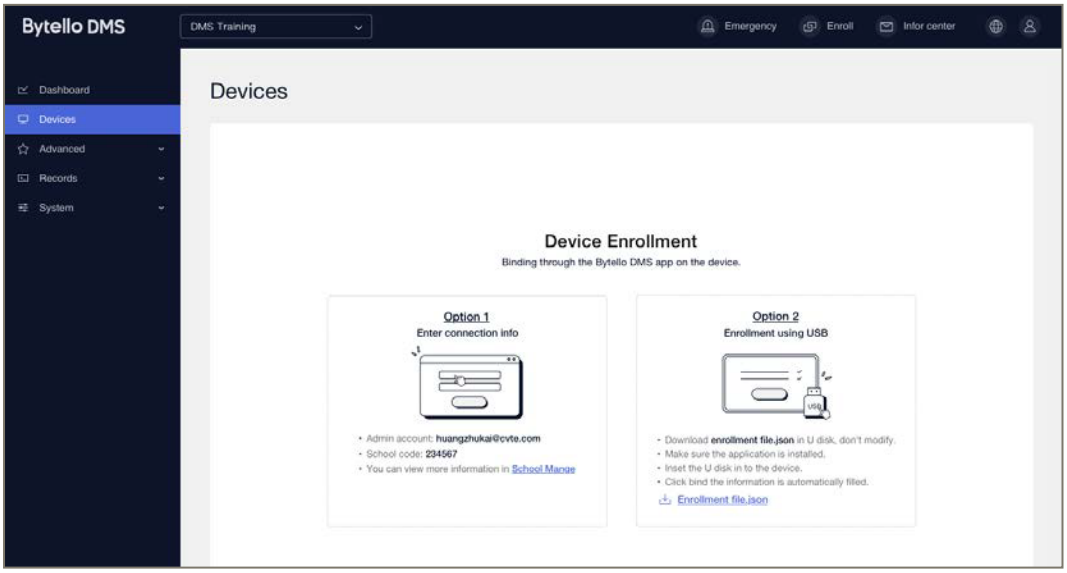


Step three: Once been approved, login dms.bytello.com

1.2 DEVICE ENROLL

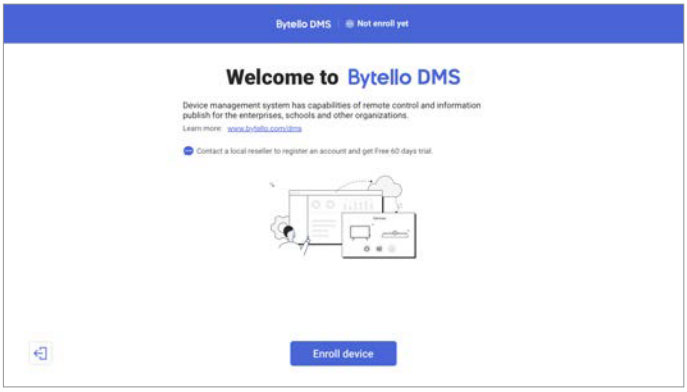
Enroll method

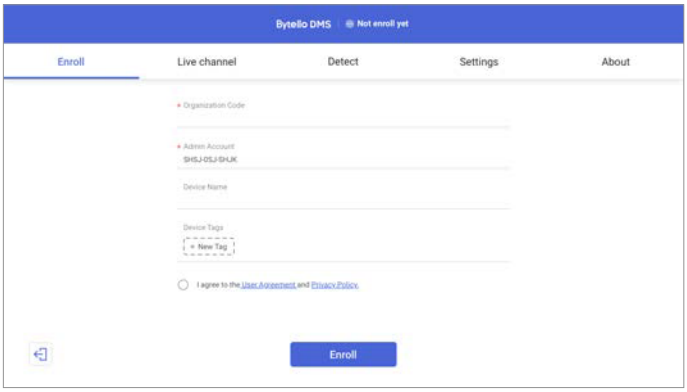
Login to dms.bytello.com, Click [Enroll] on the top bar to see enroll method.



Fill in the information on the client

Input ‘Organization code’ and ‘Admin account’ on Client to enroll this device to the organization.
Download DMS Client here: http://www.bytello.com/dms

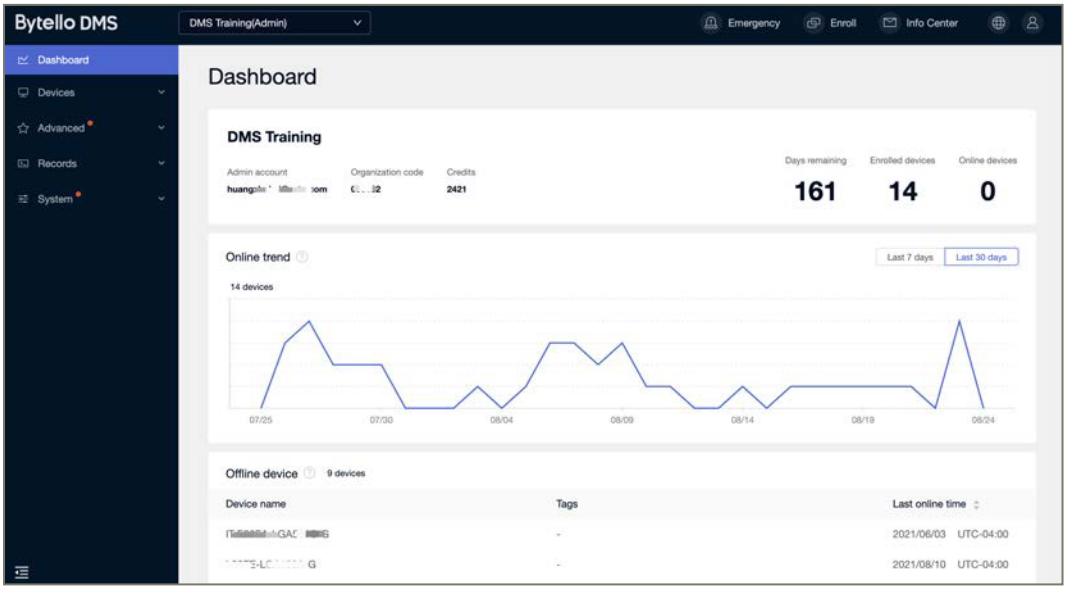




1.3 DASHBOARD

1.3.1 ORGANIZATION INFO

Basic info includes **Organization name**, **Organization code**, **admin account**.



Credits are the total credit one organization has.
Enrolled devices are the number of devices enrolled so far, 1 enrolled device cost 1 credit 1 day.
Days remaining is the time length that this account has to access the product.
Online devices are the number of devices currently online at the moment.

1.3.2 ONLINE TREND

To check devices' online & offline status for the past 7 and 30 days.

1.3.3 OFFLINE DEVICE

A list of devices that have been offline for the past 7 days.

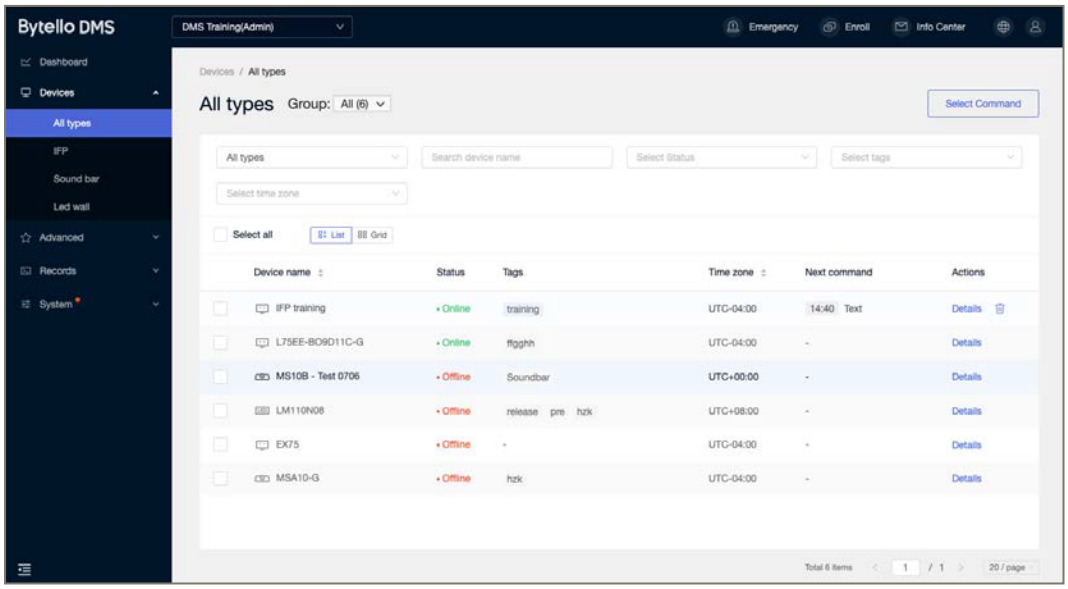
2. DEVICES

2.1 DEVICE VIEW

2.1.1 LIST VIEW

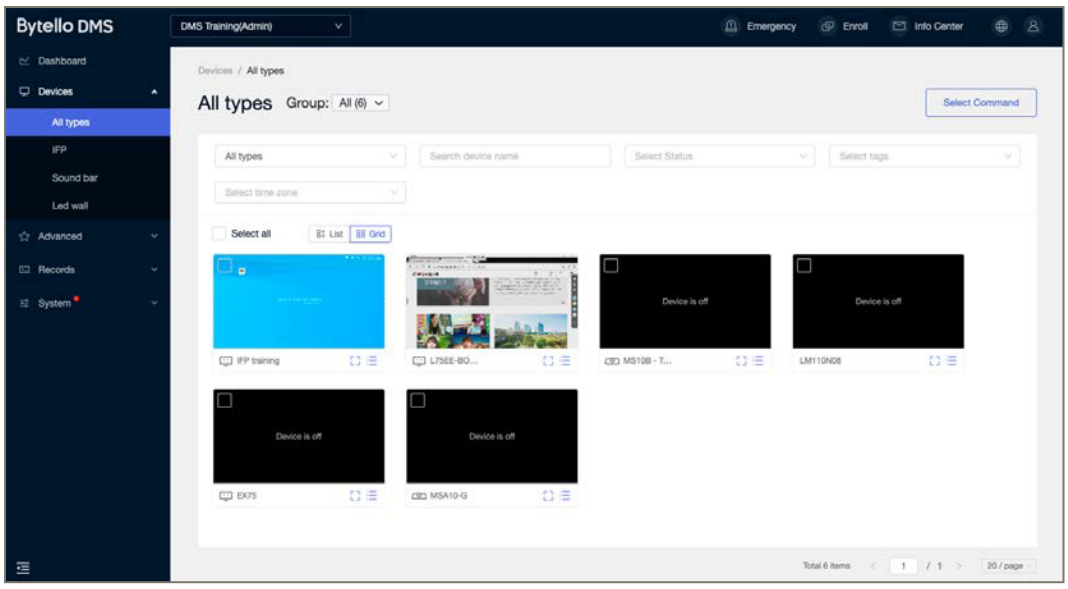
All devices enrolled Organization will be displayed in Devices -> All types.
List view is the default view.

Status Online means the device is currently connected with DMS.
Status Offline means the device is not connected with DMS.



2.1.2 GRID VIEW

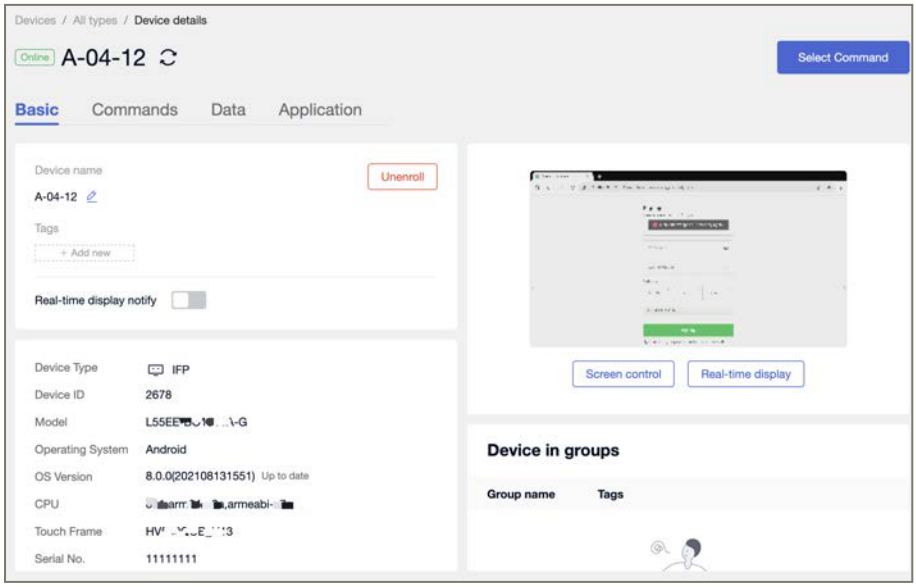
Grid view showcases device screenshots.



