

USER GUIDE

BYTELLO DMS- DEVICE MANAGEMENT SYSTEM

Update:2021 Nov

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1. INTRODUCTION

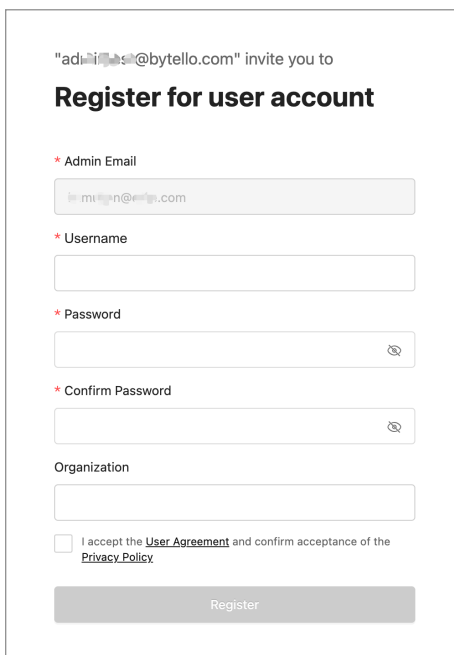
1.1 INTRO

Bytello DMS is a web-based software 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 mail inbox of bytello account invitation to get the unique registration link.

Step two: Fill registration form.



"admin@bytello.com" invite you to

Register for user account

* Admin Email

* Username

* Password

* Confirm Password

Organization

I accept the [User Agreement](#) and confirm acceptance of the [Privacy Policy](#)

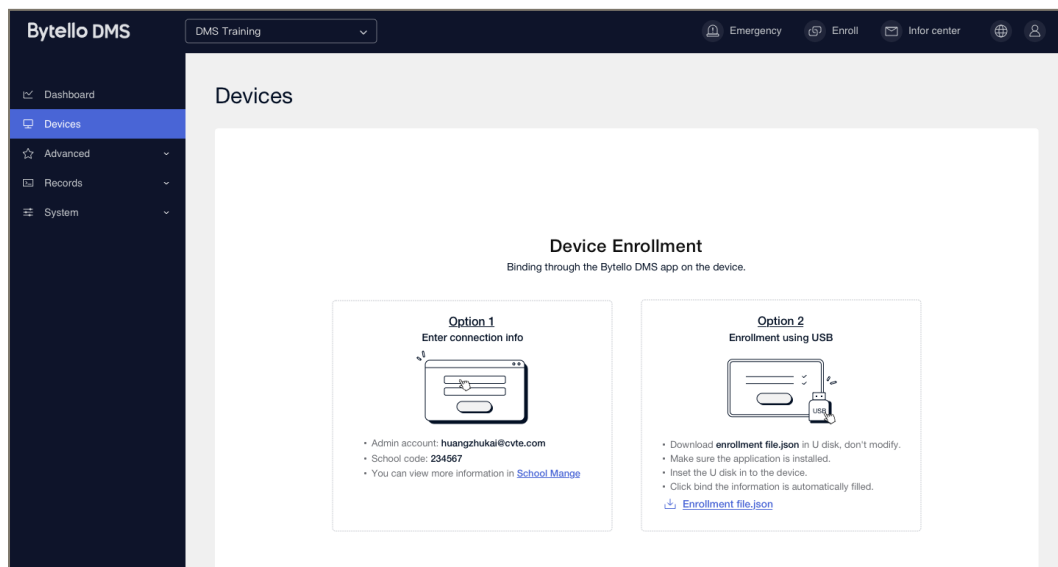
Register

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

1.2 DEVICE ENROLL

Enroll method

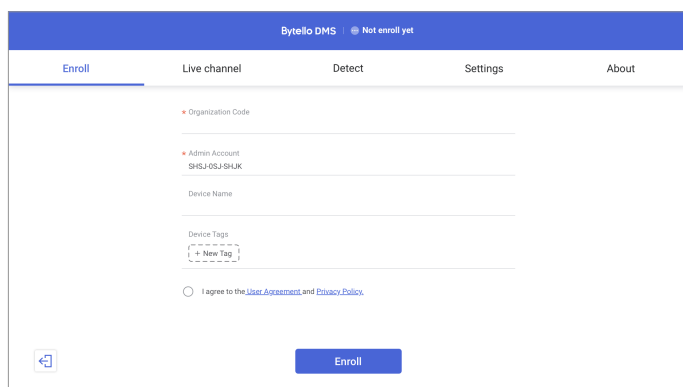
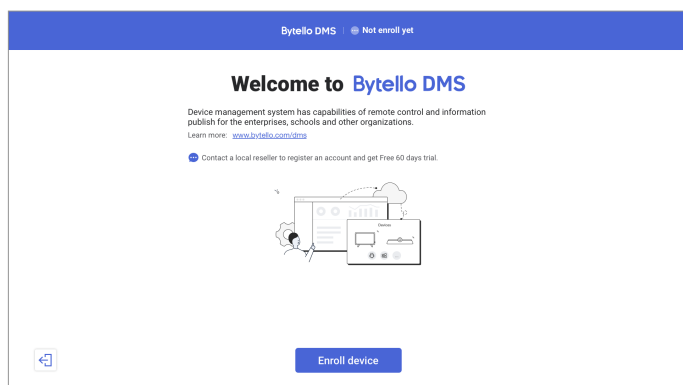
Login to dms.bytello.com, Click [Enroll] on the top bar to see enroll method.



Fill in information on client

Input 'Organization code' and 'Admin account' on Client to enroll this device to the organization.

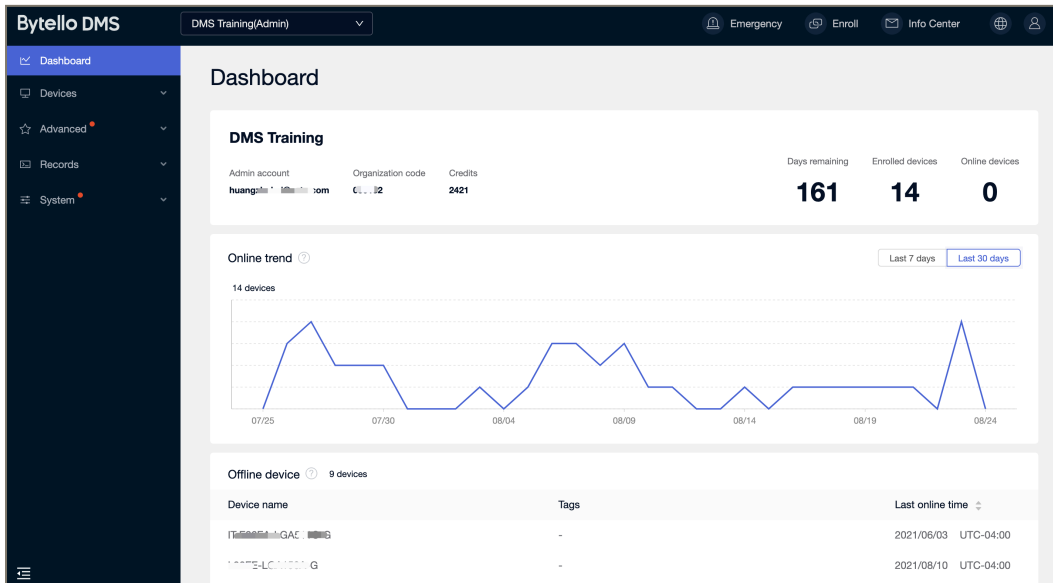
Download DMS Client here: <http://www.bytello.com/dms>



1.3 DASHBOARD

1.3.1 ORGANIZATION INFO

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



Credits is the total credit one organization have.

Enrolled devices is the number of devices enrolled so far, 1 enrolled device cost 1 credit 1 day.

Days remaining is the time length that this account have to access to the product.

Online devices is the number of device currently online at the moment.

1.3.2 ONLINE TREND

To check devices' online & offline status for 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

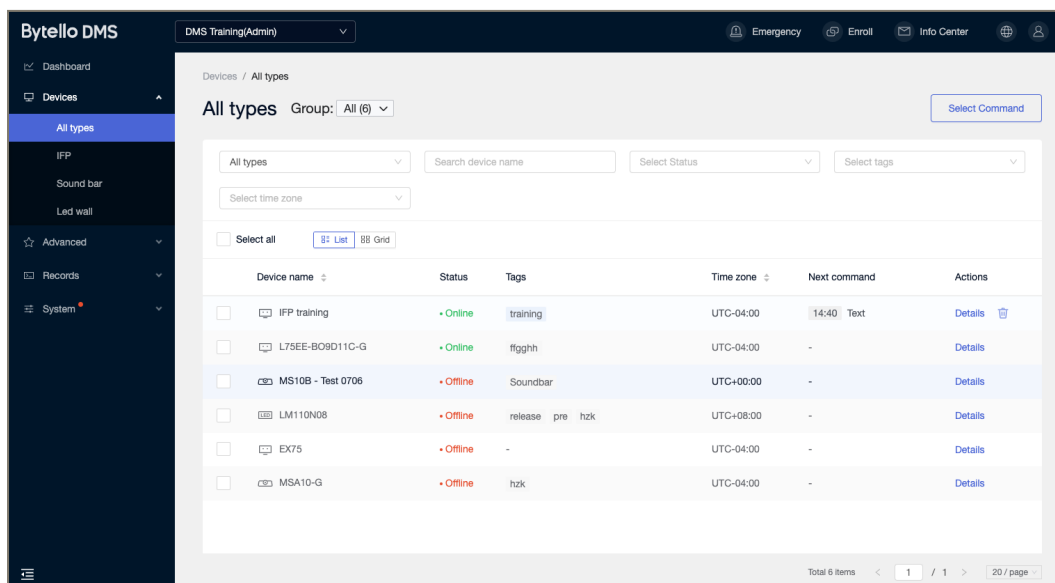
2.1 DEVICE VIEW

2.1.1 LIST VIEW

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

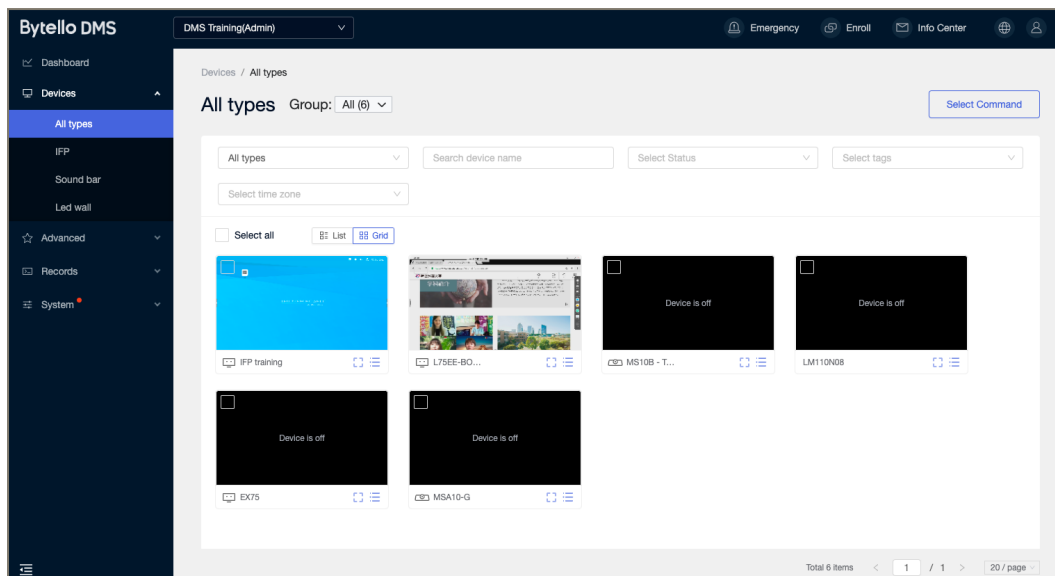
Status Online means the device is currently connected with DMS.

