
User Manual

KiloLink Server Free (Linux System)

(2022-5 version)

1 KiloLink Sever Free User Guide

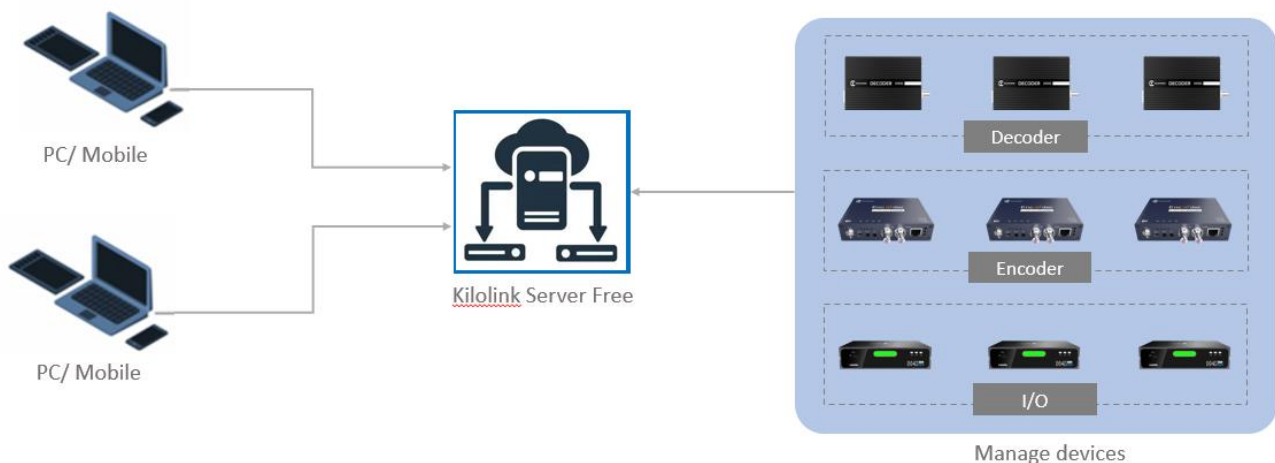
1.1 KiloLink Server Free Introduction

KiloLink Server Free is a centralized management system developed by Kiloview. It is mainly used for centralized management of KILOVIEW's encoders, decoders and NDI series products. The system supports up to 5 levels of group management according to your different applications, and it can authorize different permissions for each group to achieve more refined device management. It also supports the permission management of the modules, granting different permission to different users and user groups. KiloLink Server Free makes device management more convenient. Users can use different terminals to check the device working status, manage the device, login to the device webpage to configure the parameters, etc.



For more information about KiloLink Server Free, please refer to:

<https://www.kiloview.com/en/kilolink-server-free>





Introduction:

KiloLink Server Free mainly used for centralized management of Kiloview encoders, decoders and NDI devices. Users can login to the system via Web browsers (Chrome, Edge, Safari) to manage and maintain the devices connected to the system.

- Supported models: Including DC220/DC230/D300 decoders, MG300 media gateway; E, G series, N1/N2 and M2 encoders, and N3/N4/N30/N40/U40/N6 FULL NDI devices.
 - Update the firmware here: www.kiloview.com/en/support/download/
-

1.2 Login KiloLink Server Free

Enter `http://server IP: 83/` in the browser to login to the KiloLink Server Free. The default username is **admin**, and the password is **Kiloview001**.

The screenshot shows a login interface with the following elements:

- Header: Login
- Input fields: Username, Password
- Language selection: English (dropdown menu)
- Checkbox: Read and Agree «User License Agreement»
- Button: Login