2.2 DEVICE DETAILS

2.2.1 BASIC

Change device name, device tags; Set device notification display method;
Display device information;
View screen; Start a screen control session;

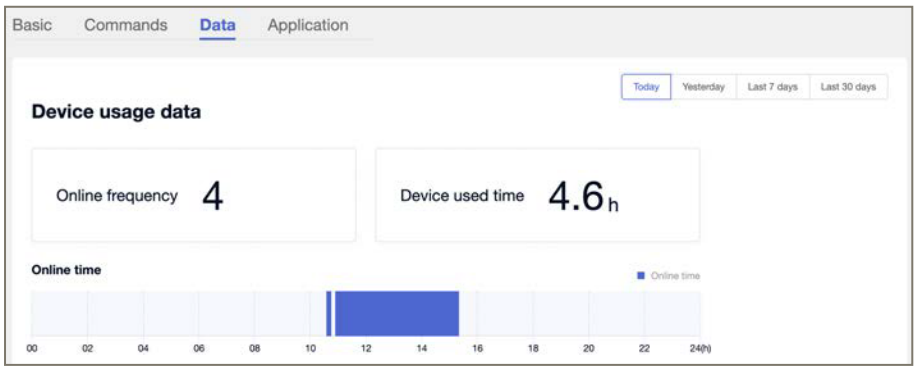


2.2.2 COMMANDS

Find out scheduled, unexecuted commands for this device.
Only Admin can check the Command Owner.

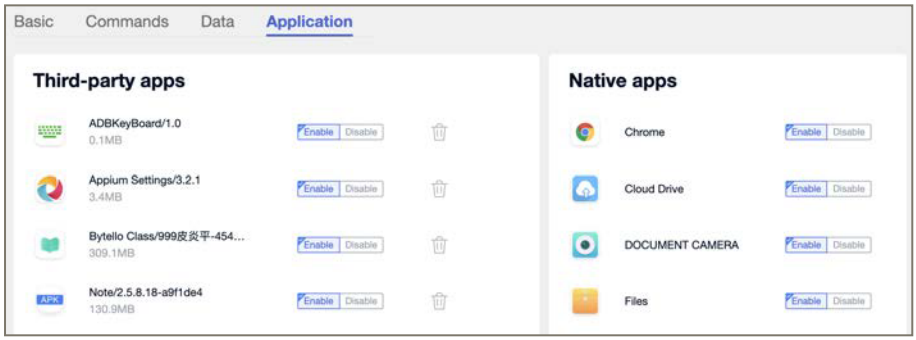
2.2.3 DATA

Find out device usage (used time, online times, and online duration) for today, yesterday, last 7 days, and last 30 days.



2.2.4 APPLICATION

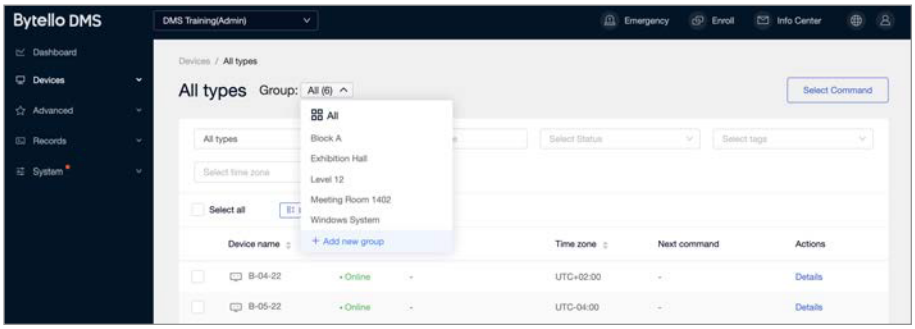
Find out applications installed on the device.
Enable, disable or uninstall applications.



2.3 DEVICE GROUP

2.3.1 CHOOSE GROUP & ADD NEW

Device groups can be accessed on the device list.

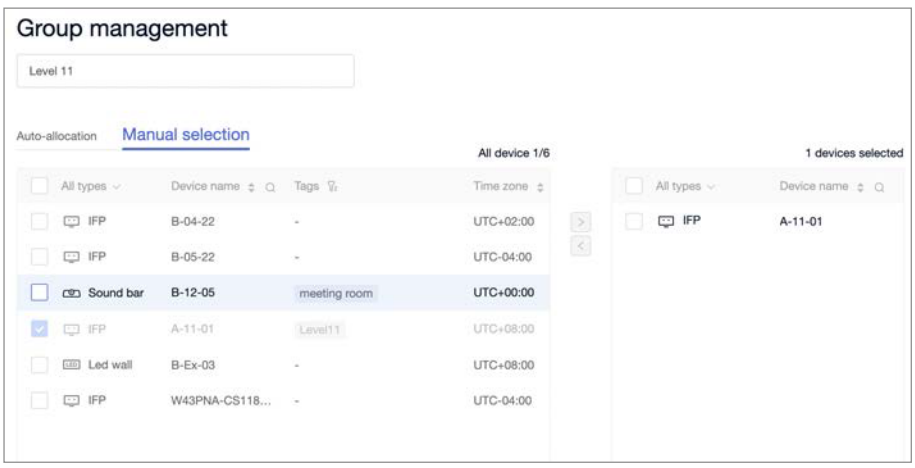


2.3.2 GROUP: AUTO-ALLOCATION

Using ‘and’ ‘or’ conditions to select devices into groups.
Devices that meet the conditions will automatically enter the group.
Devices that no longer meet the conditions will automatically be removed from the group.

2.3.3 GROUP: MANUAL SELECTION

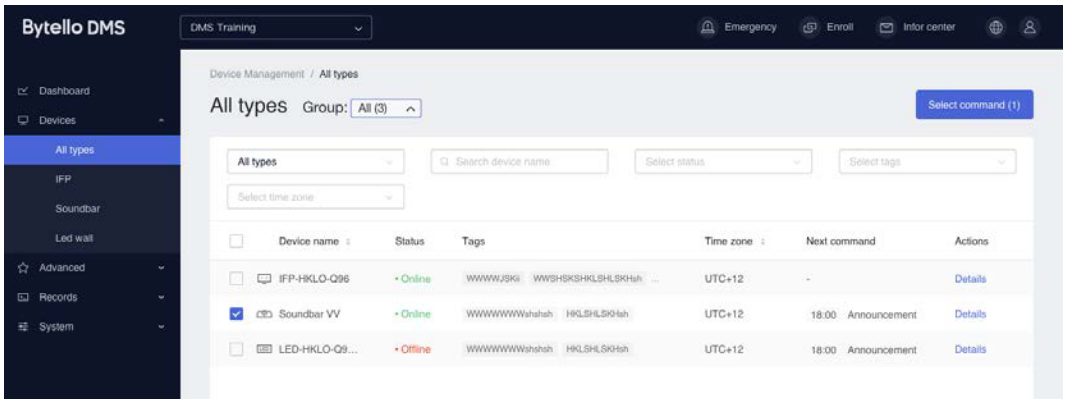
Manually select devices and create a device group



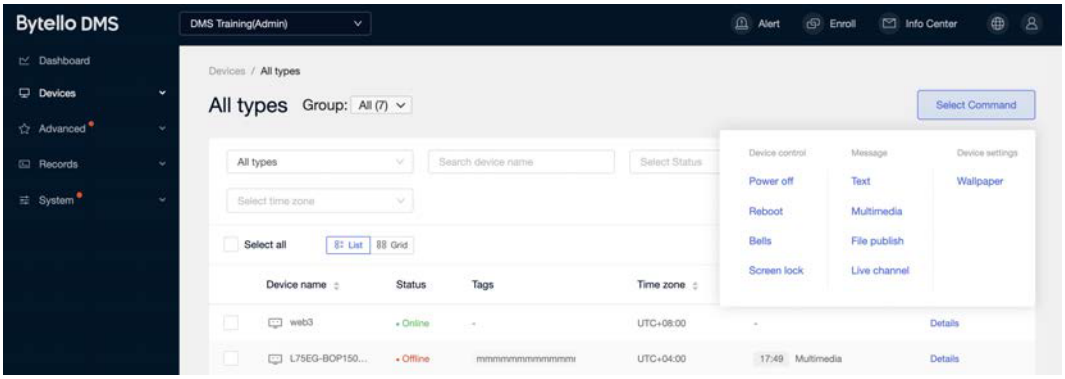
3. SEND A COMMAND

3.1 SELECT & SEND

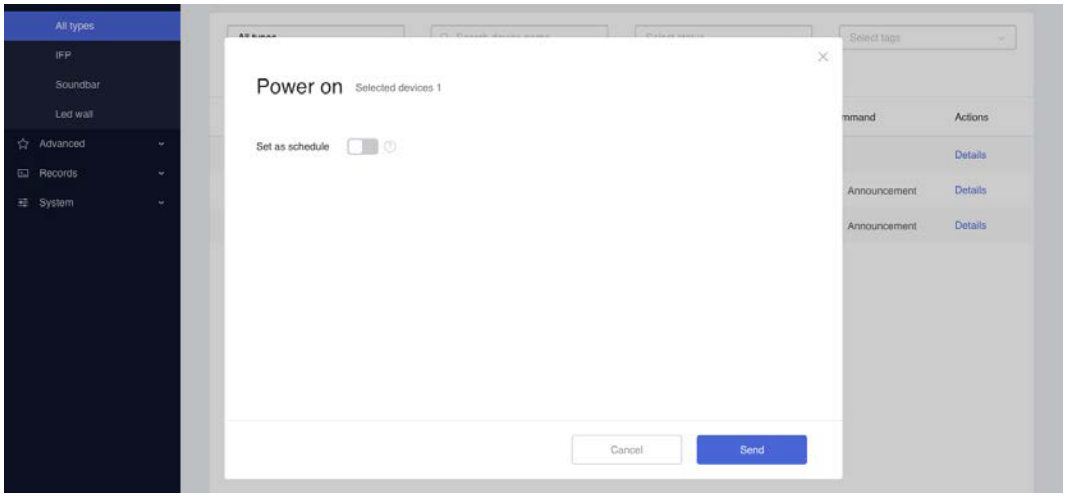
Step one: select device



Step two: select a command；



Step three: edit and send out command;



Editing option: Set as schedule

Time alignment: according to the selected device, the device located in the time zone (UTC max) display

For example, three devices in different timezones are selected(UTC-4 UTC-6 UTC-8). The timezone will be displayed according to the time of UTC-4.

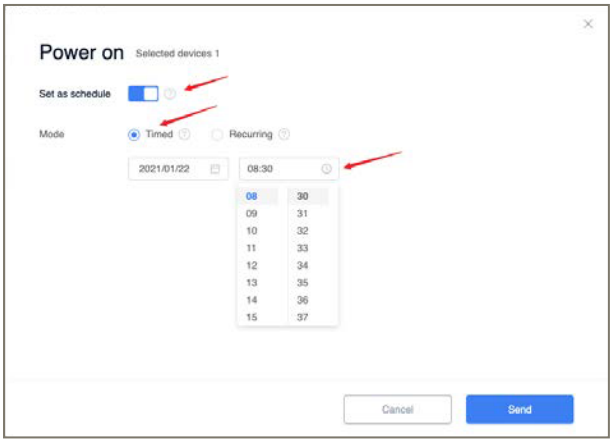
3.2 COMMAND TIME MODE

3.2.1 EXECUTE NOW

Click ‘Send’ directly to execute the command immediately.

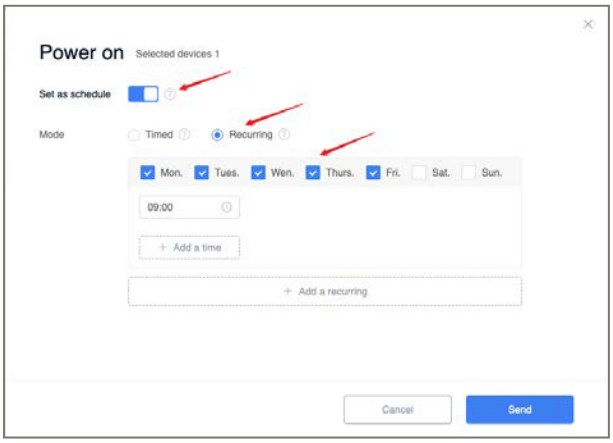
3.2.2 TIMED MODE

Open Set as schedule, Select (future) year-month-day-time to send a command.