Status Offline means the device is not connected with DMS.



2.1.2 GRID VIEW

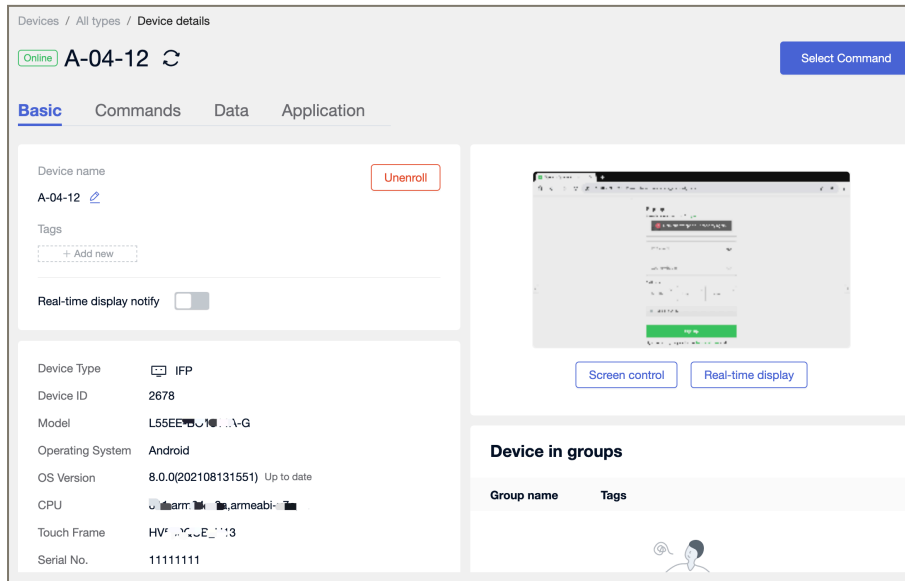
Grid view showcases device screenshots.



2.2 DEVICE DETAILS

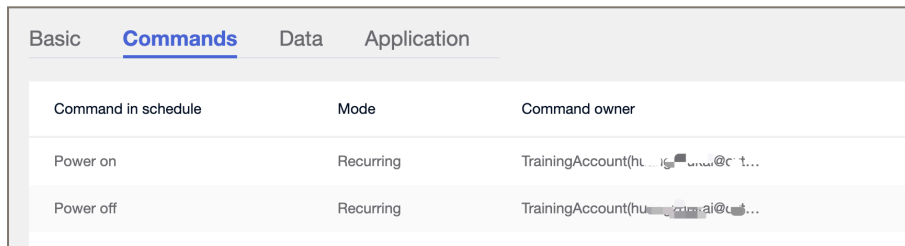
2.2.1 BASIC

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



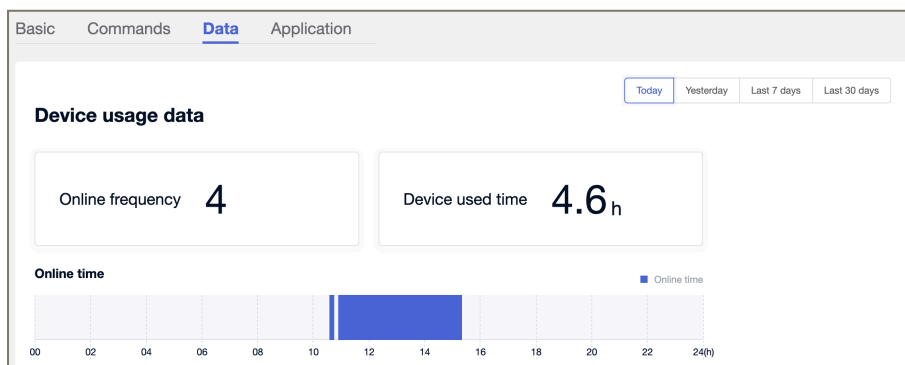
2.2.2 COMMANDS

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



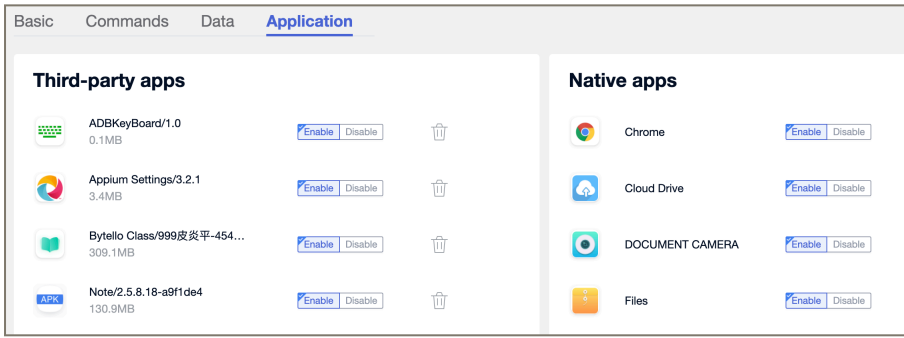
2.2.3 DATA

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

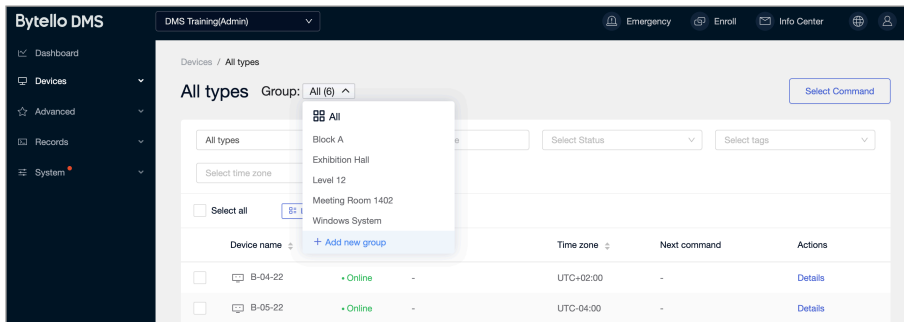
Find out applications installed on the device. Enable, disable or uninstall applications.



2.3 DEVICE GROUP

2.3.1 CHOOSE GROUP & ADD NEW

Device groups can be accessed on the device list.

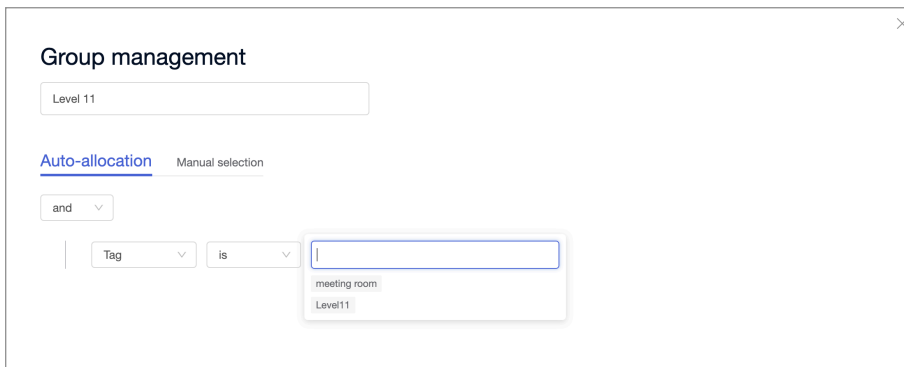


2.3.2 GROUP: AUTO-ALLOCATION

Using 'and' 'or' conditions to select devices into a group.

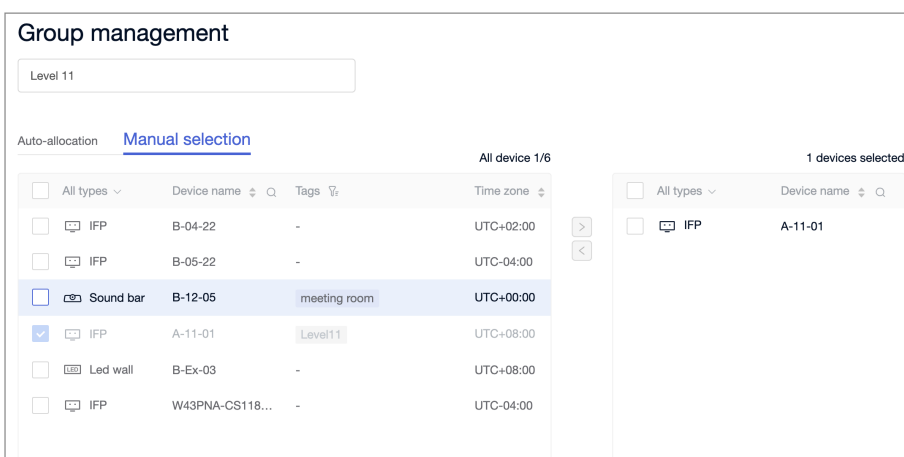
Devices that meet the conditions will automatically enter the group.

Devices that no longer meet the conditions will automatically be removed from the group.