Note

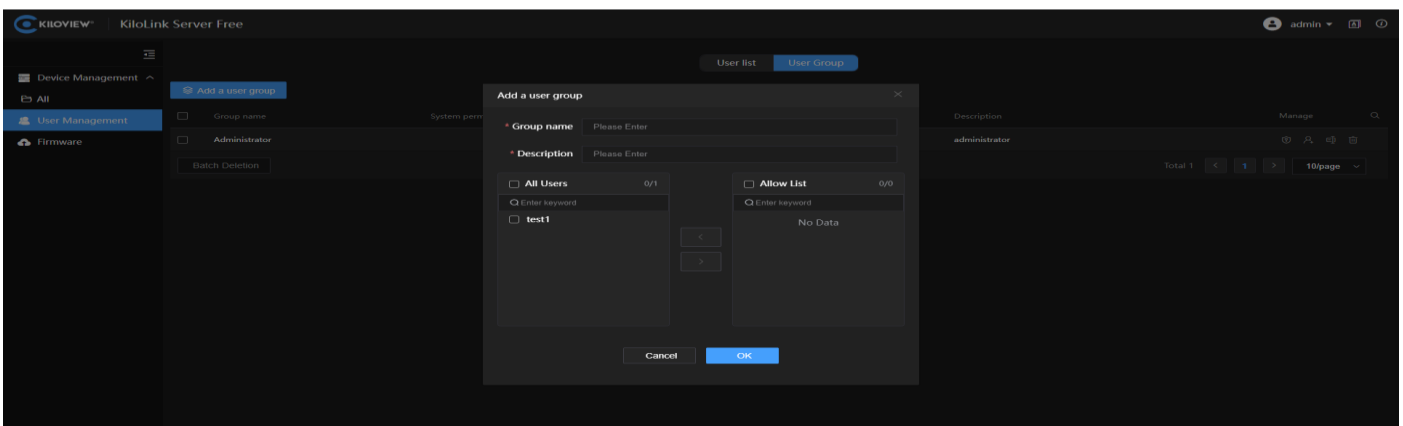
- For information security concern, we recommend you change the password after your first login.
 - KiloLink Server Free login port is 83 by default.
-

2 User Management

After deployment, there is a super administrator account **admin** by default. Log in with the super administrator account, you can create users and user groups via the user management, and add permissions to users and user groups.

2.1 User Management

In user management, you can add, modify, and delete users (individually or in batches). The added user starts without any permissions. You need to add the user to the user group, and the user will have the permissions of the user group.



Introduction

- Modify password; Rename; Delete;



Note

- When adding a user, password must consist of uppercase characters, lowercase characters and digits with 6~32 characters long.

2.2 User Group

2.2.1 Add user group

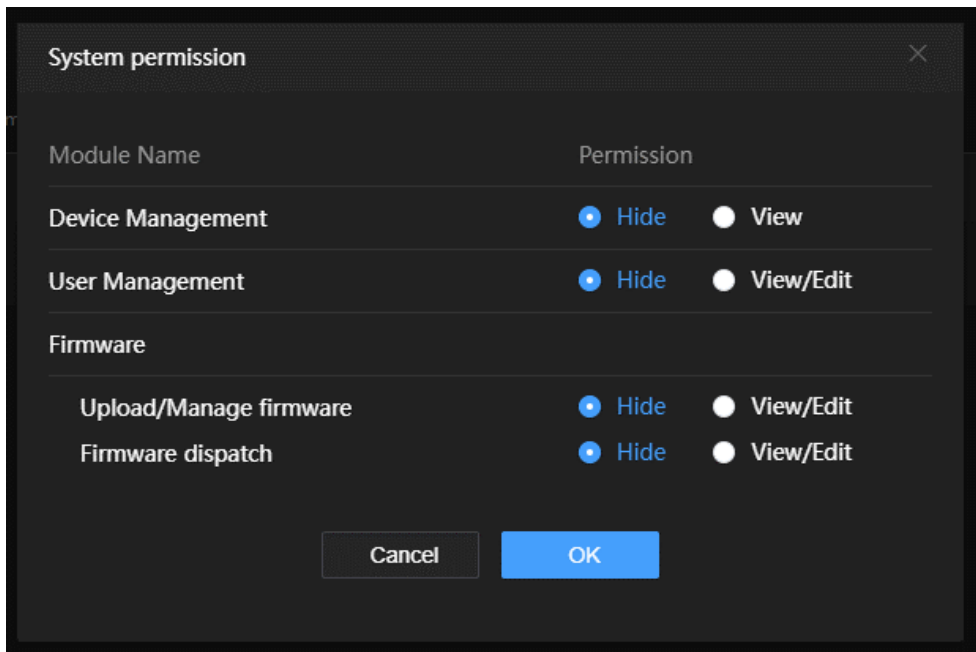
Add a user group and authorize the user group. All users in the user group have the same authority.

The operation is as follows: click "Add a user group", enter the group information, and select users in the "All Users" to the user group.

2.2.2 User group permission

The system includes three modules: Device Management, User Management and Firmware. All users and user groups should have permissions to operate the system. When log in for the first time, the default super administrator can add users and user groups, and give permissions to the user groups.