3.2.3 RECURRING MODE

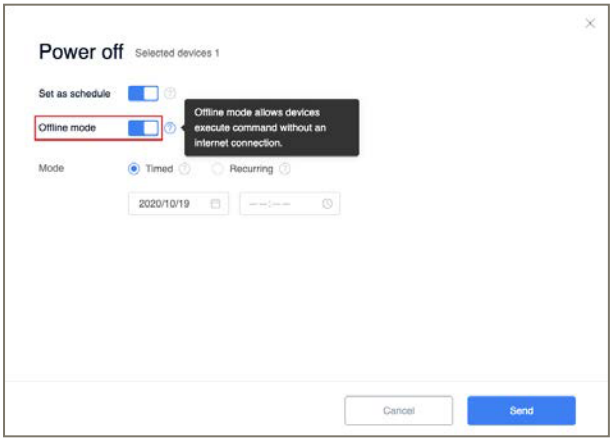
Select a specific period, and set a time fence for commands.



3.3 OFFLINE MODE

3.3.1 OFFLINE MODE

Offline mode means that for Timed and Recurring type commands, after the device successfully receives the command for the first time. If the network is disconnected at the command execution time, the device can still execute this command.



3.3.2 RECALL AN OFFLINE COMMAND

If you need to recall/cancel an offline command, the target device needs to connect to the network.
To recall an offline command is the same action as a common command.

3.3.3 COMMANDS WITH OFFLINE MODE

Power off - offline mode
Default state: offline mode is off
Users can choose to turn it on/off. After the device is turned on, if the device successfully receives the instruction, the device can still perform the shutdown successfully according to the set time when the device is not connected to the Internet.

Reboot - offline mode
Default state: offline mode is off
Users can choose to turn it on/off at their discretion. After turning on, if the device successfully receives instructions, the device can still perform a restart at the set time, following the un-networked state

Screen Lock - offline mode
Default state: offline mode is on and the user cannot turn it off.
After the device received the command, the device can still be executed at the set time when it is not connected to the network, and if the lock screen is disconnected during the lock screen, the lock screen instructions can still be executed regardless of the network

4. MANAGE

4.1 DEVICE CONTROL

4.1.1 POWER ON

Three-time modes are supported.

Remote power-on functionality relies on the build of the Wake On LAN function.

After the command is received by the device, if the device is connected to a Bytello WOL service, the execution results will succeed.

See Chapter 11 for more information on Bytello WOL Service

4.1.2 POWER OFF

Three-time modes are supported
Support for offline line mode
When the shutdown command is reached, the device segment will have a secondary confirmation pop-up window, if a user is using a shutdown that they do not want to shut down, they can reject the shutdown order this time. If there is no click rejection within 10s, the shutdown will be performed.

4.1.3 REBOOT

Three-time modes are supported
Support for offline line mode
When the restart command is reached, the device segment will have a secondary confirmation pop-up window, if the user is using does not want to restart, you can reject this shutdown instruction. If there is no click rejection within 10s, the restart will be performed.
Send a Power-off command to the shutdown device, and the execution fails.

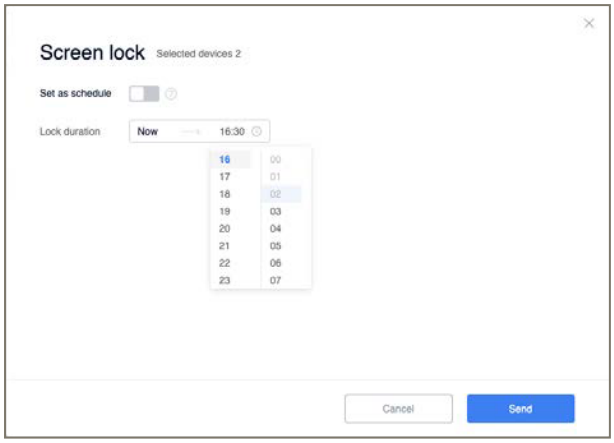
4.1.4 BELLS

Three-time modes are supported
Ringtones support playing music for a fixed length of time when, on the target device, at a specified time. Supports playback of 10s, the 20s, 30s, 60s and paly the whole song.
Supports local upload of music files. Successfully uploaded files are stored in the bell list.

4.1.5 SCREEN LOCK

Three-time modes are supported;
Screen lock feature that supports locking a specified device for a certain period.

The screen lock function is sent
The locked device, can not do any software class operation, can not use the remote control.
For a single locking period for the device, lock to 23:59 of the day at the latest;



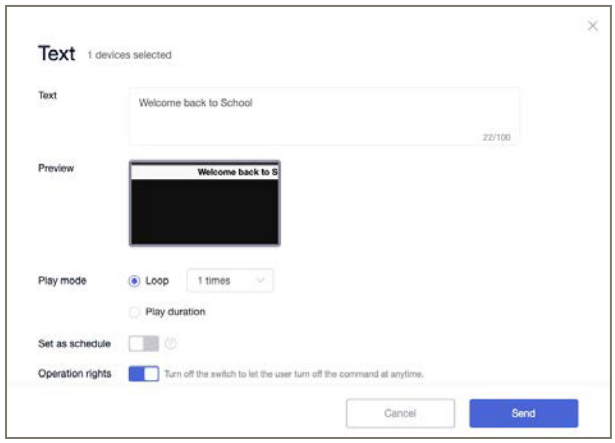
Screen lock password settings
Find the screen lock on the > Password manage page and set a 6-digit password

Unlock Screen lock

1. The end time of the arrival screen lock is automatically unlocked
2. The device will be unlocked automatically when it reaches 23:59
3. Entering a password on the target device during the locked period will work properly with the target device. If there is no action for 20 minutes after unlocking, the device will be locked again and a password will be required to enter here. The password for the screen lock can be viewed on the setting page of admin/Sub-admin.
4. Unlock unlocks the target device for a single lock-screen command on the command records page by admin/sub-admin.

4.2 MESSAGE

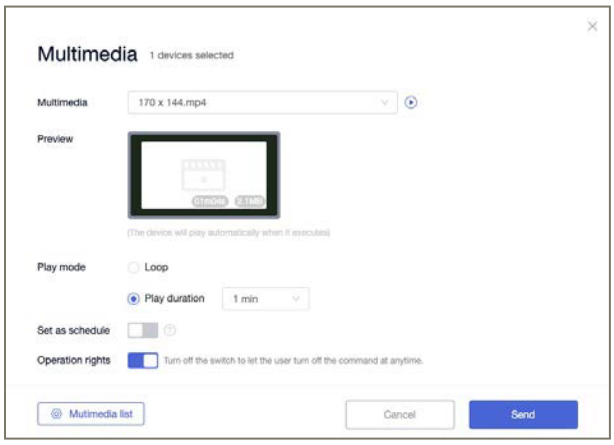
4.2.1 TEXT



Text support three-time modes
Enter text to display as text running light subtitles on the target device;
When Operation rights open, anyone in front of the device can turn off the text;

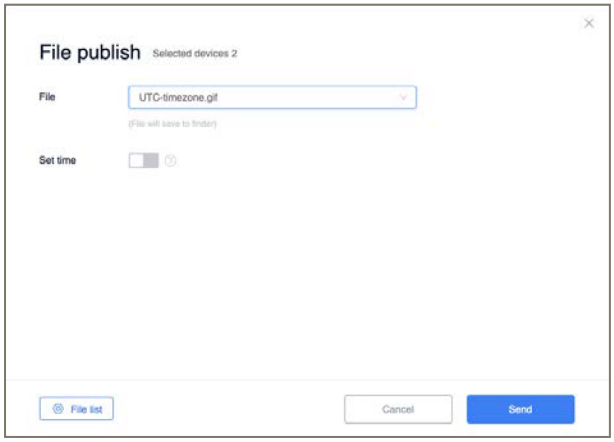
4.2.2 MULTIMEDIA

Three-time modes supported
Multimedia supports the release of information in image and video formats. A window appears on the target device with a close button.
When operation rights are on, anyone infant of the device can close the multimedia message.



4.2.3 FILE PUBLISH

Send now and timed send is supported. Recurring mode sending is not supported.
File transfer, which pushes and stores any type of file in a centralized temporary folder on the target device.
Supports uploading files locally and storing them in the File list
After it has been successfully sent to a temporary folder on the target device, it is notified through the pop-up window
Supports uploading files locally and storing them in the File list



4.2.4 ALERT

Introduction
Alert will send immediately;
Alert has a preset warning template that can be sent directly after changing the text in the template;
Supports local upload of images and storage;
After the alert information is sent, it will be displayed as a full-screen information display on the target device, and the user can not turn it off on his own;
To recall an Alert
When an emergency message is sent, the top bar on the web displays a red light effect that represents the alert. Go back to the emergency page and click on the recall to cancel the release of the emergency.

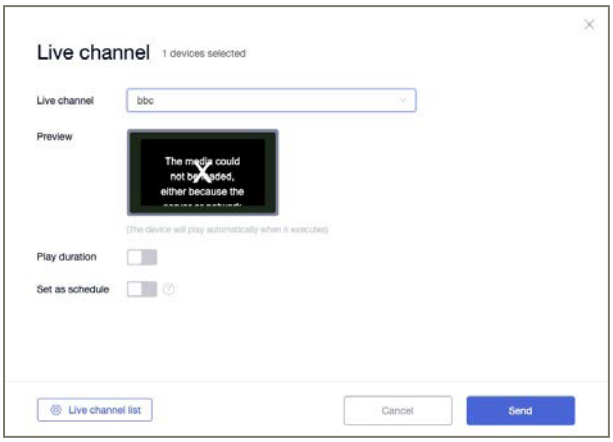
Device permissions for alert information
The Alert directive permission is different from other instruction permissions, and if the sub-admin has the command permission to send the emergency, the default Alert instruction is valid for all devices in the school.

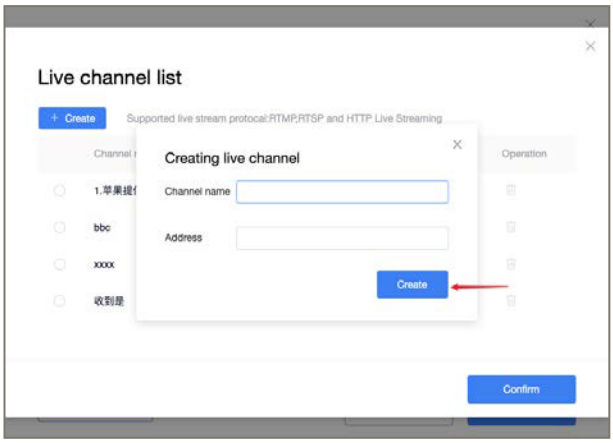
4.2.5 LIVE CHANNEL

To set up a live channel and broadcast it on the devices. Support format

RTMP/RTSP
Ex: rtmp://example.example/live/example

Apple HLS (HTTP Live Streaming)
Ex: http://ivi.example.edu.example/hls/example.m3u8

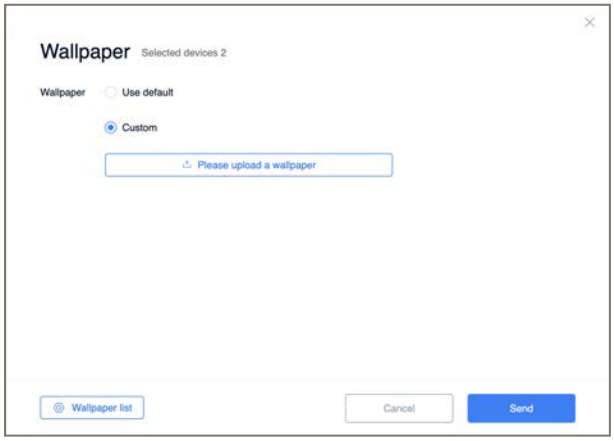




4.3 DEVICE SETTINGS

Wallpaper

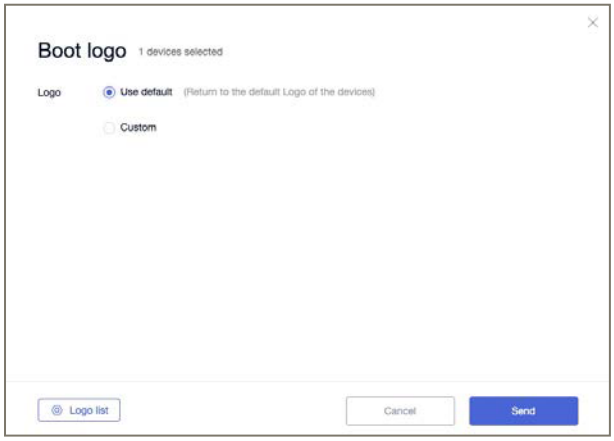
Wallpaper settings, only support Execute Now;
Supports the default wallpaper to be restored to the device;
When the device receives this instruction, it will automatically change the wallpaper immediately;



Instruction sending follows a downward asynchronously, and the device can receive instructions when it is powered on within 72h of the instruction being sent. If more than 72h has not yet executed this instruction, it is determined to be a failure to execute.