2.3.3 GROUP: MANUAL SELECTION

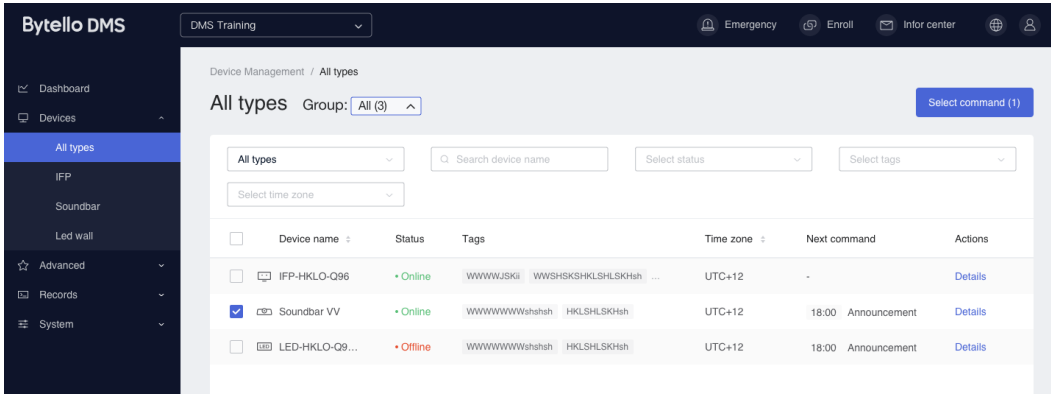
Manually select devices and create a device group



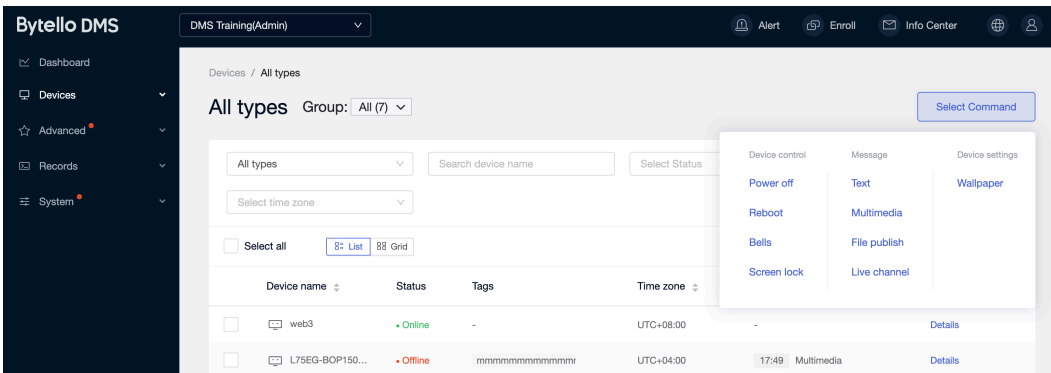
3. SEND A COMMAND

3.1 SELECT & SEND

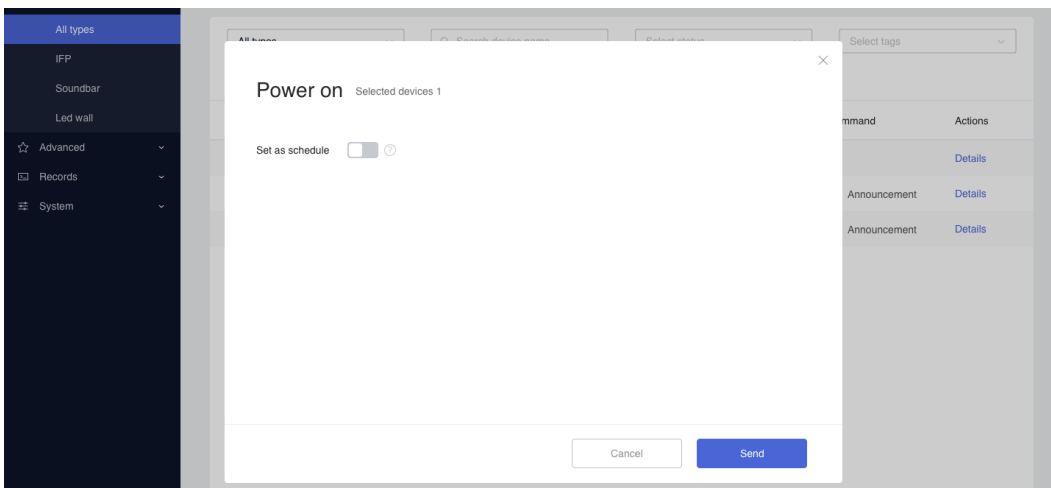
Step one: select device



Step two: select a command;



Step three: edit and send out command;



Editing option: Set as schedule

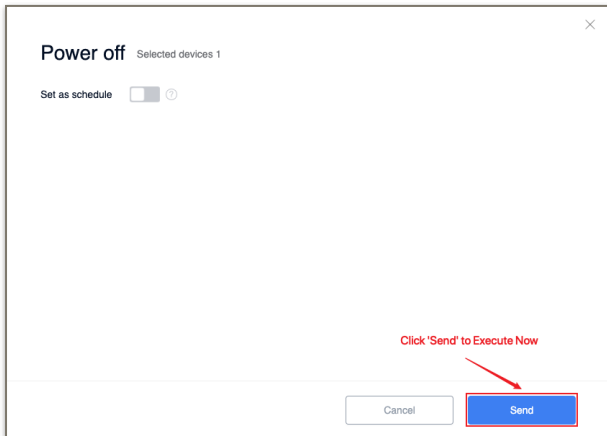
Time alignment: according to the selected device, the device located in the time zone (UTC max) display

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

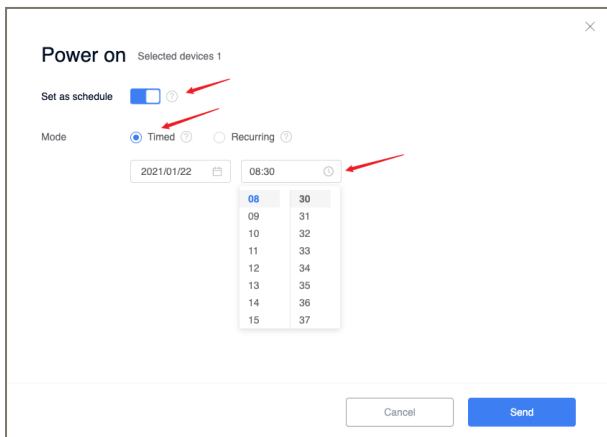
3.2.1 EXECUTE NOW

Click 'Send' directly to execute the command immediately.



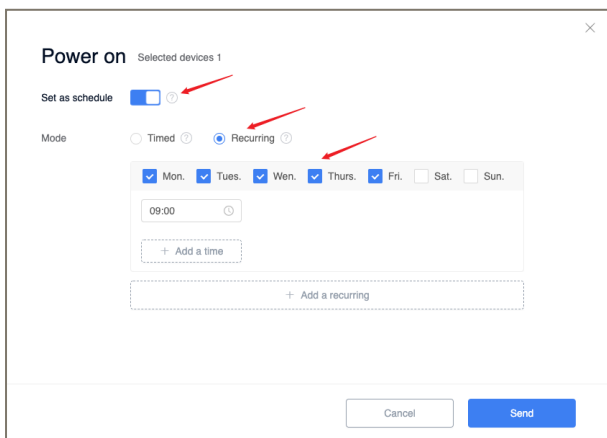
3.2.2 TIMED MODE

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



3.2.3 RECURRING MODE

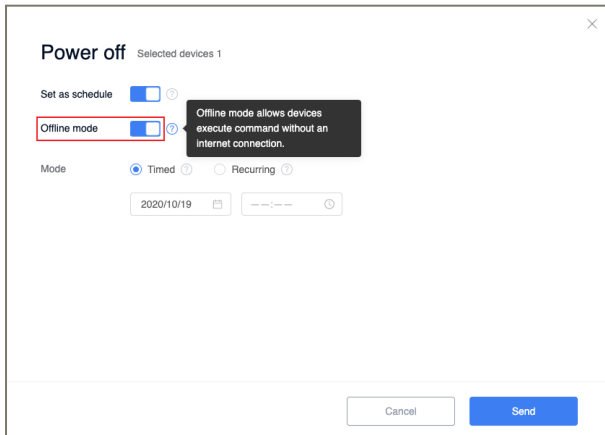
Select a specify periodic, and set a time fence for commands.



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 A 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 with 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 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 on/off at their own 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 device received 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 received by device, if the device is connected to a Bytello WOL service, the execution results will success.

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 do not want to restart, you can reject this shutdown instruction. If there is no click rejection within 10s, the restart will be performed.

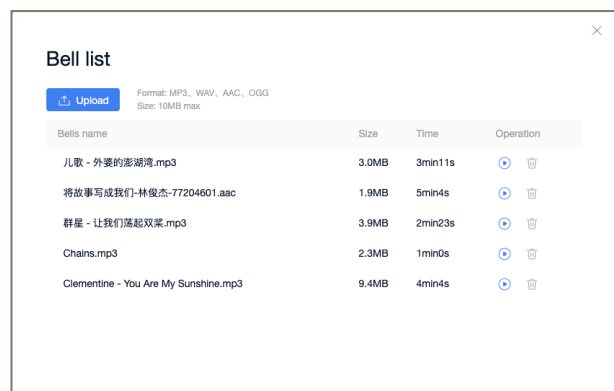
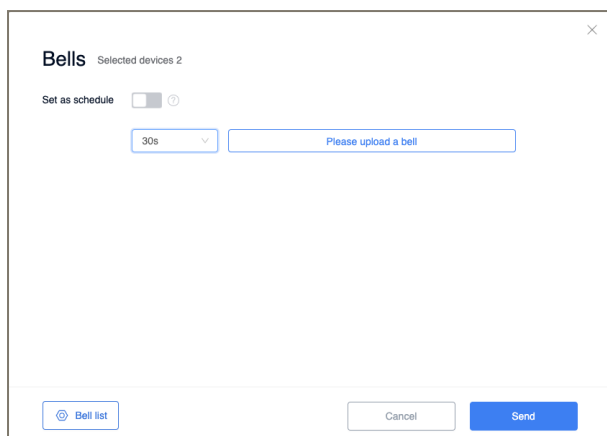
Send a Power-off command to the shutdown device, and the execution results in a failure.

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, 20s, 30s, 60s and paly whole song.

Supports local upload of music files. Successfully uploaded files are stored in bell list.