In "User Management" , you can only authorize the user group with hidden or view permissions for the "Device Management". If need operation permissions for the device, please turn to the "Access Control" in the "Device Management" . For details, please refer to the chapter 3.1.4 "Device Management - Access Control".



Introduction

- Hide: Modules are not visible to users of the user group;
- View: Users in the user group can view authorized modules;
- Edit: Users in the user group can edit authorized modules

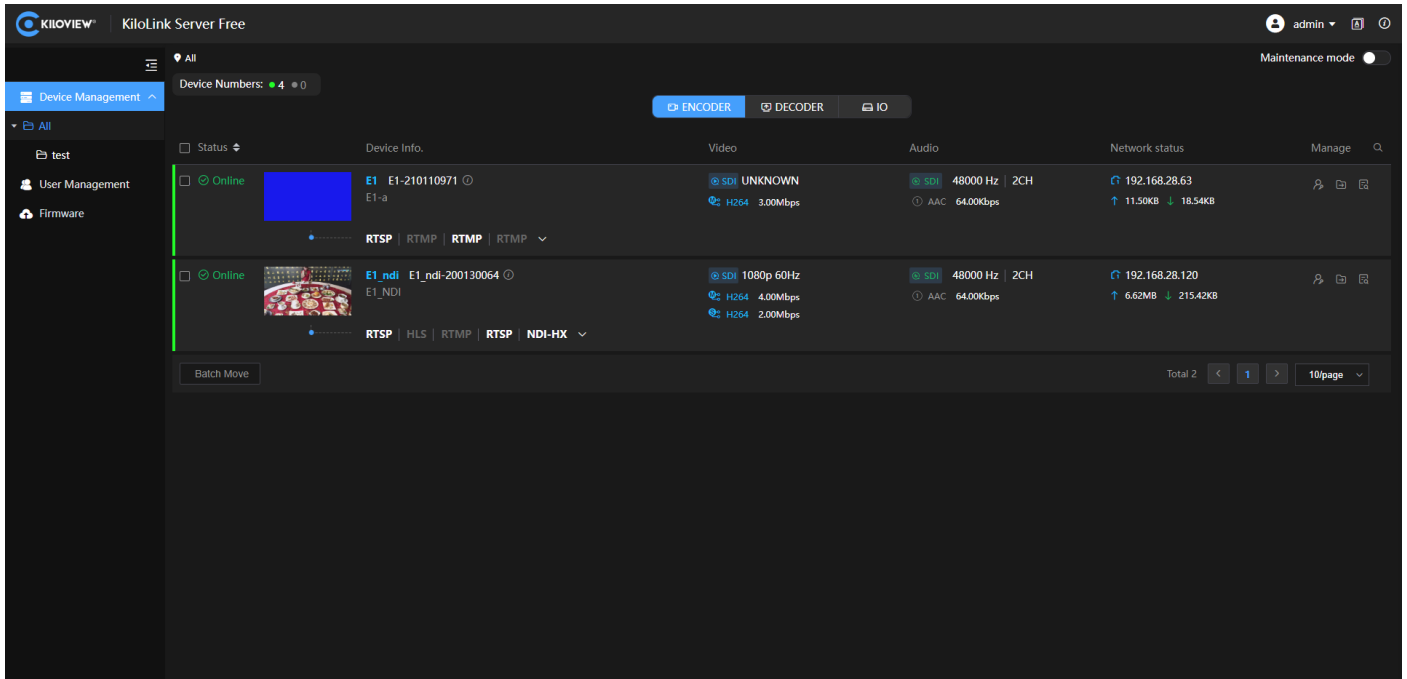


Note

- The permissions for the "Device Management" module are only available for hiding and viewing in the "User Management" . Edit permissions need to be set in the "Device Management "module.

3 Device Management

Click "Device Management" to manage all devices under "ENCODER", "DECODER" and "IO".