Boot Logo

Power on logo settings, only support Execute Now;
Supports the default boot logo to be restored to the device;
Upon receipt of this instruction, the device will automatically replace the boot logo immediately and take effect in the next boot;

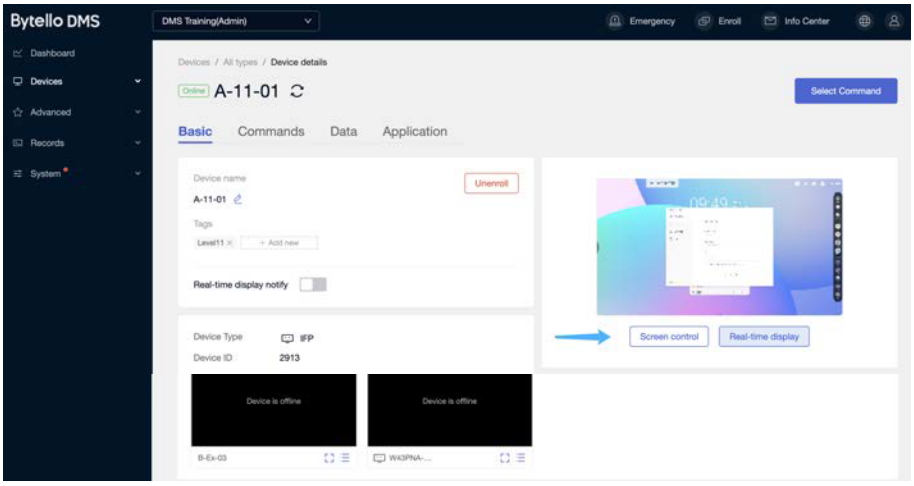


Instruction sending follows a downward asynchronously, and the device can receive instructions when it is powered on within 72h of the instruction being sent. If more than 72h has not yet executed this instruction, it is determined to be a failure to execute.

4.4 SCREEN CONTROL

4.4.1 REAL-TIME DISPLAY

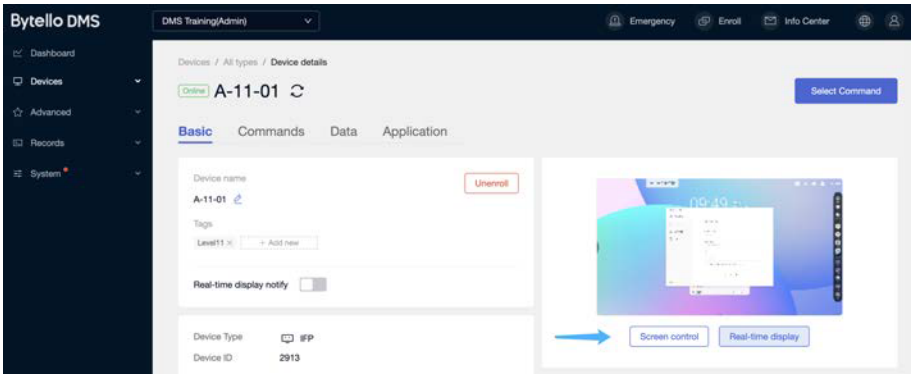
Entry A: device list -> device details -> Real-time display
Entry B: device list -> Grid view -> Real-time display



Real-time display mode
Once entered, the user will be able to check the device screen and send instant commands.

4.4.2 SCREEN CONTROL

Entry A: device list -> device details -> Screen control

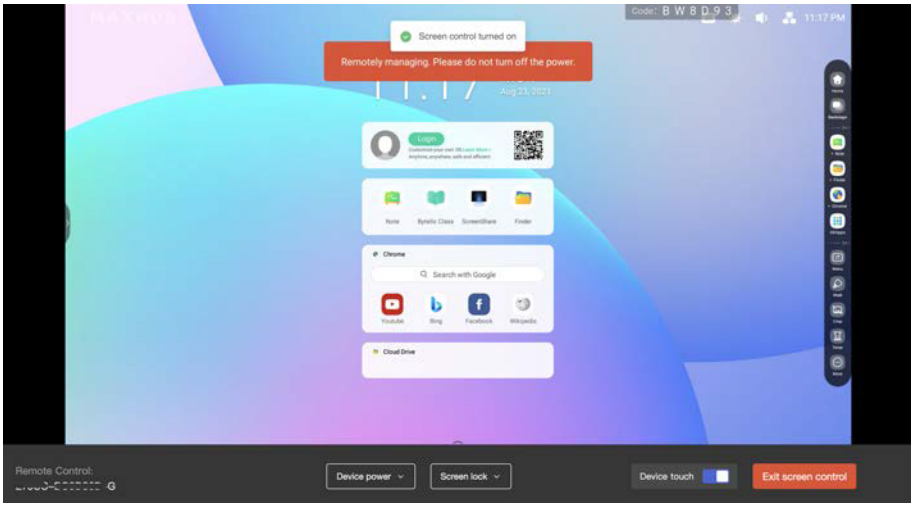


Entry B: Real-time display mode -> Screen control

Screen control mode
Enter Screen control session requires device permission. Users of the device need to [Allow] this remote screen control session.
If a user of the device [Reject] the session. IT admin will not be able to take control.
If there is no response in the 30s, the device will enter a remote screen control session without permission.

Waiting for permission

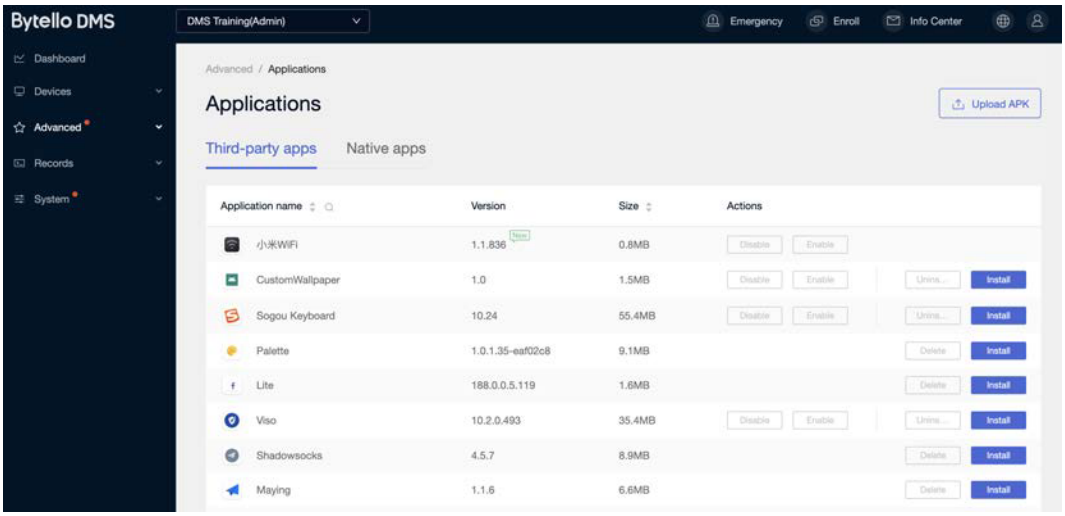
Remote screen control session entered



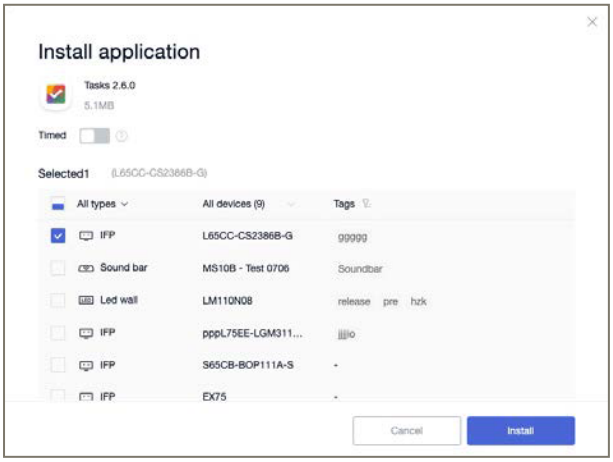
5. ADVANCED MANAGE

5.1 APPLICATIONS

The portal is in the navigation bar-functions, supports Execute Now and Timed time modes, supports local upload.
On the app list, select the app then selects the target action, and send it to the targeted device.

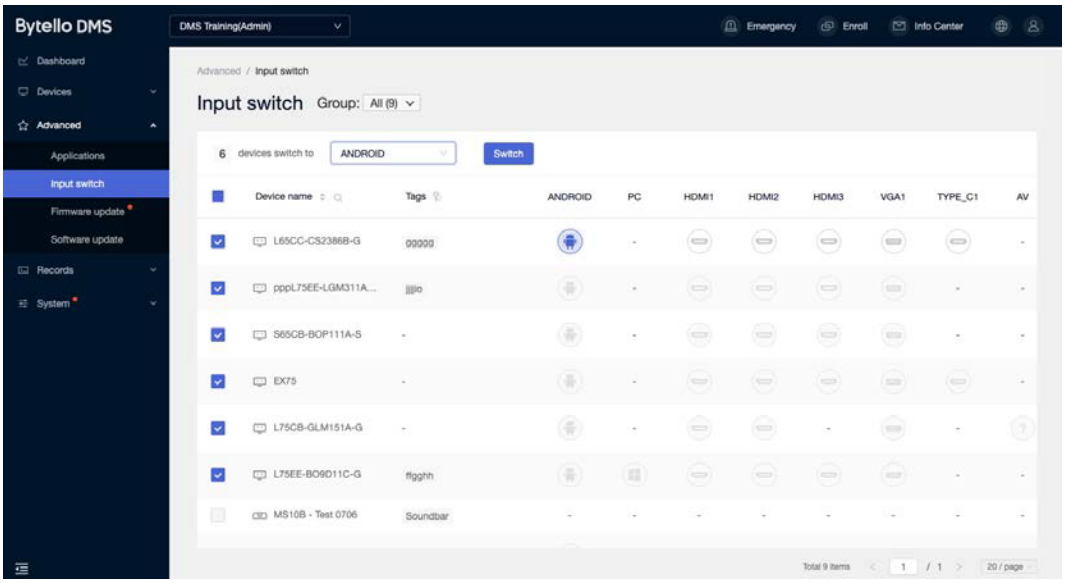


What you can do with a third-party app:
1. Install, install a new app to the target device
2. Update, the update has been applied to the latest version
3. Uninstall the installed app
4. Disable, disable installed apps, disabled apps will not appear in the app store
5. Enabled, enable disabled apps

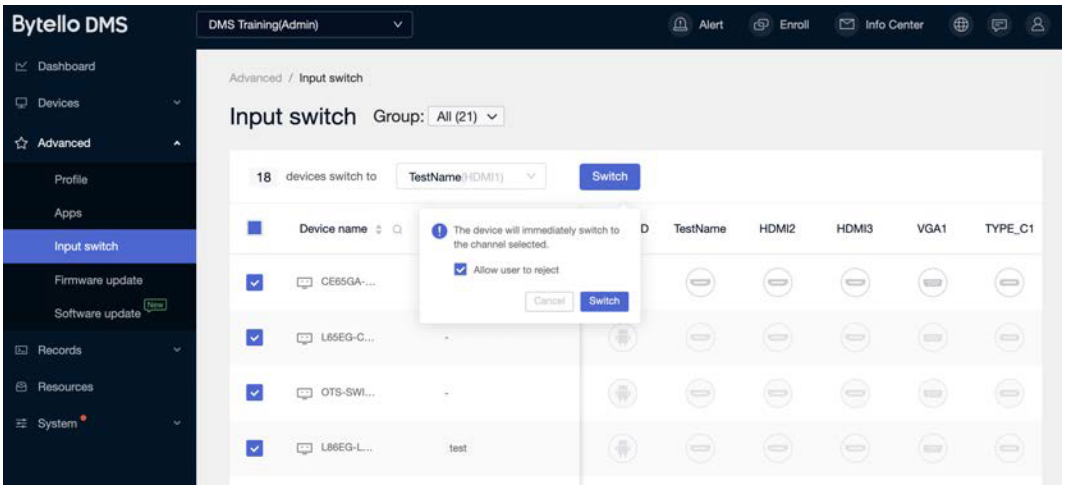


5.2 ANDROID ONLY - INPUT SWITCH

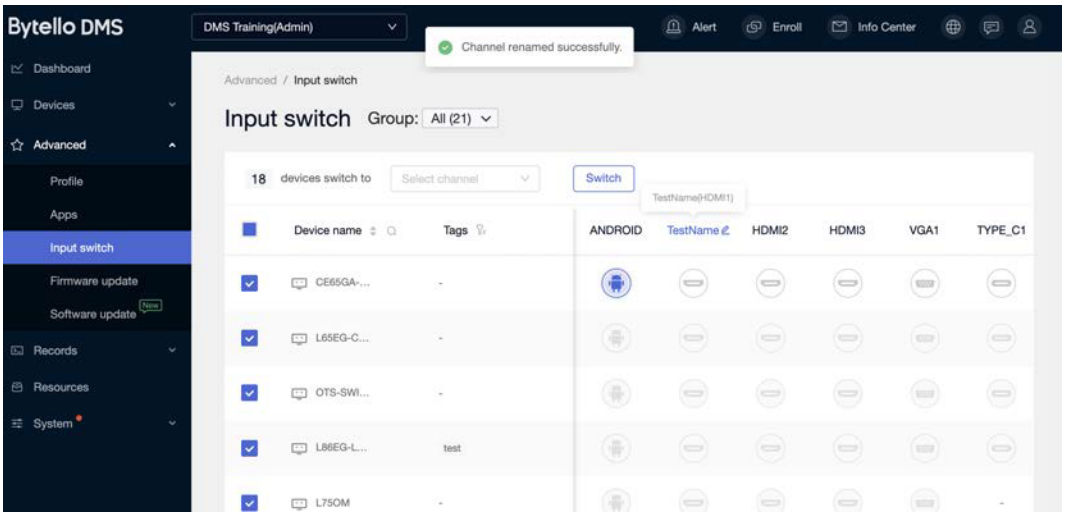
The ability to switch in bulk for channels under Android;