4.1.5 SCREEN LOCK

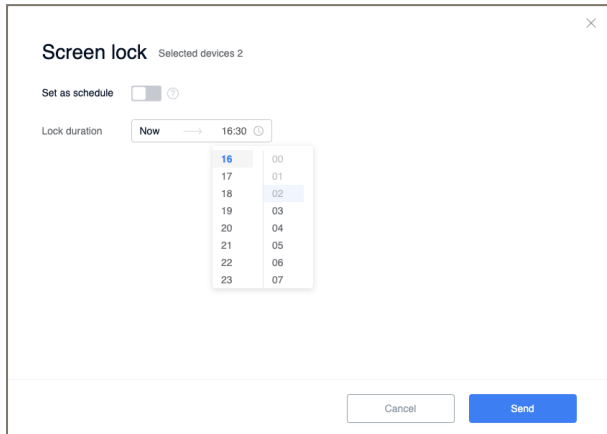
Three time modes are supported;

Screen lock feature that supports locking a specified device for a certain period of time.

The screen lock function is sent

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

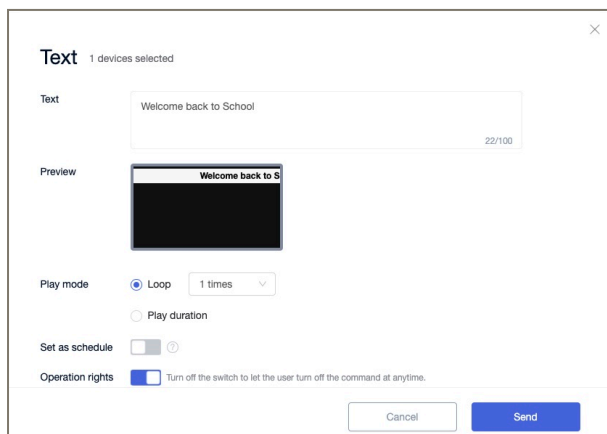
Find the screen lock on the > Password manage page and set a 6-digit password

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;

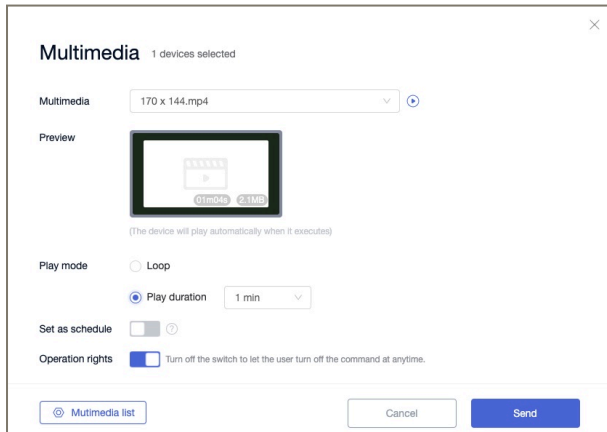
When Operation rights open, anyone in front of the device can turn off the text;

4.2.2 MULTIMEDIA

Three time modes supported

Multimedia support the release of information in image and video formats. A window appears on the target device with a close button.

When operation rights is on, anyone infant of the device can close the multimedia message.



4.2.3 FILE PUBLISH

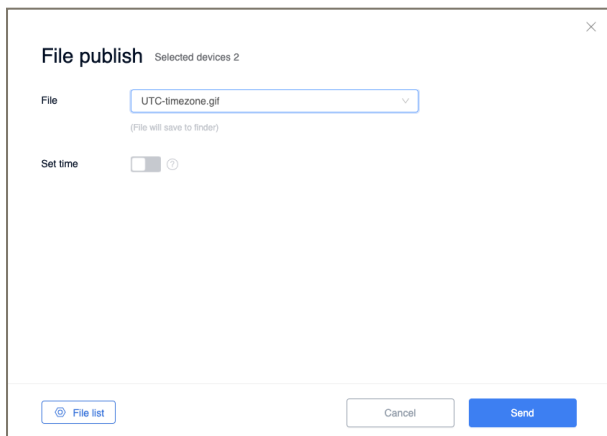
Send now and timed send is supported. Recurring mode sending is not supported.

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 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 File list



4.2.4 ALERT

Introduction

Alert will send immediately;

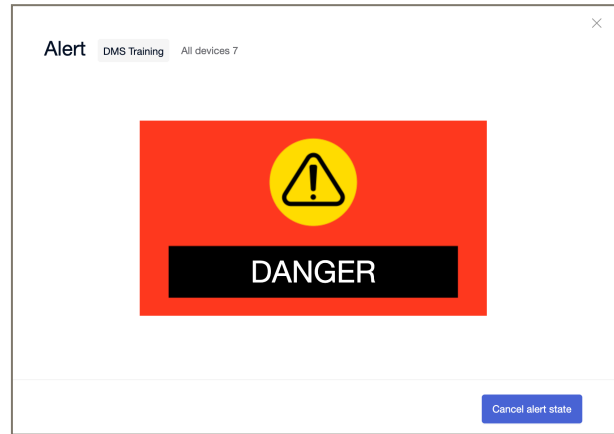
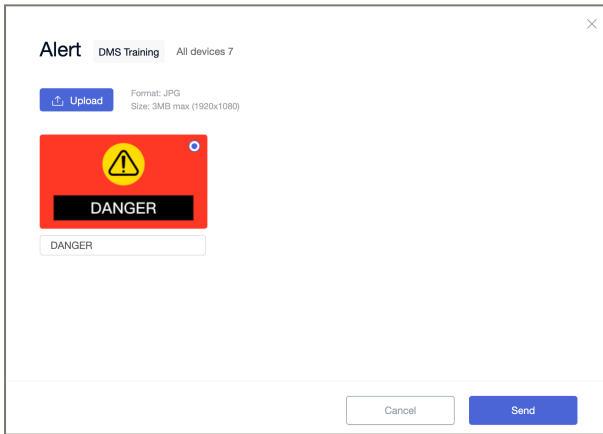
Alert has a preset warning template that can be sent directly after changing the text in the template;

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 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

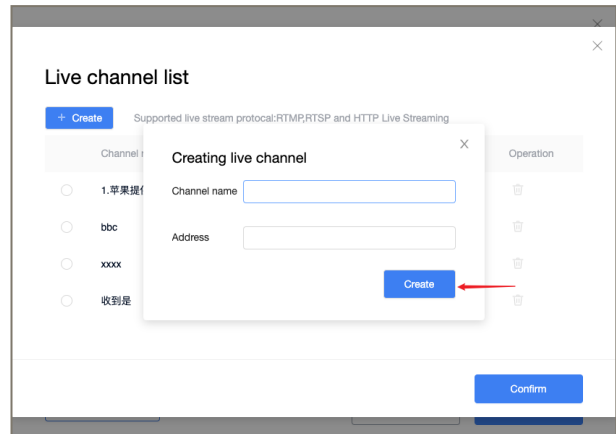
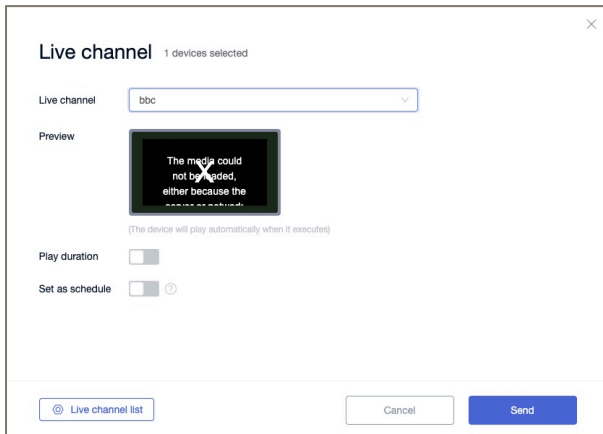
To set up a live channel and broadcast it on the devices. Support format

RTMP/RTSP

Ex: <rtmp://example.example/live/example>

Apple HLS (HTTP Live Streaming)

Ex: <http://ivi.example.edu.example/hls/example.m3u8>



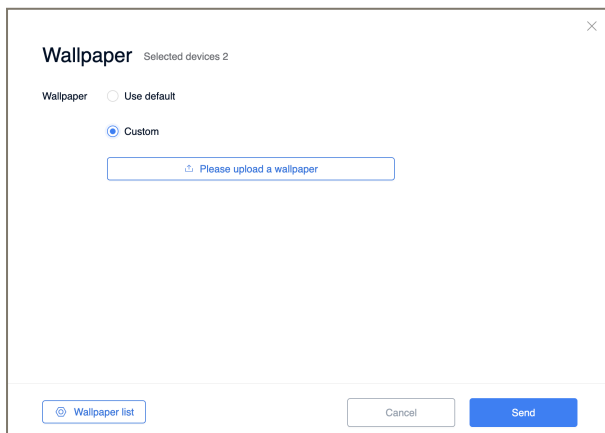
4.3 DEVICE SETTINGS

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;



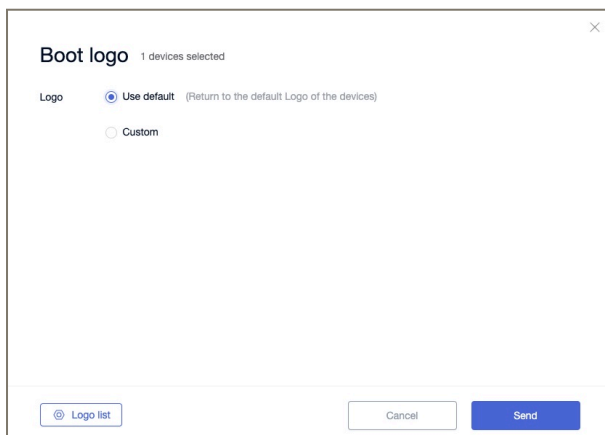
Instruction sending follows a downward asynchronously, and the device can receive instructions when it is powered on within 72h of the instruction being sent. If more than 72h has not yet executed this instruction, it is determined to be a failure to execute.