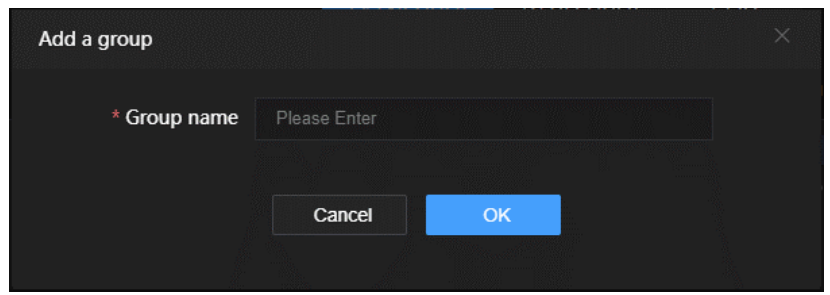
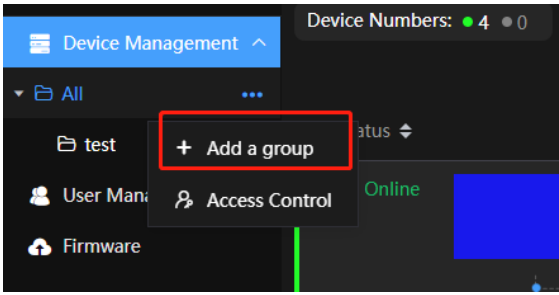
3.1 Group Management

Users can add groups in the Device Management with different application scenarios, and all the devices can be classified to the groups, which is convenient for further maintenance.

Each group supports up to add 5 groups.

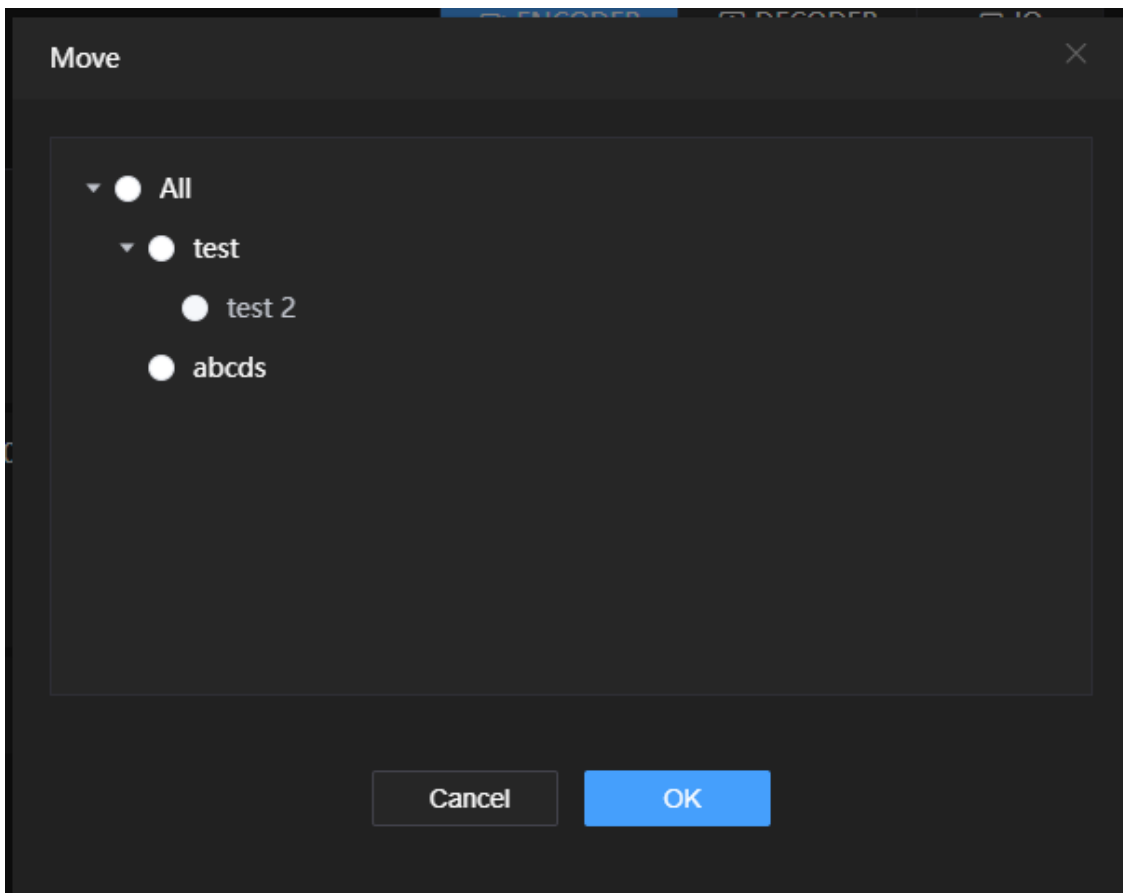
3.1.1 Add a group

Click "⋮" on the right of each group. Then click "Add a group", enter the group name and click "OK" to add a new group.