Firstly, select the target device; Secondly, choose which channel to switch to;
*If the device does not have the target channel, the instruction is determined to fail, and if the device state is off, the instruction is determined to fail;



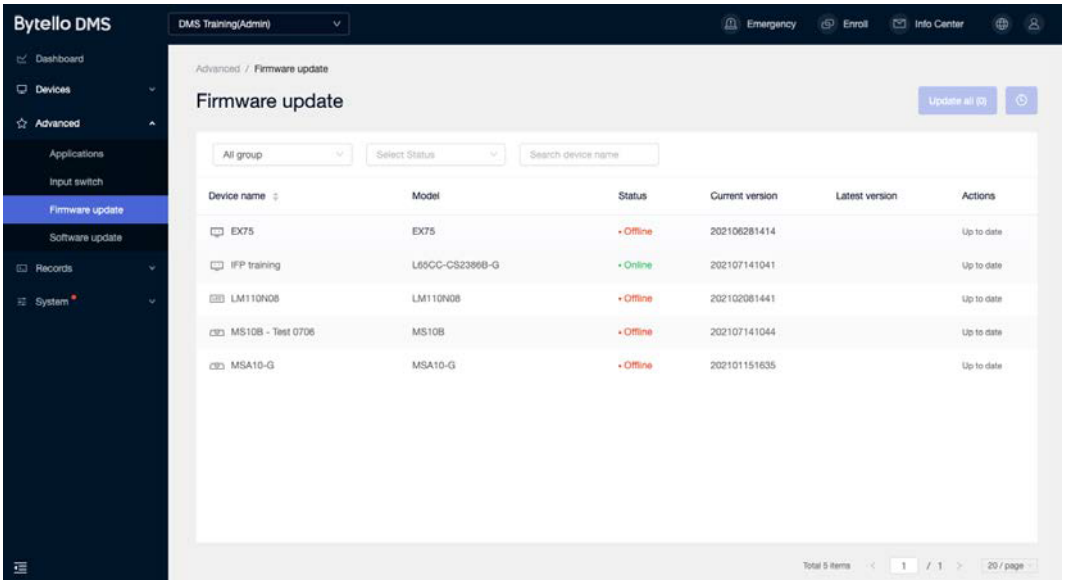
When [Allow user to reject] is selected, users in front of the device will not be able to reject this command.



Click a channel to change the preview name.

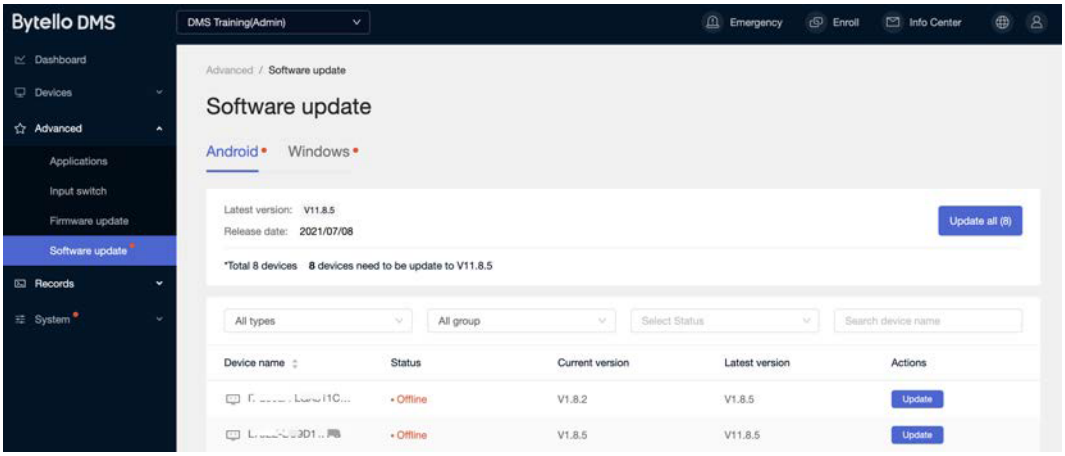
5.3 FIRMWARE UPDATE

Once a new firmware is released and detected by the device. The notification will show in DMS - Firmware update.
Click [Update all] to send out the command. The command will not expire.



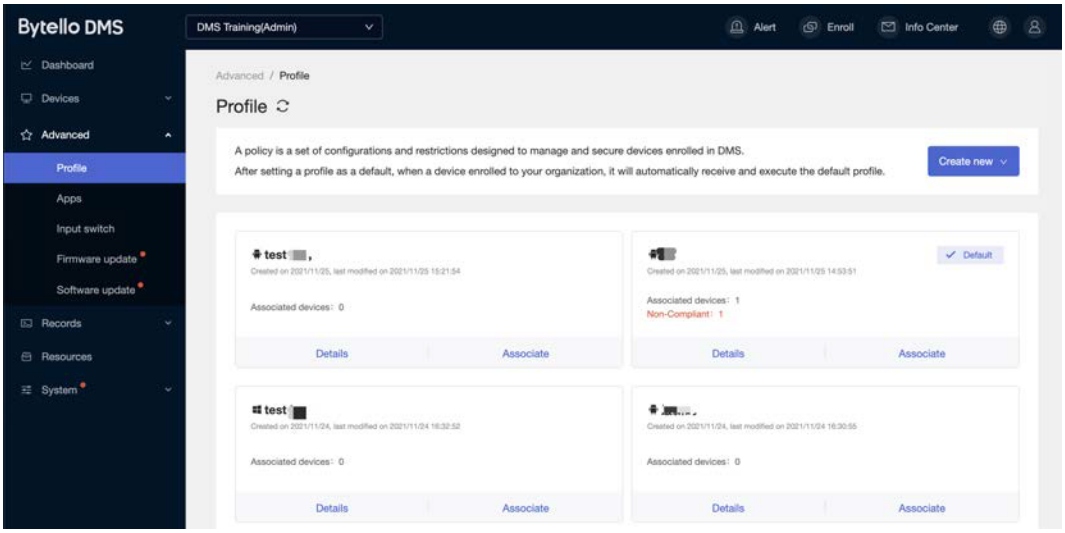
5.4 DMS CLIENT UPDATE

Android device DMS client management features, issued by its administrator DMS client latest version, keep the new version of DMS to support the latest features.



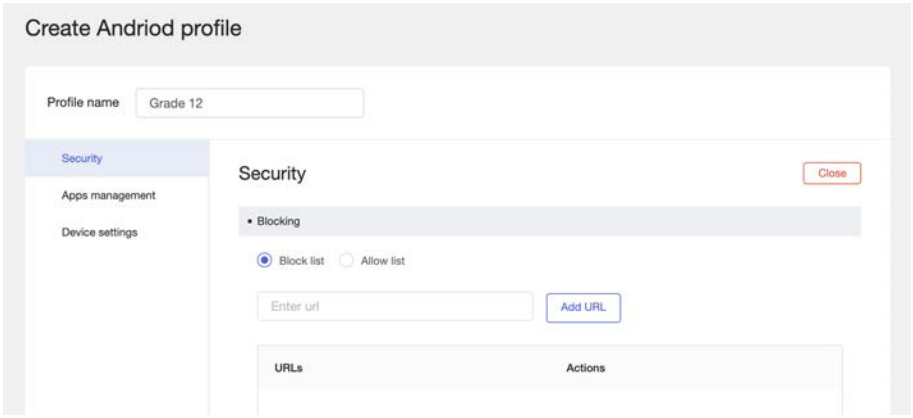
6. PROFILE

Use profile to set a batch of settings.
If one profile is set as ‘default’, the new device enrolled will auto-link with the profile.



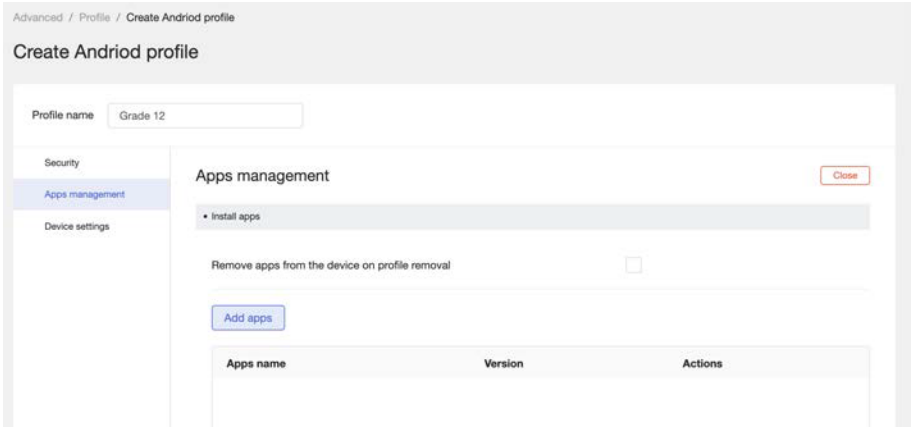
6.1 SECURITY - BLOCKING

Able to set Web block list and Allow list.
The blocklist is used to prevent a user from browsing certain URLs; Allow list is used to let users only browse certain URLs.

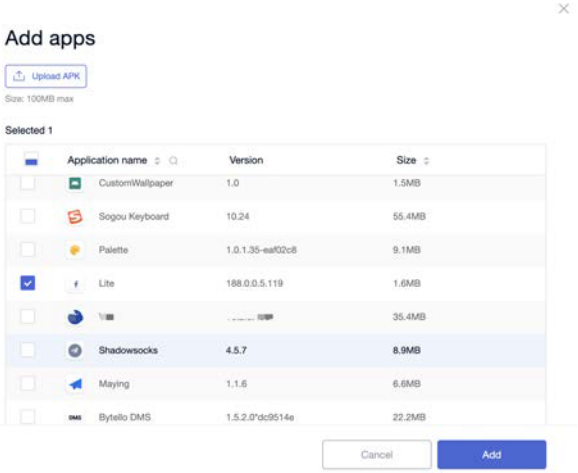


6.2 APP MANAGE

Create a list of apps to push apps to the associated devices.

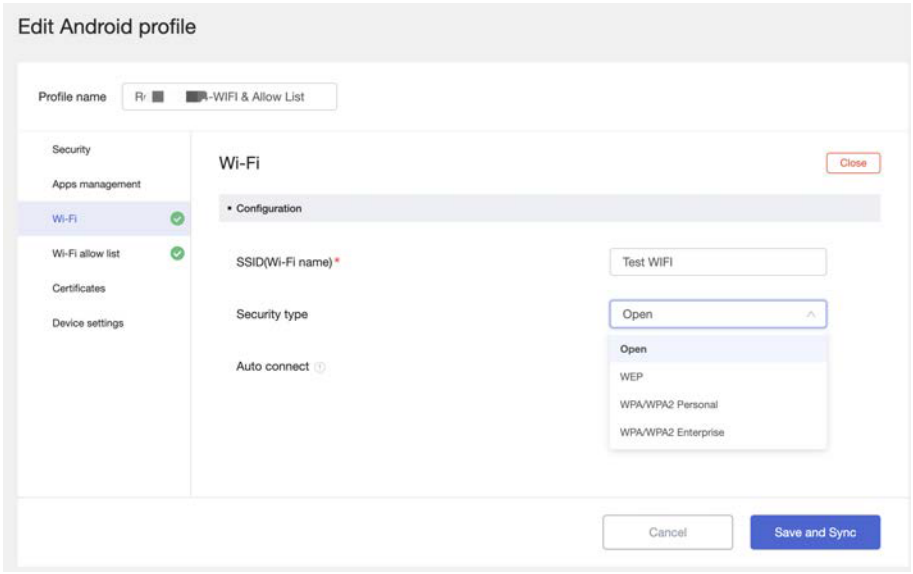


Select apps from Resource - Apps, or upload from local finder.