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;



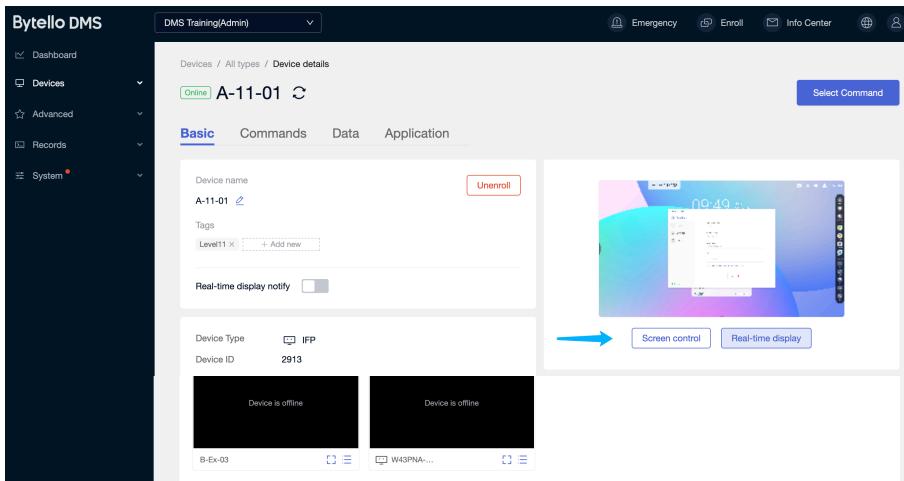
Instruction sending follows a downward asynchronously, and the device can receive instructions when it is powered on within 72h of the instruction being sent. If more than 72h has not yet executed this instruction, it is determined to be a failure to execute.

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



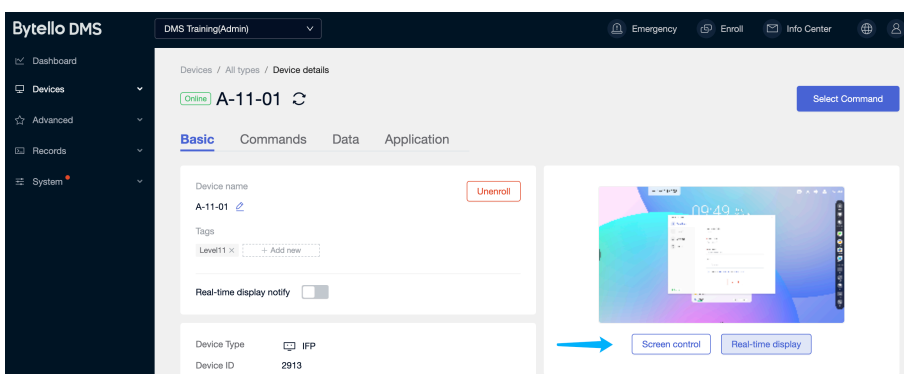
Real-time display mode

Once entered, user will be able to check 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

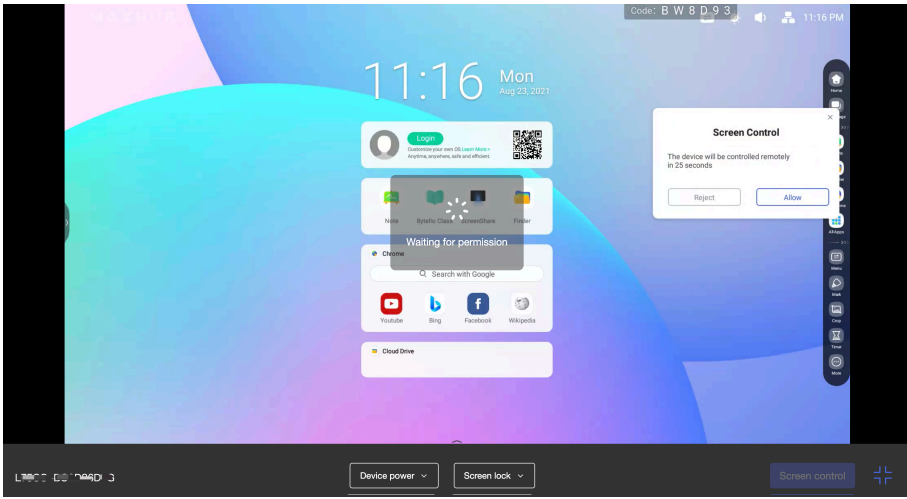
Screen control mode

Enter Screen control session require device permission. User of the device need to [Allow] this remote screen control session.

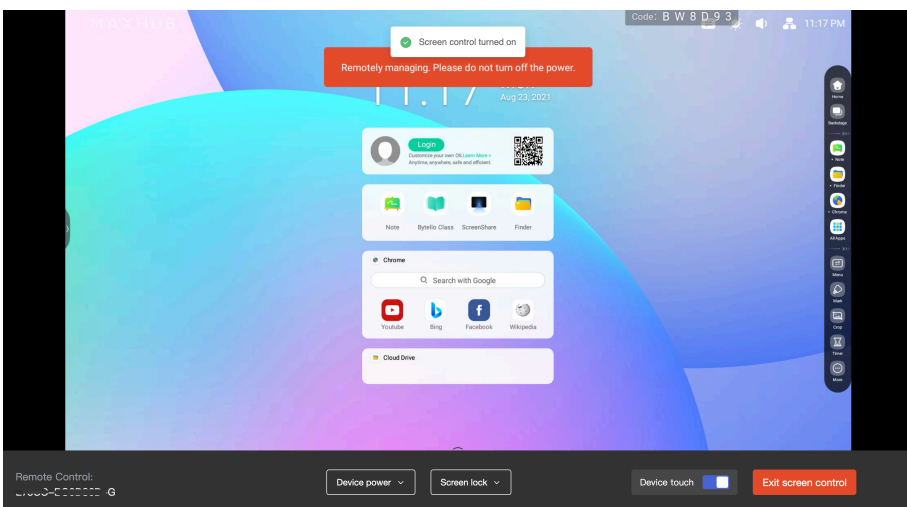
If user of the device [Reject] the session. IT admin will be able to take control.

If there is no response in 30s, device will enter remote screen control session without permission.

Waiting for permission



Remote screen control session entered

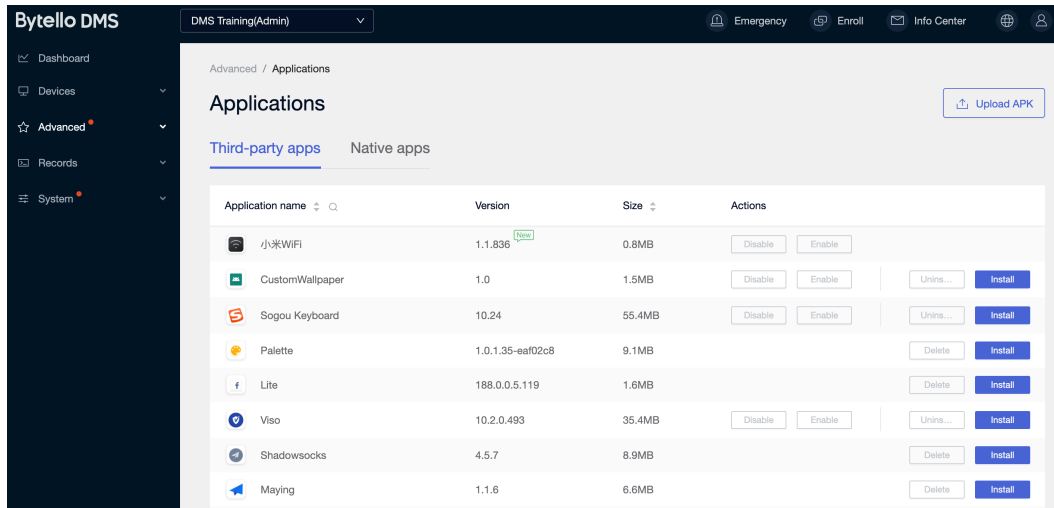


5. ADVANCED MANAGE

5.1 APPLICATIONS

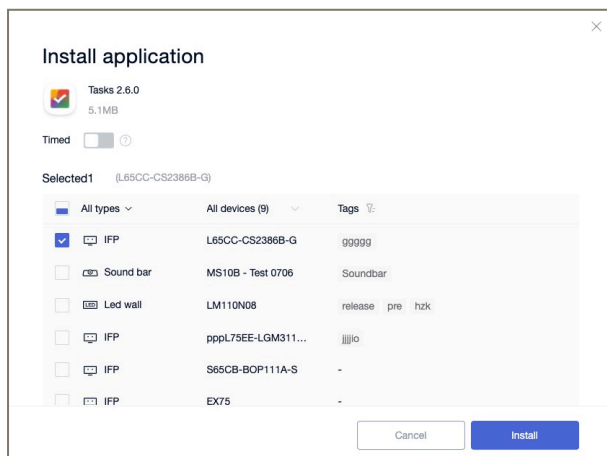
The portal is in the navigation bar-functions, supports Execute Now and Timed time modes, supports local upload.

On the app list, select app, then selects the target action, and send to the targeted device.



What you can do with 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;

The list of channels will show: 1- all the devices through the various channels have or not, 2- power on the current channel of the equipment;

Select the target device first, and then 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;

The screenshot shows the 'Input switch' page in the Bytello DMS interface. The page title is 'Input switch' and the group is set to 'All (9)'. There are 6 devices selected. The 'Switch' button is highlighted. The table below shows the device details and their channel status.

Device name	Tags	ANDROID	PC	HDMI1	HDMI2	HDMI3	VGA1	TYPE_C1	AV
L65CC-CS2386B-G	99999	🔌	-	🔌	🔌	🔌	🔌	🔌	-
pppL75EE-LGM311A...	jjjlo	🔌	-	🔌	🔌	🔌	🔌	-	-
S65CB-BOP111A-S	-	🔌	-	🔌	🔌	🔌	🔌	-	-
EX75	-	🔌	-	🔌	🔌	🔌	🔌	-	-
L75CB-GLM151A-G	-	🔌	-	🔌	🔌	-	🔌	-	?
L75EE-BO9D11C-G	ffgghh	🔌	🔌	🔌	🔌	🔌	🔌	-	-
MS10B - Test 0706	Soundbar	-	-	-	-	-	-	-	-

5.3 FIRMWARE UPADTE

Once a new firmware released and detected by the device. The notification will show in DMS - Firmware update.

Click [Update all] to send out command. The command will not expire.

The screenshot shows the 'Firmware update' page in the Bytello DMS interface. The page title is 'Firmware update' and there is an 'Update all (5)' button. The table below shows the device details and their firmware status.

Device name	Model	Status	Current version	Latest version	Actions
EX75	EX75	Offline	202106281414		Up to date
IFP training	L65CC-CS2386B-G	Online	202107141041		Up to date
LM110N08	LM110N08	Offline	202102081441		Up to date
MS10B - Test 0706	MS10B	Offline	202107141044		Up to date
MSA10-G	MSA10-G	Offline	202101151635		Up to date

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.