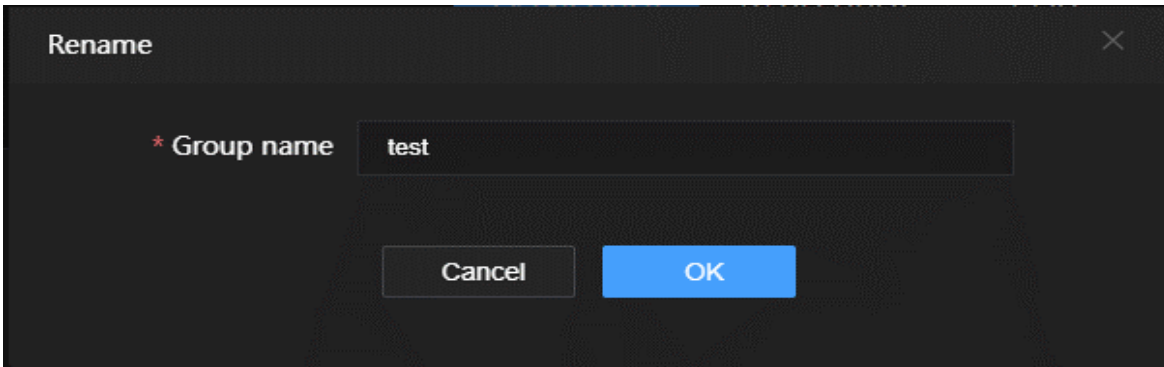
3.1.2 Move the group

When you want to move the group to another one, click "Move" and select the group to move to.