6.3 WI-FI

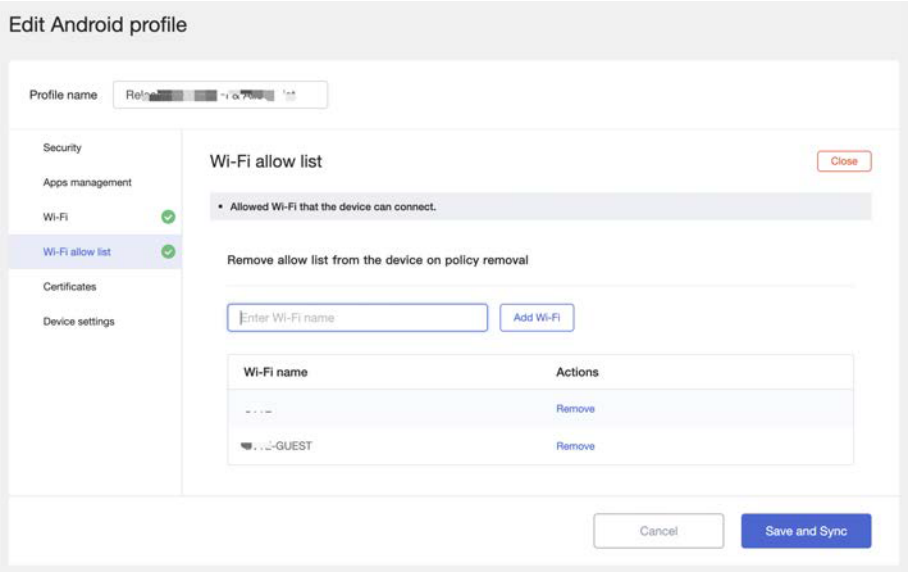
Set up wifi and send it to the associated devices.



Choose different security types and required information.

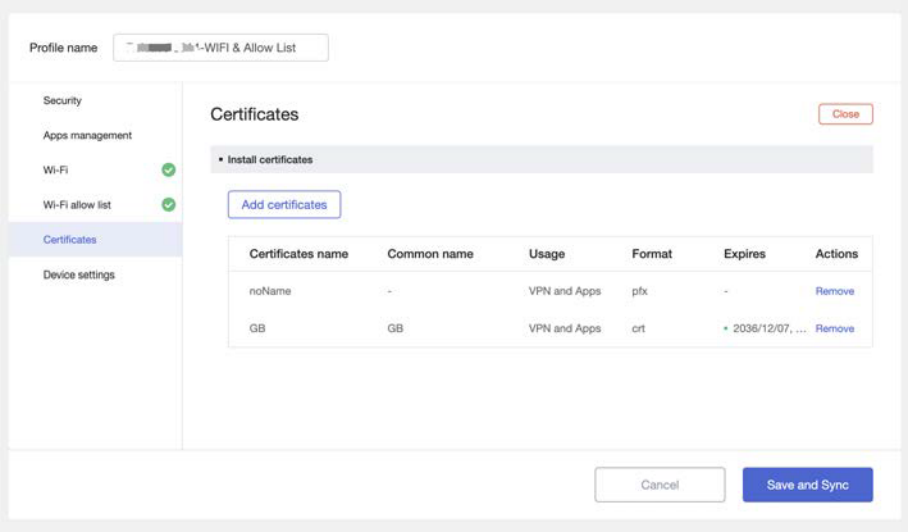
6.4 WI-FI ALLOW LIST

Set a Wi-Fi Allow list. Associated devices can only use WIFI configured in WIFI-Allow List.

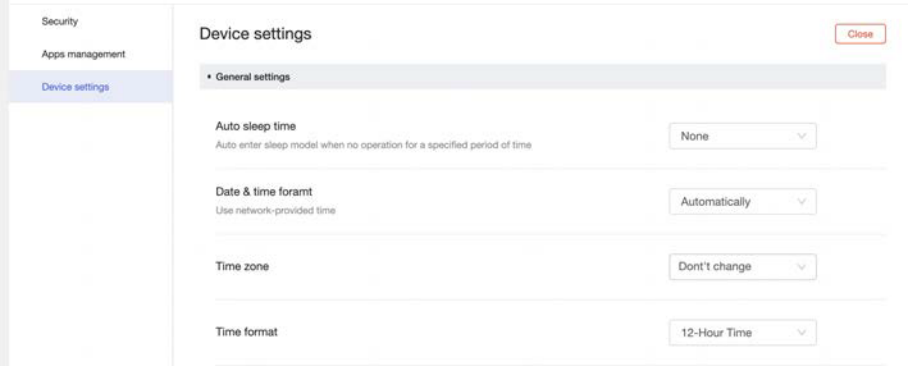


6.5 CERTIFICATE

Set a list of certificates and send it to associated devices.
Choose from Resource-Certificates or upload from local.

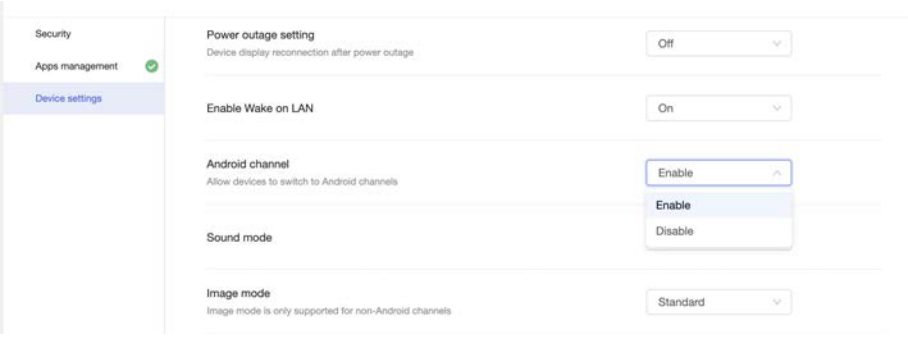


6.6 DEVICE SETTINGS



Auto sleep time
Auto sleep when there is no operation for a while.
Date & time format
Choose auto and the device will check the internet to set the date and time.
Timezone
Choose device timezone.
Time format
Define how date and time are displayed on the device. Choose from 12-hour clock and 24-hour clock.

No single shutdown
Automatic shutdown is when a device is detected to be inoperable for some time.



Power outage setting - Android only
There are three scenarios in which a device experiences an unexpected power outage and is plugged in again.
1. Off Power off and then power-up, the device remains off
2. On Power off and then power-up, the device will automatically power on
3. Last: Power off and then connected, the device back to the state before the power went out
After the instruction is sent, the device can receive the instruction within 24h of the instruction being sent. If more than 24h has not yet executed this instruction, it is determined to be a failure to execute.

Enable Wake on LAN
When this is On, the device will be able to receive the Power On command from DMS.

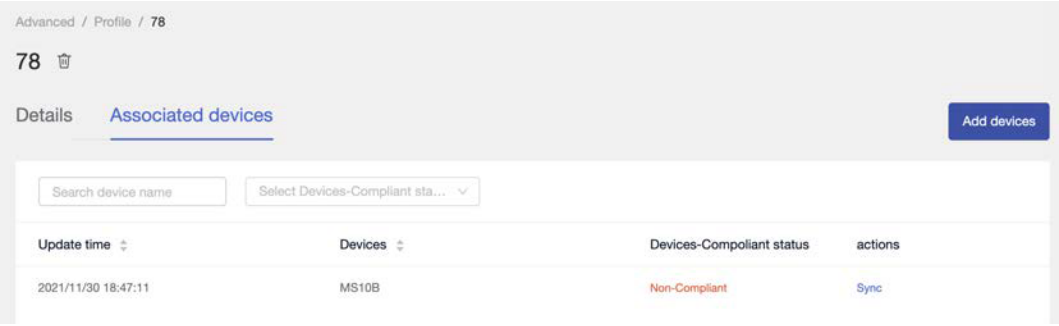
Android channel
When the is on, the device has Android channels, a dock bar, and can use Android applications such as finder, media player, browser, note, etc.
The target device does not have an Android channel when the switch is off and serves only as a channel display channel.
Instruction sending follows a downward asynchronous, and the device can receive instructions when it is powered on within 24h of the instruction being sent. If more than 24h has not yet executed this instruction, it is determined to be a failure to execute.

Image mode - Android only
Image mode refers to the device's screen display settings, which only support Execute Now. No feedback on the device, check advanced settings to check the current setting.

Sound mode - Android only
Sound mode, which refers to the sound mode of the device, supports only Execute Now. No feedback on the device, check advanced settings to check the current setting.

6.4 ASSOCIATE DEVICES

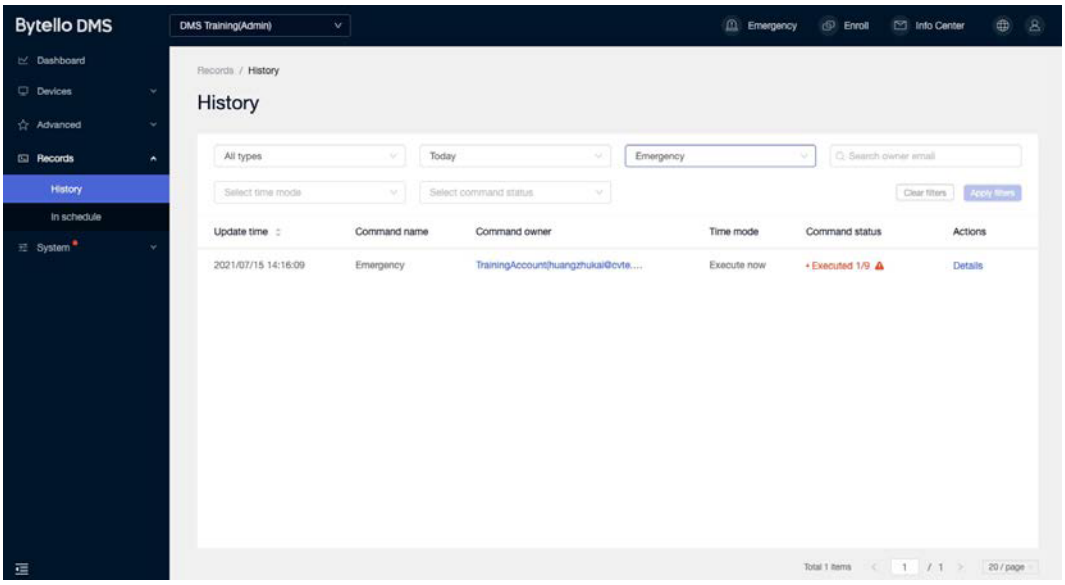
Associate device



Associate device to a Profile means the device will get all settings instantly.
Associated devices will check each setting current status and sync Profile to the device again.

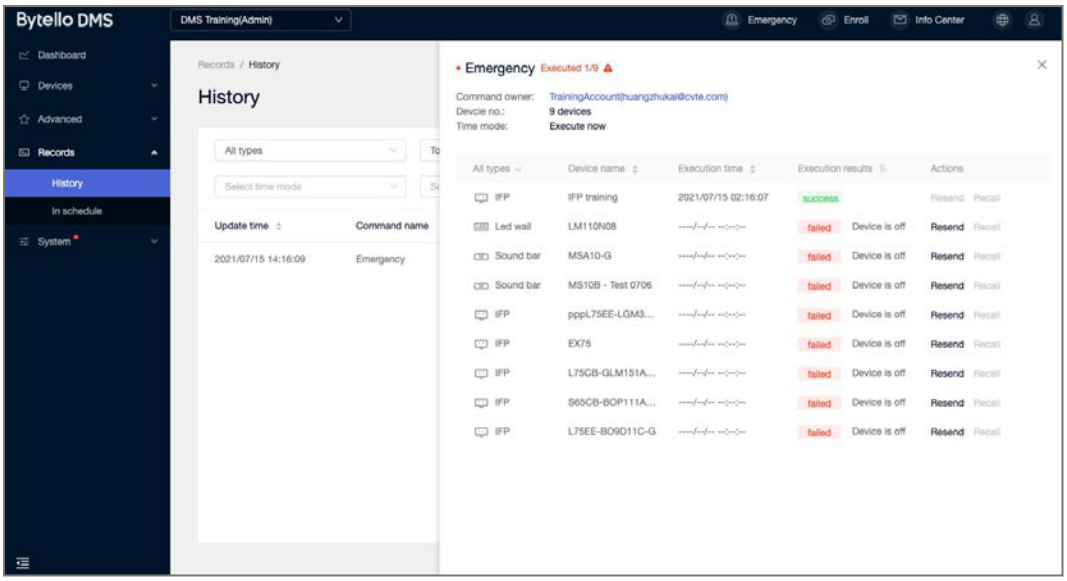
7. RECORDS

7.1 COMMAND HISTORY



Instructions that are executed immediately are sent and then entered into the Execution history list. Timed and the recurring instruction, when the set time is reached, the instruction enters the Execution history list.
The status of the instruction is Executed, and the score indicates the success of the instruction under the current instruction.