Bytello DMS

DMS Training/Admin

Emergency Enroll Info Center

Advanced / Software update

Software update

Android Windows

Latest version: V11.8.5
Release date: 2021/07/08 [Update all \(8\)](#)

*Total 8 devices 8 devices need to be update to V11.8.5

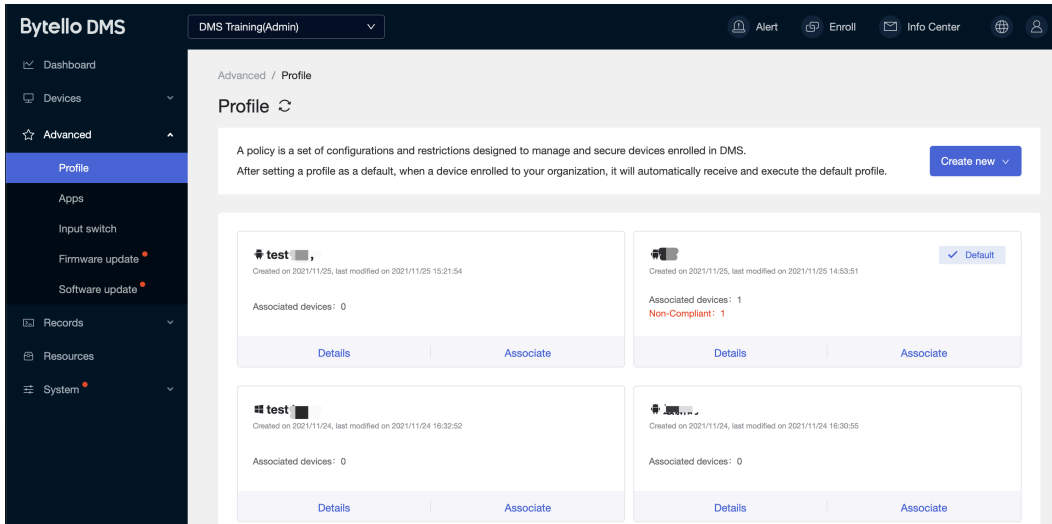
All types All group Select Status Search device name

Device name	Status	Current version	Latest version	Actions
Lenovo L11C...	Offline	V1.8.2	V1.8.5	Update
Lenovo D1...	Offline	V1.8.5	V11.8.5	Update

6. PROFILE

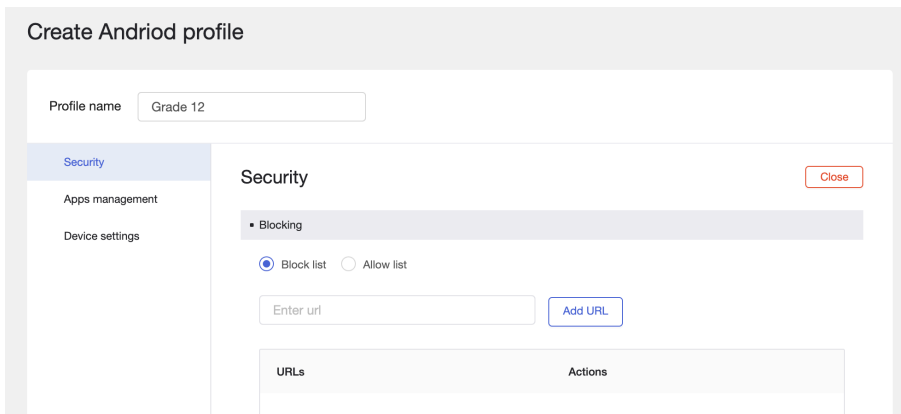
Use profile to set a batch of settings.

If one profile set as 'default', new device enrolled will auto link with the profile.



6.1 SECURITY - BLOCKING

Able to set Web block list and Allow list.



6.2 APP MANAGE

Set a list of apps.

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

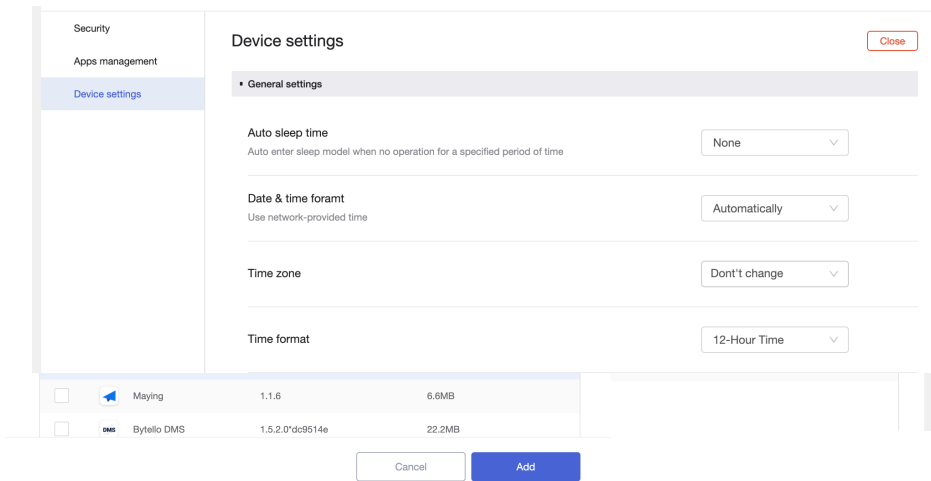
6.3 DEVICE SETTINGS

Auto sleep time

Auto sleep when there is no operation for period of time.

Date & time format

Choose auto and device will check internet to set date and time.

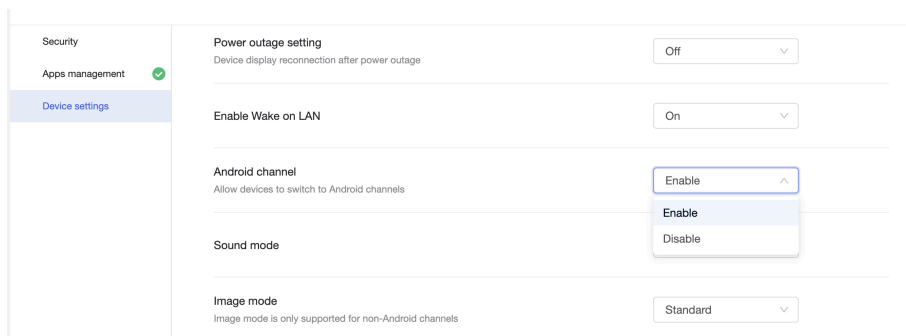


Timezone

Choose device timezone.

Time format

Define how date and time displayed on the device. Choose from 12-hour clock and 24-hour clock.



No single shutdown

Automatic shutdown when a device is detected to be inoperable for a period of time. Selectable time period: Never, 1 min, 3mins ... 1 hour

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 remain off
 2. On: Power off and then power up, the device will automatically powers 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 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.

When the switch is off, the target device does not have an Android channel 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 settings for the device's screen display, which only support Execute Now. No feedback on the device, check advanced settings to check 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 current setting.

6.4 ASSOCIATE DEVICES

Associate device

Advanced / Profile / 78

78

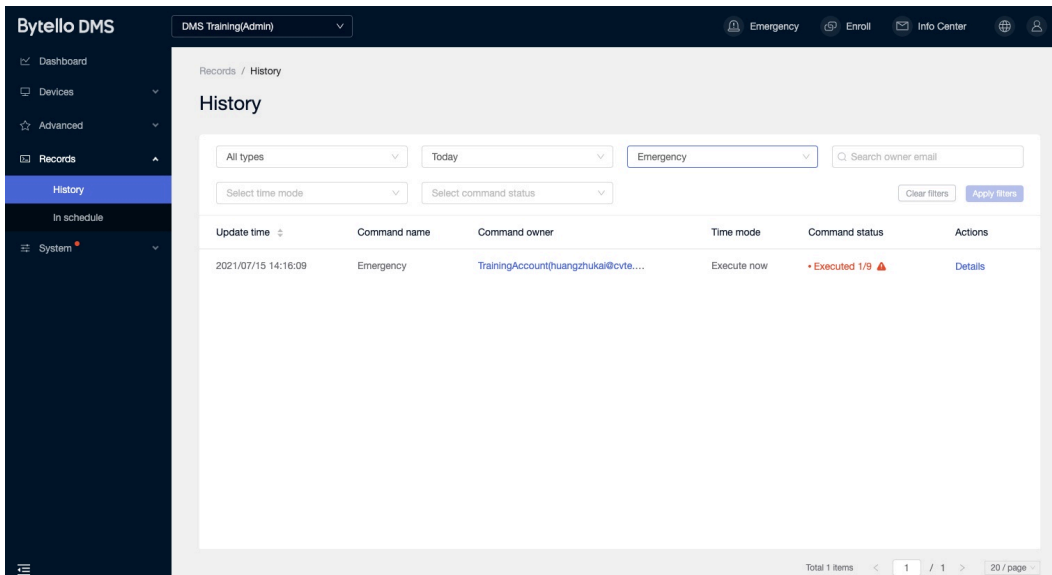
Details [Associated devices](#) [Add devices](#)

Update time	Devices	Devices-Compliant status	actions
2021/11/30 18:47:11	MS10B	Non-Compliant	Sync

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 device again.