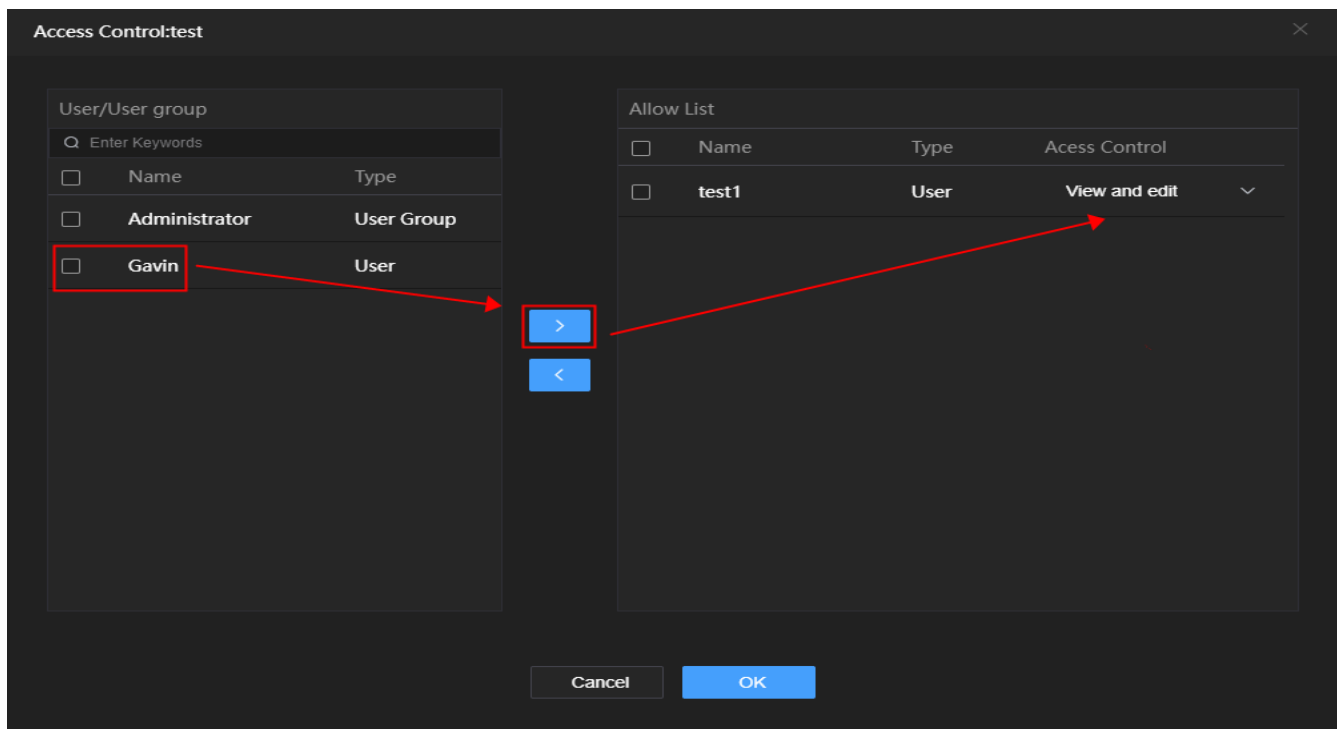
3.1.3 Rename the group

When you want to change the group name, click "Rename", enter a new name, and click "OK".



3.1.4 Access control

In the "Device Management" , click "Access Control", and select the user or user group that needs to be authorized to the "Allow list" on the right, and click  . Then choose the permissions for the user or user group.





Introduction

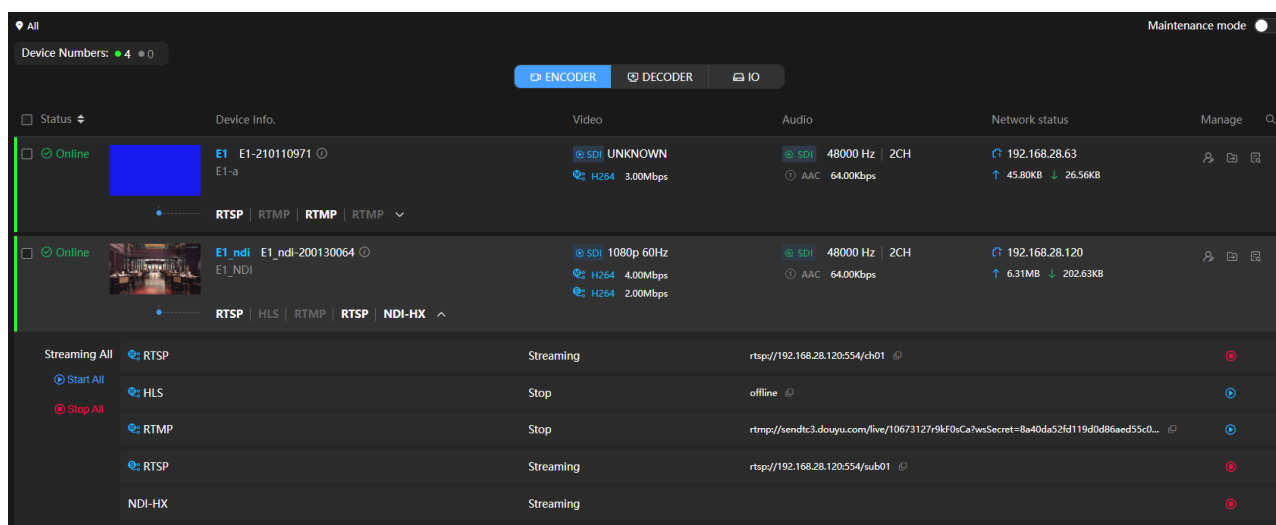
- View only: Only with the viewing permission of the group, and cannot rename, move, delete, etc. the devices under the group;
 - View and edit: With the viewing and editing permissions of the group, and can rename, move, delete, etc. the devices under the group;
 - The root directory does not support rename, move, and delete, etc.
 - The lower-level group have the permissions of the upper-level group by default. But if the lower-level group is limited with some permissions, it is subject to the configured permission;
 - Management such as rename, move, and delete a group require the first-level group owns the permissions. For example: the lower-level group "Test group" of "Sales group", if the "Sales group" does not have the editing permission, even if the "Test group" is authorized, the group cannot be edited. Only the lower-level group of "test group" can be edited;
 - It is required to have the editing permission for the target directory if you need to remove the group.
-

3.2 Device management

On the device management page, you can check the device status, device information, video and audio information, and network status of all devices. And you can authorize and move the device, even remotely access the device webpage and configure parameters.