7.2 HISTORY DETAILS



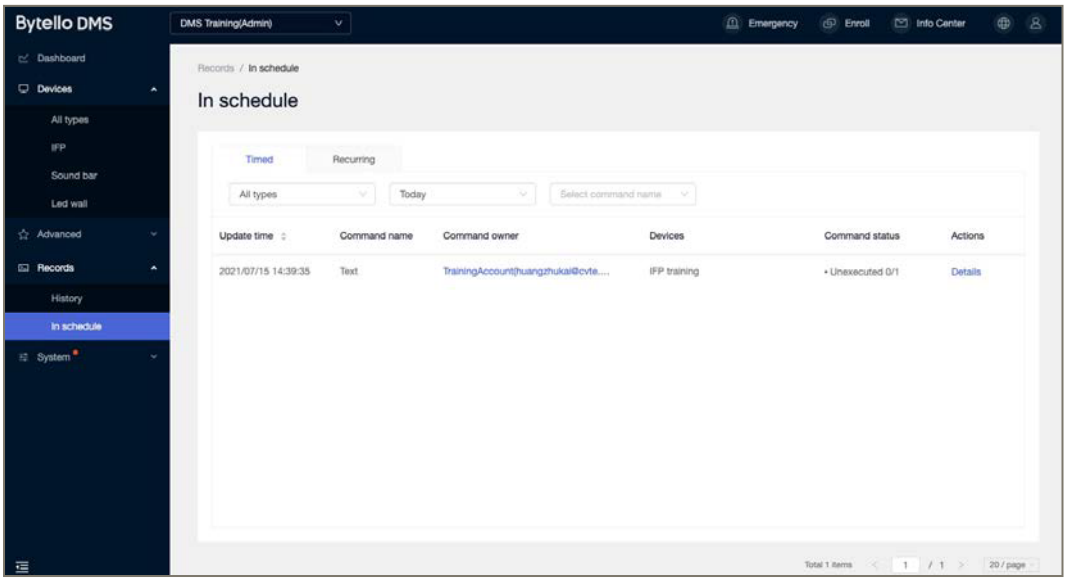
The entrance to the instruction details is available at Execution history as well as in schedule;
Under the details of the equipment execution record of the instruction, you can see the specific execution of each device under the instruction;

The specific Execution results are:
Success, this device has successfully executed this instruction;

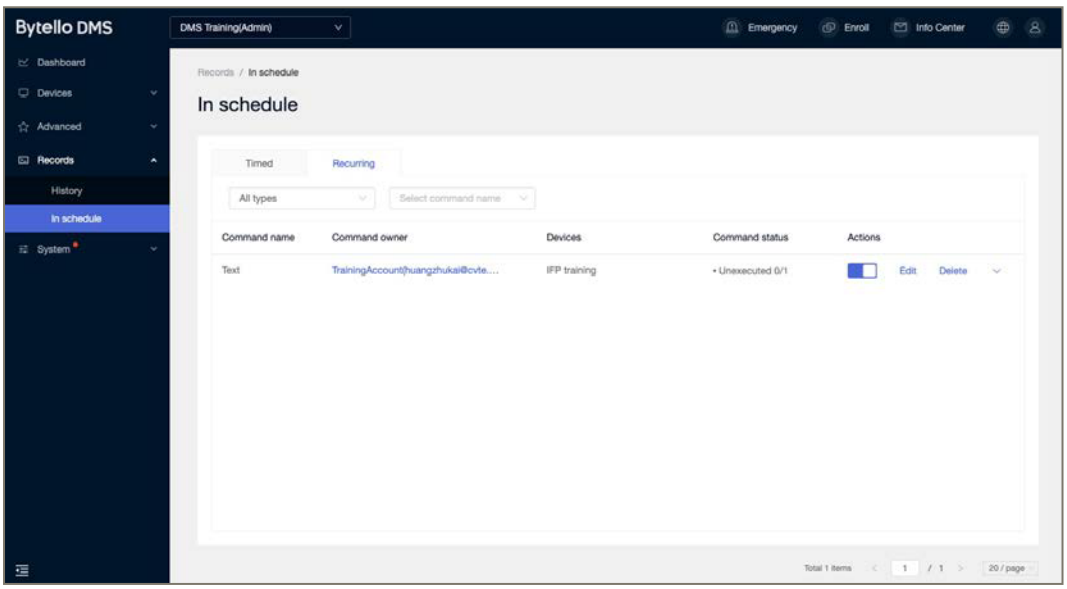
No action is supported;
Failed, this device failed to execute;
Support for the resend operation, i.e. re-issuing instructions for this device;
Recalled, the device has withdrawn the issuance of this directive;
No action is supported;
Wait, this device has not executed this instruction;
Support for recall operations, i.e. recall orders for devices that have not yet been executed;

7.3 COMMAND IN SCHEDULE

Timed and the recurring instruction, which enters the Command in schedule list when the set time is not reached. The instruction status is Unexecuted and the score indicates the success of the device execution under the current instruction.

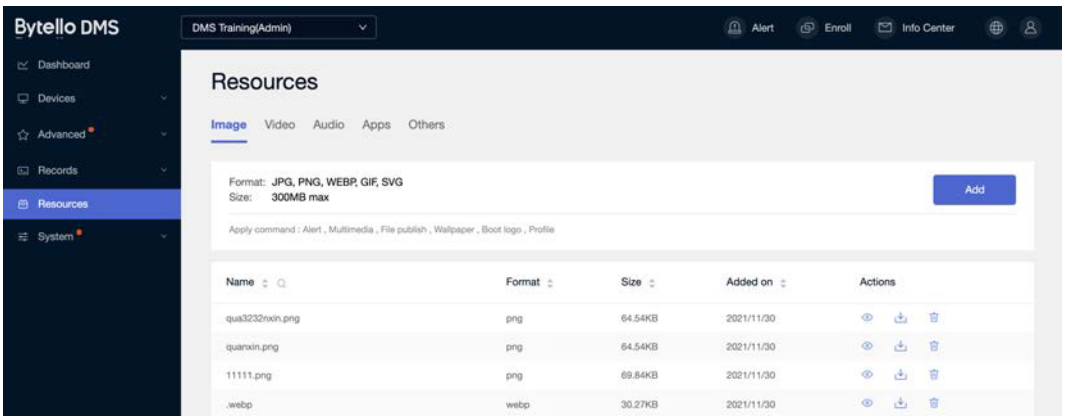


In the recurring command, the user can close, edit and delete.



8. RESOURCES

Upload and manage all organization resources in one place.



8.1 IMAGES

Upload images to your organization's resources. Choose these images when sending a command like Alert, Multimedia, Wallpaper, Boot logo, and file publish.

8.2 VIDEOS

All videos here can be selected from command-Multimedia and File publish.

8.3 AUDIOS

All audios and music can be selected from command-Bells.

8.4 APPS

Upload and manage all apps.

8.5 OTHERS

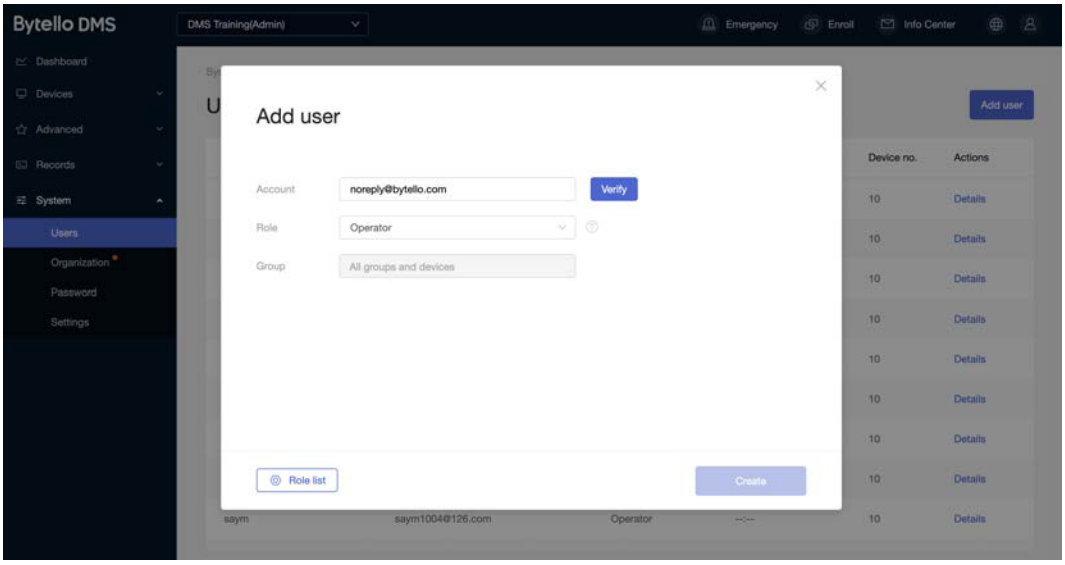
Any other files can be uploaded to organization resources and sent as File publish.

9. USER

9.1 ADD A USER

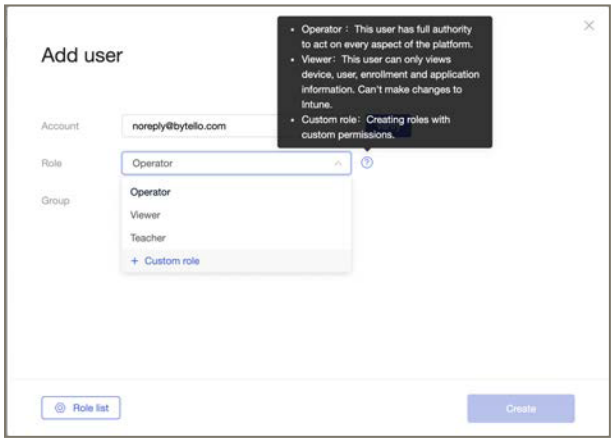
9.1.1 INPUT EMAIL ADDRESS

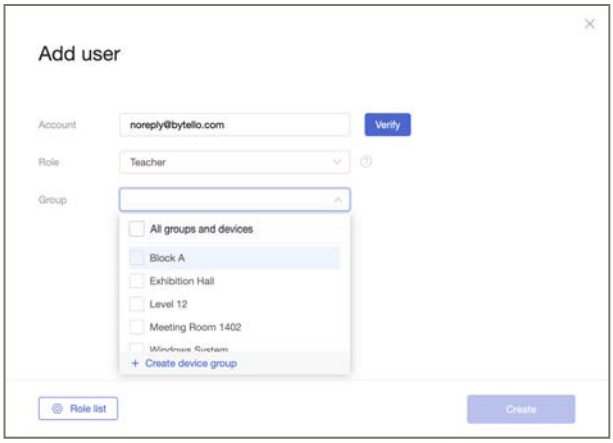
Enter an email address and verify if it already exists in Bytello User Center;
If this account does not exist in Bytello User Center, you need to set a password;
If this account already exists in Bytello User Center, this user already has a password;



9.1.2 CHOOSE ROLE & DEVICE GROUPS

Choose a pre-defined role, Operator or Viewer.
Once a custom role has been selected, choose existing device groups.





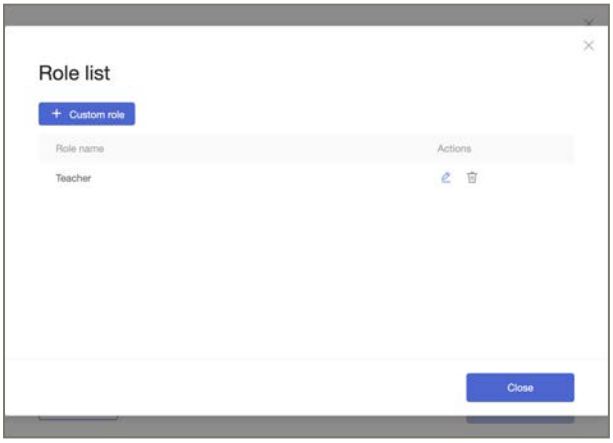
9.2 CUSTOM ROLE

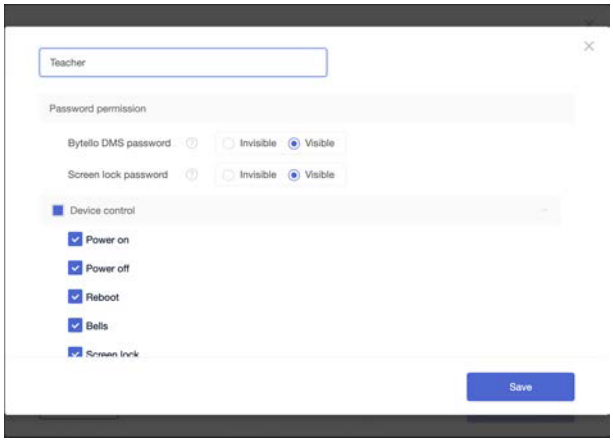
Create a role and set permissions.

Bytello DMS password:
This password is used to unenroll a device from a DMS client. If the switch is on, a user with this role can check the password on System -> Password

Screen Lock password:
This password is used to unlock a device during screen lock time. If this switch is turned on, a user with this role can check the screen lock password on System -> Password;

Command permissions
Select what command this role will have.