7. RECORDS

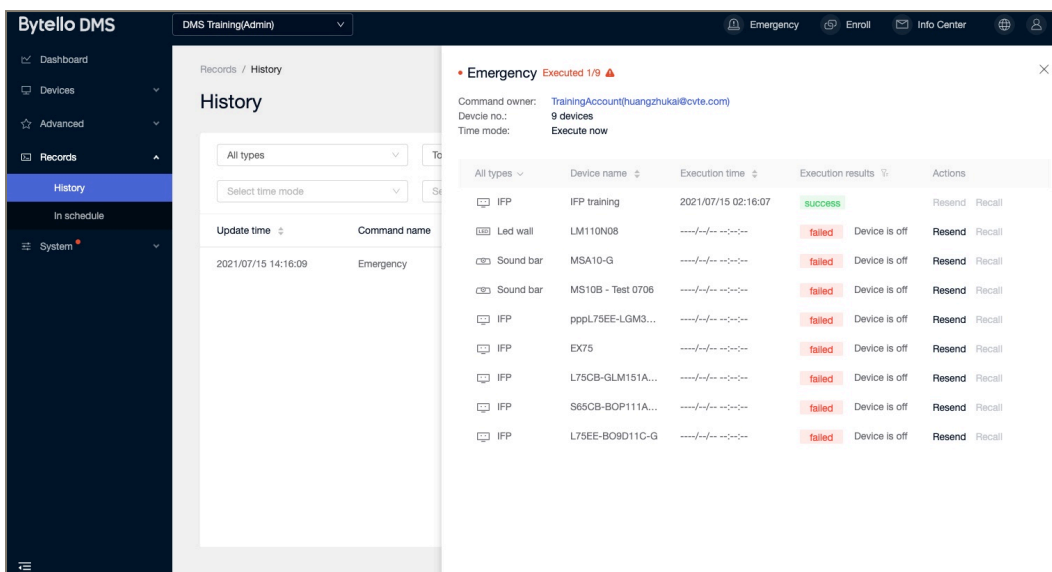
7.1 COMMAND HISTORY



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;

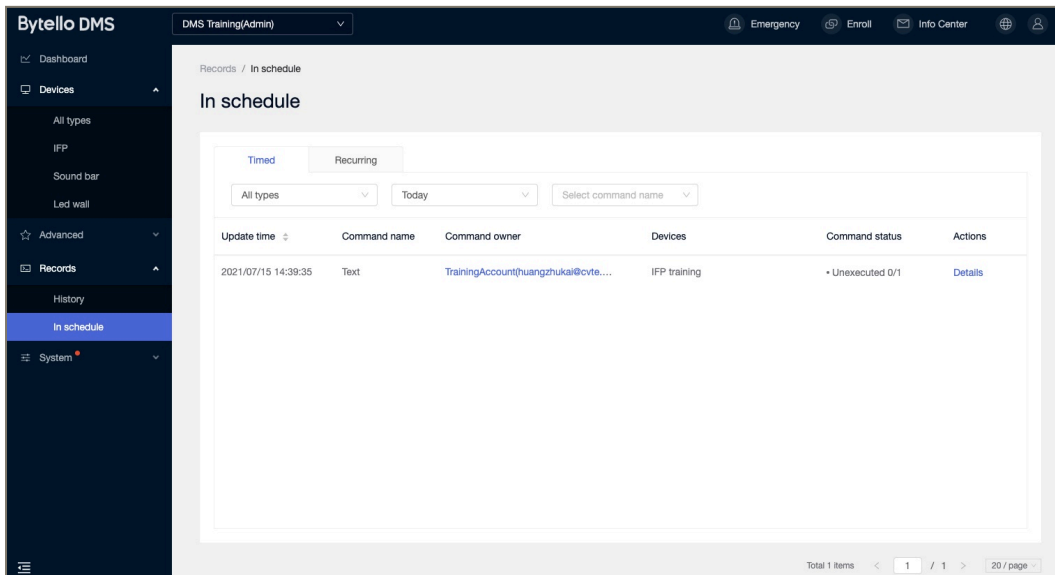
The specific Execution results are:

Success, this device has successfully executed this instruction;

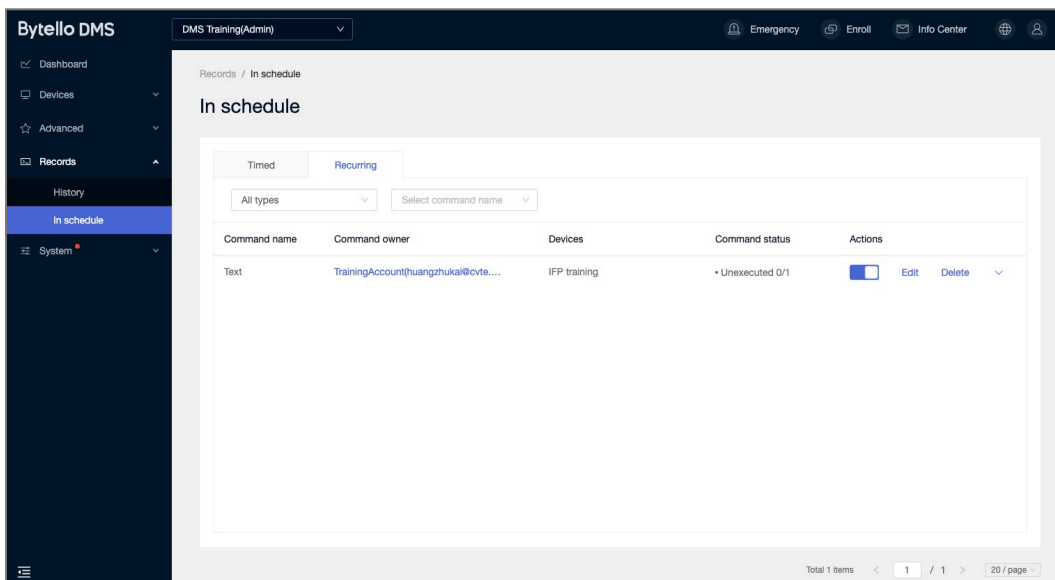
- No action is supported;
- Failed, this device failed to execute;
- Support for the resend operation, i.e. re-issuing instructions for this device;
- Recalled, the device has withdrawn the issuance of this directive;
- No action is supported;
- Wait, this device has not executed this instruction;
-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

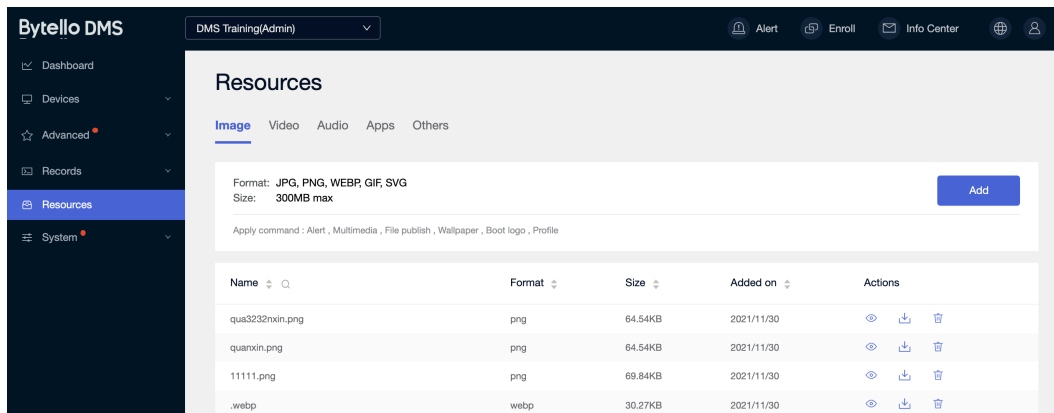


In recurring command, user can close, edit and delete.



8. RESOURCES

Upload and manage all organization resources in one place.



8.1 IMAGES

Upload images to your organization 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

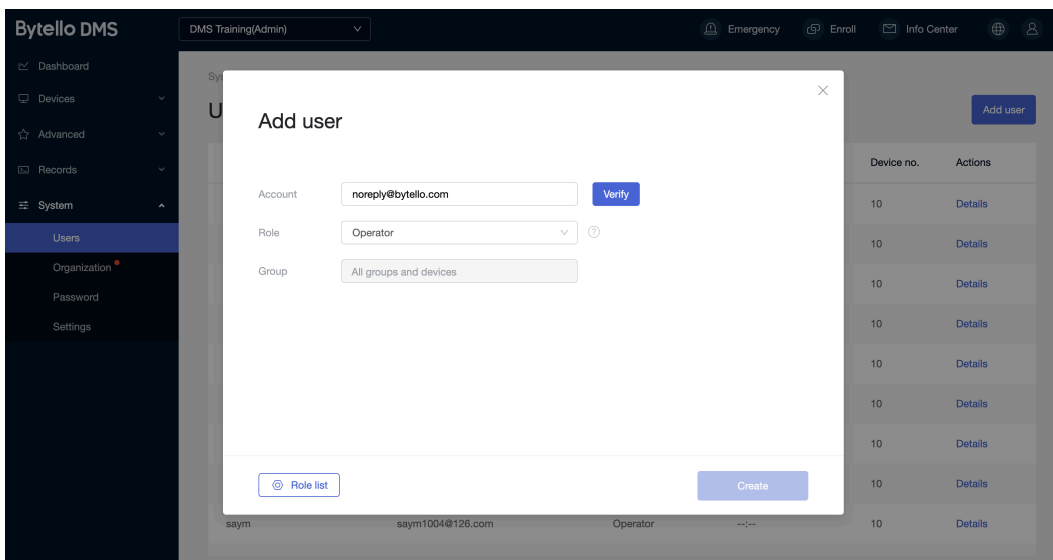
Any other files can be upload to organization resources and send as File publish.

9. USER

9.1 ADD A USER

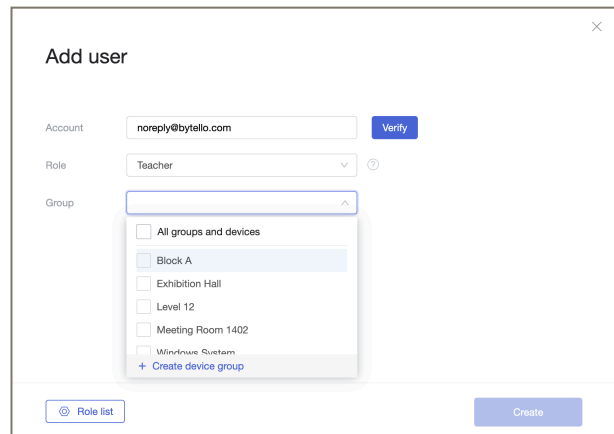
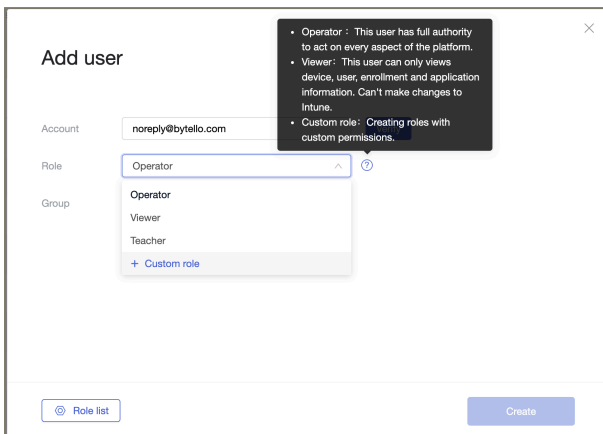
9.1.1 INPUT EMAIL ADDRESS

Enter 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 have a password;



9.1.2 CHOOSE ROLE & DEVICE GROUPS

Choose a pre-defined role, Operator or Viewer.



Once a custom role been selected, choose existing device groups.

9.2 CUSTOM ROLE

Create a role and set permissions.