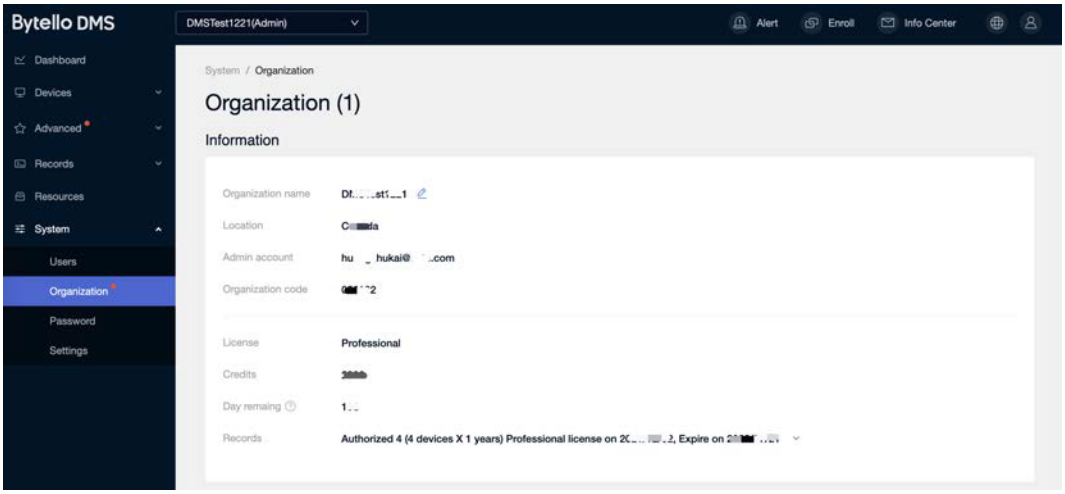




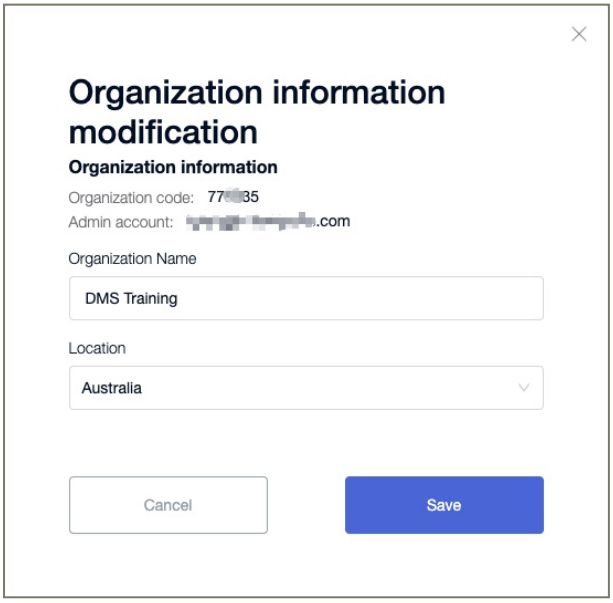
10. SYSTEM

10.1 ORGANIZATION

Basic information:
Organization name;
Location, the area where the organization is located;
Admin account administers email address;
Organization code, which is self-generated by the system upon completion of the organization registration and is non-changeable;
License information includes license type, credits left, days remaining, and license records.



Change Organization Name and Location:



10.2 PASSWORD

BYTELLO DMS LOCK

The default is 000000
Can be turned off/on, when the switch is on, admin can set a 6-digit password;
When unenrolling a device from the client, the user needs to enter the correct password to operate;

SCREEN LOCK

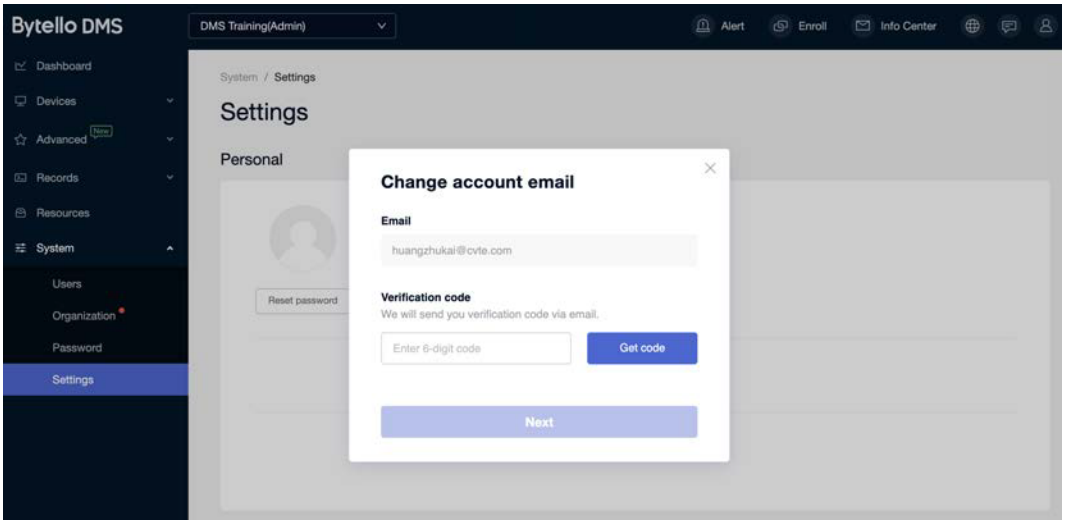
The default is 000000

The default is permanently on, admin can set a 6-digit password;
Users can enter a lock screen password to unlock a device for some time by entering the correct password.

10.2 PERSONAL SETTINGS

CHANGE ADMIN EMAIL

Go through verification to change the admin's login email address.
*This is an ADMIN-ONLY function.



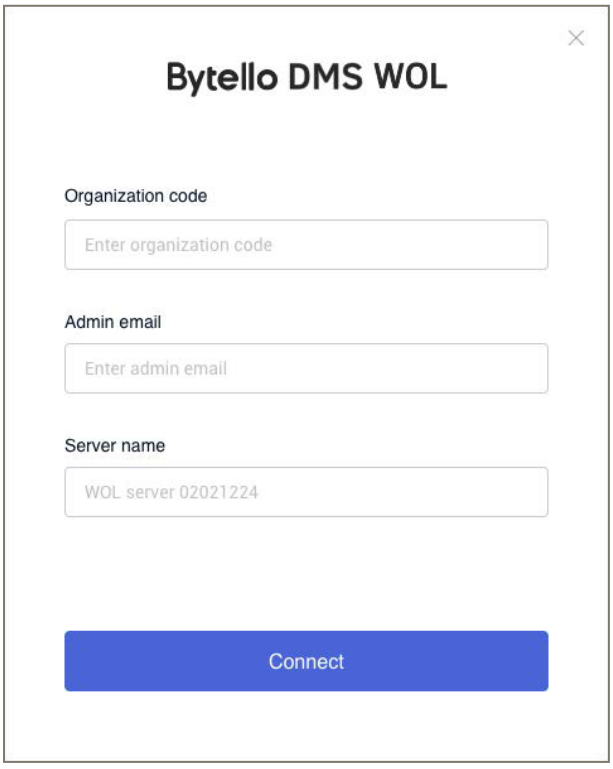
11. WOL SERVICE

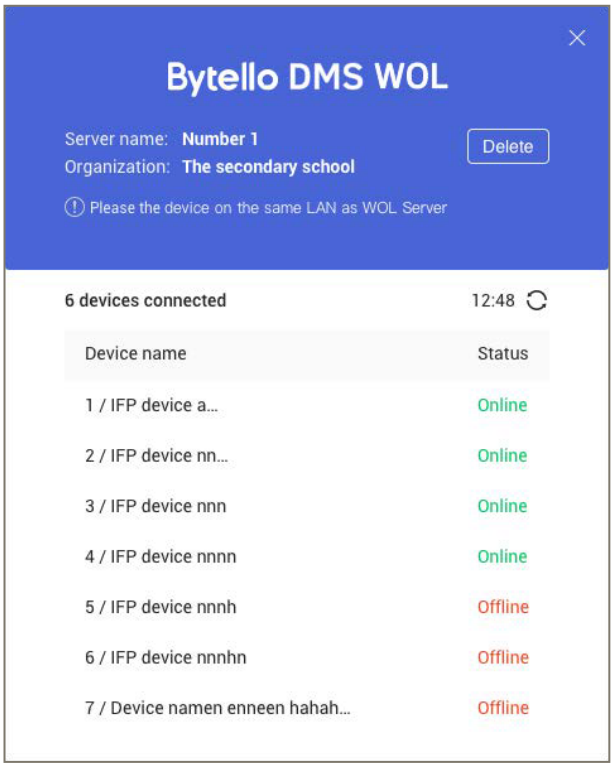
11.1 SETUP BYTELLO WOL SERVICE

The Power-on command will work when the device is connected to a Bytello WOL Service.

Step One:
Download and install Bytello WOL Service on a PC system; **make sure this computer is under the same network as the controlled device.**

Download Bytello WOL Service here: http://www.bytello.com/dms



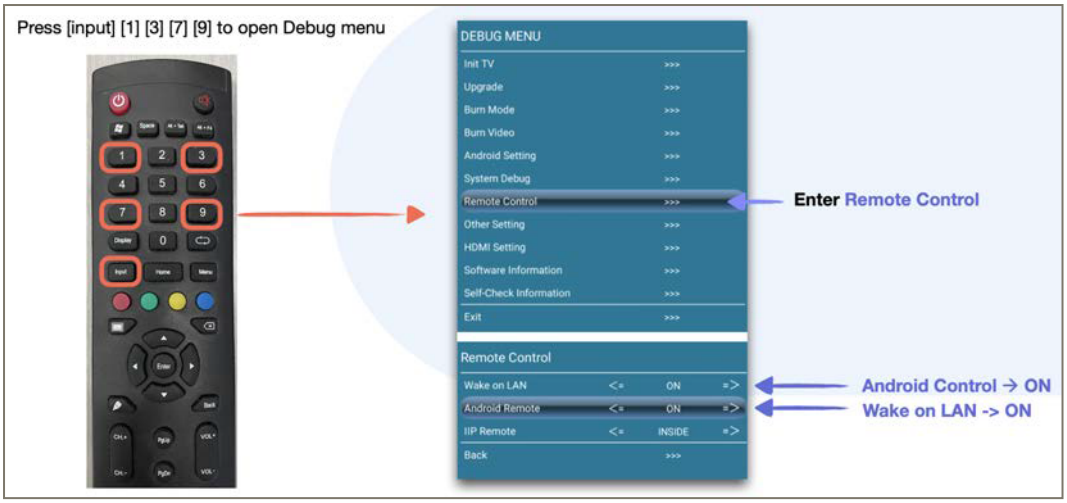


Step Two:
fill in the Organization code and Admin email to connect **this** WOL server to your organization;

Step Three:
Input Server name to distinguish various WOL servers within one organization.

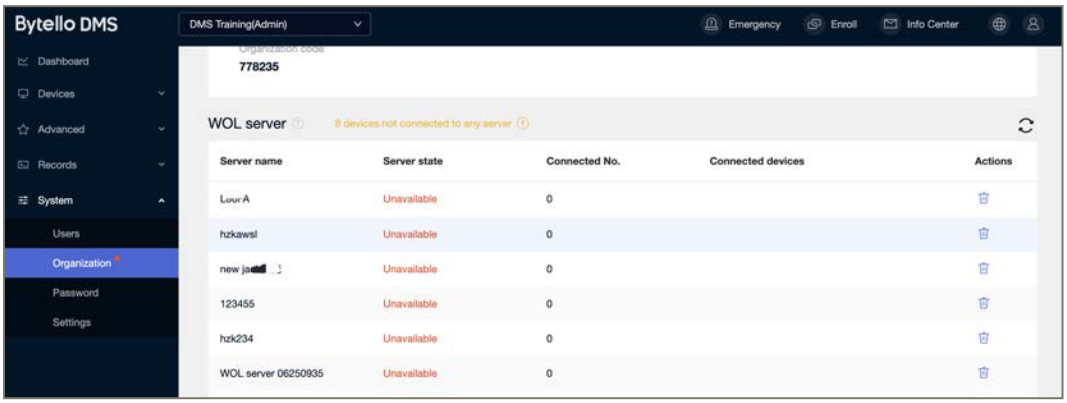
Step Four:
Once the WOL server is connected to the organization, it will start to search devices around it and present a WOL-connected-device-list, both on the Bytello WOL service client and
One organization can have various WOL servers.

For Bytello certified devices, please make sure Wake on LAN is open



11.2 WOL SERVER ON WEB

ONLY ADMIN CAN SEE [WOL Server] on page System -> Organization.



Devices without a WOL server connection will fail Power on command；

Server state, server connection state;
Connected devices, the number of devices connected to this server;
Actions, which supports the removal of this wake-up server;