Bytello DMS password:

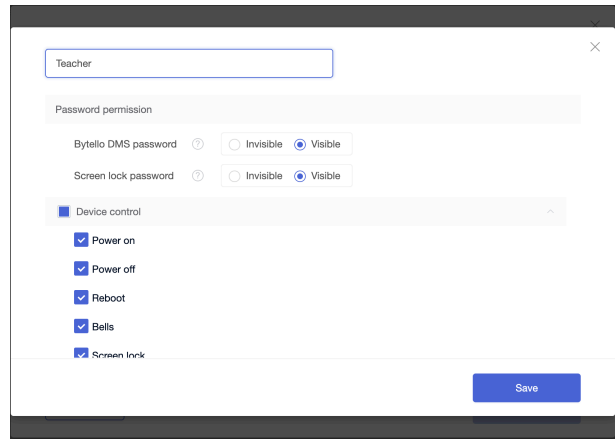
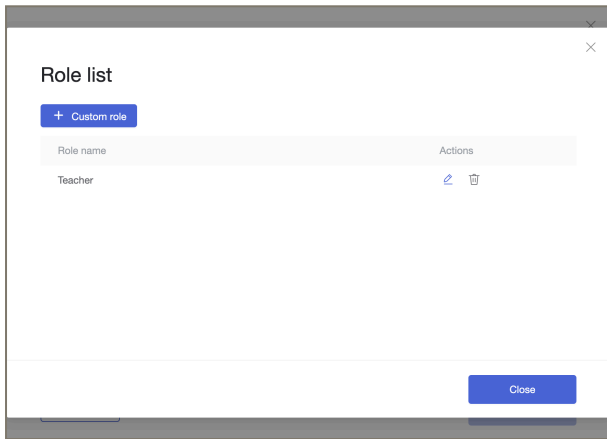
This password is used to unenroll a device from DMS client. If the switch is on, user with this role can check the password on System -> Password

Screen Lock password:

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

Command permissions

Select what command this role will have.



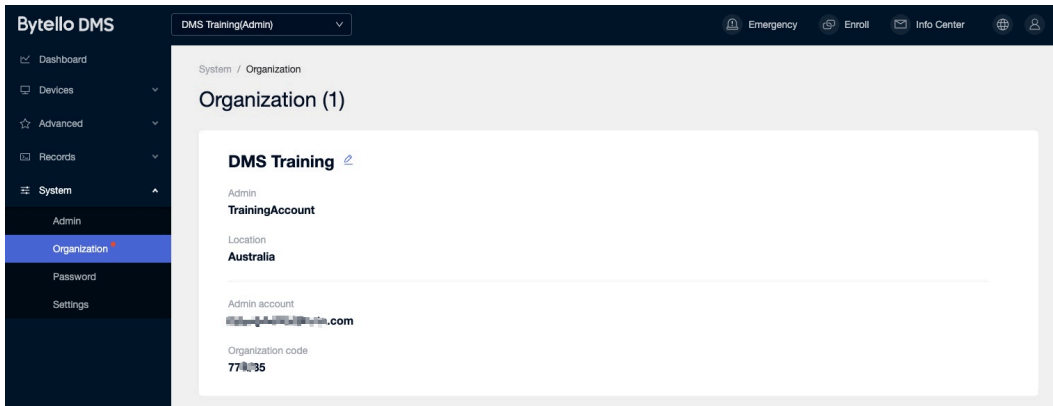
10. SYSTEM

10.1 ORGANIZATION

Organization name, the name of the organization, to be filled in at the time of registration;

Admin username, manager's name, filled in at the time of organization registration;

Location, the area where the organization is located, is completed at the time of registration;



Admin Email, Manager's Mailbox, completed at the time of organization registration;

Organization code, which is self-generated by the system upon completion of the organization registration and is non-changeable;

Change Organization name and Location

Organization information modification

Organization information

Organization code: 770035

Admin account: [redacted].com

Organization Name

Location

Cancel Save

10.2 PASSWORD

BYTELLO DMS LOCK

Password of Bytello DMS lock ⓘ

Password

✓ ✗

The default is 000000

Can be turned off/on, when the switch is on, admin can set a 6-digit password;

When unenroll a device from client, user need to enter the correct password to operate;

SCREEN LOCK

Password of screen lock ⓘ

Password

✓ ✗

The default is 000000

The default is permanently on, admin can set a 6-digit password;

Users can enter lock screen password to unlock a device for a period of time by entering the correct password.

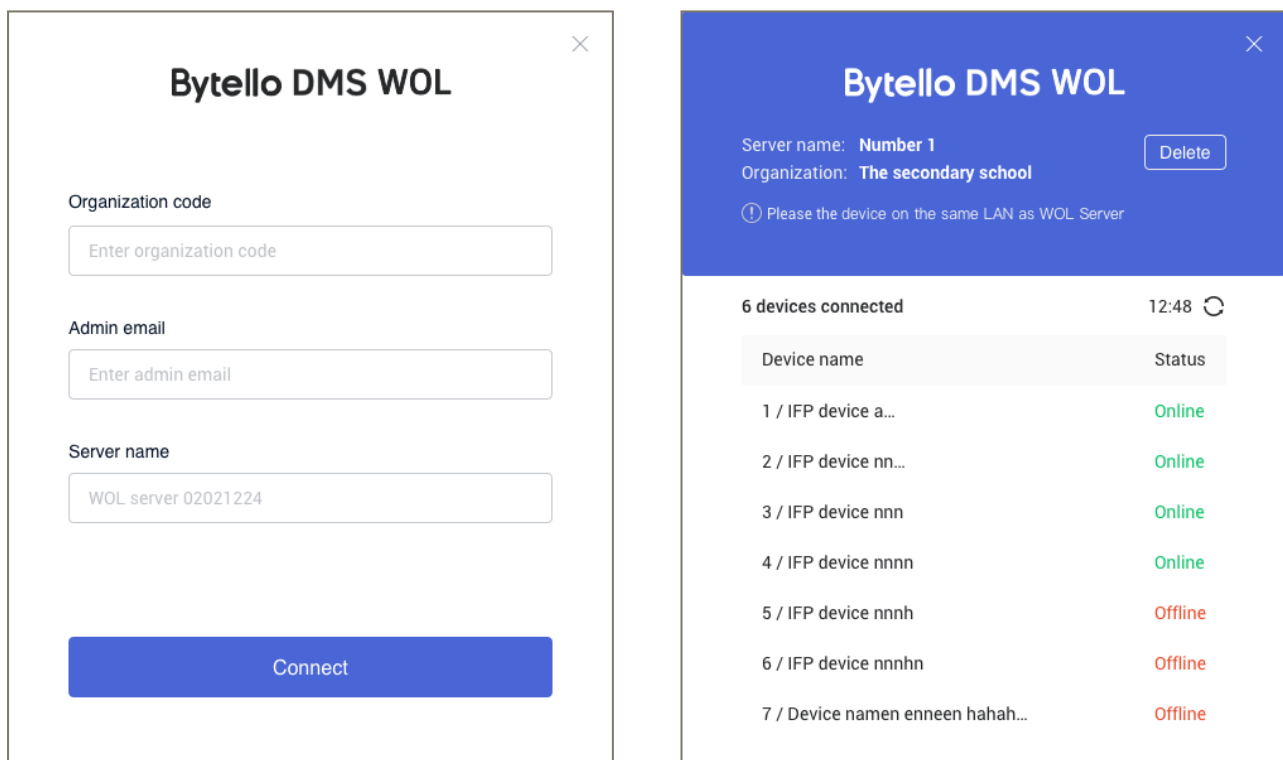
11. WOL SERVICE

11.1 SETUP BYTELLO WOL SERVICE

Power on command will work when 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>



The image shows two screenshots of the Bytello DMS WOL interface. The left screenshot is the registration form, and the right screenshot is the main dashboard.

Registration Form (Left Screenshot):

- Title: Bytello DMS WOL
- Organization code:
- Admin email:
- Server name:
- Connect button

Main Dashboard (Right Screenshot):

- Title: Bytello DMS WOL
- Server name: Number 1
- Organization: The secondary school
- Delete button
- Notification: Please the device on the same LAN as WOL Server
- 6 devices connected (12:48 refresh)
- Table of connected devices:

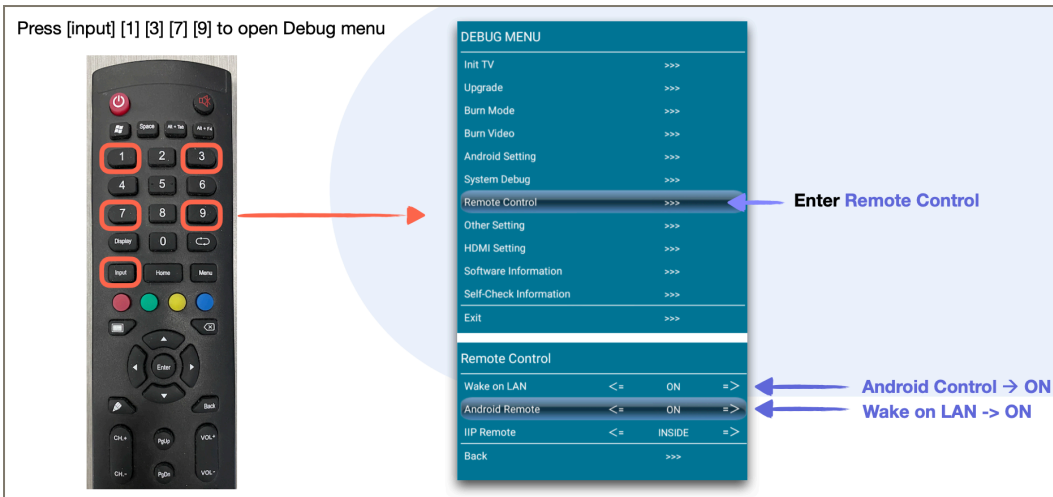
Device name	Status
1 / IFP device a...	Online
2 / IFP device nn...	Online
3 / IFP device nnn	Online
4 / IFP device nnnn	Online
5 / IFP device nnnh	Offline
6 / IFP device nnnhn	Offline
7 / Device namen enneen hahah...	Offline

Step Two: fill in 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 WOL server connected to the organization, it will start to search devices around it and present a WOL-connected-device-list, both on 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.

Server name	Server state	Connected No.	Connected devices	Actions
Loor-A	Unavailable	0		
hzkaws1	Unavailable	0		
new ja	Unavailable	0		
123455	Unavailable	0		
hzk234	Unavailable	0		
WOL server 06250935	Unavailable	0		

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;