3.2.1 Encoder management

You can check the current status of the encoder, streaming status, video and audio information, etc. Also, you can start/stop streaming. Details as below:




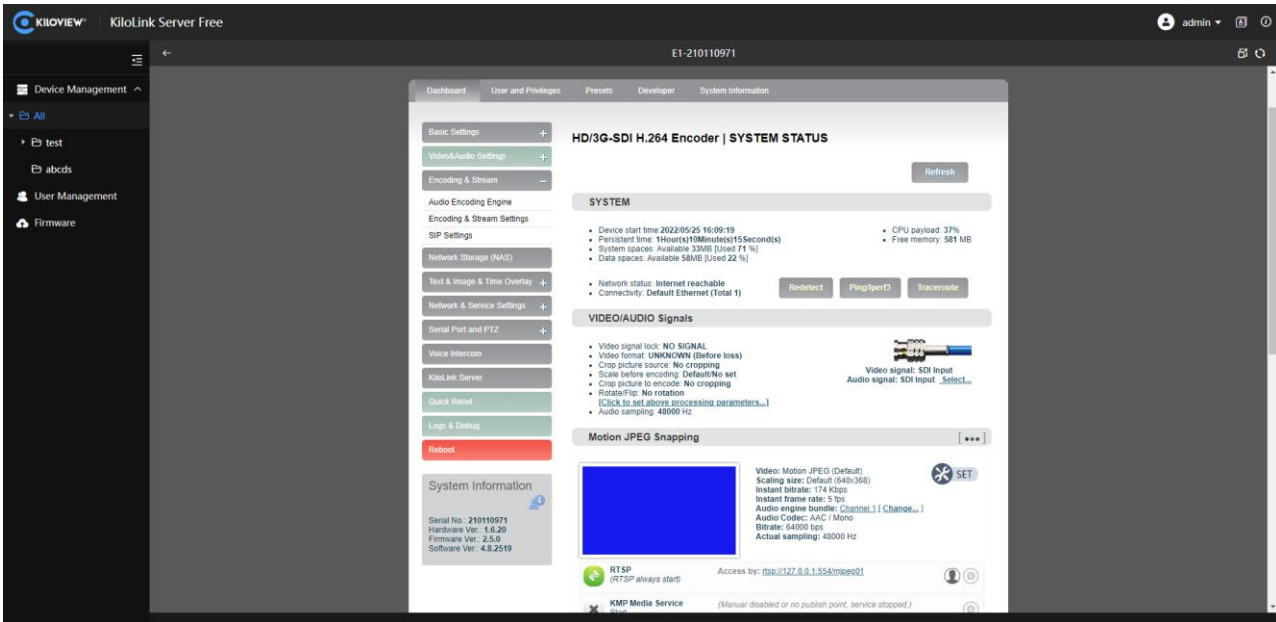
The screenshot displays a web interface for managing encoders. At the top, it shows 'Device Numbers: 4 / 0' and tabs for 'ENCODER', 'DECODER', and 'IO'. Below this, there are columns for 'Status', 'Device Info.', 'Video', 'Audio', 'Network status', and 'Manage'. Two devices are listed:

| Device | Status | Device Info. | Video | Audio | Network status | Manage |
|-----------------------------------|--------|-----------------------------------|--|-----------------------------------|---------------------------------------|---------|
| E1 E1-210110971 E1-a | Online | RTSP RTMP RTMP RTMP | SDI UNKNOWN H264 3.00Mbps | SDI 48000 Hz 2CH AAC 64.00Kbps | 192.168.28.63 45.80KB ↑ 26.56KB ↓ | [Icons] |
| E1 ndi E1_ndi-200130064 E1_NDI | Online | RTSP HLS RTMP RTSP NDI-HX | SDI 1080p 60Hz H264 4.00Mbps H264 2.00Mbps | SDI 48000 Hz 2CH AAC 64.00Kbps | 192.168.28.120 6.31MB ↑ 202.63KB ↓ | [Icons] |











Below the device list, there is a 'Streaming All' section with buttons for 'Start All' and 'Stop All'. It shows a list of streaming streams with their status (Streaming or Stop) and URLs.

| Stream | Status | URL |
|--------|-----------|---|
| RTSP | Streaming | rtsp://192.168.28.120:554/cho1 |
| HLS | Stop | offline |
| RTMP | Stop | rtmp://sendtc3.douyu.com/live/106731279Kf0sCa?wsSecret=8a40da52fd119d0486aed55c0... |
| RTSP | Streaming | rtsp://192.168.28.120:554/sub01 |
| NDI-HX | Streaming | |

If you want to check the details of the encoder, click  to enter the device webpage and configure the parameters.

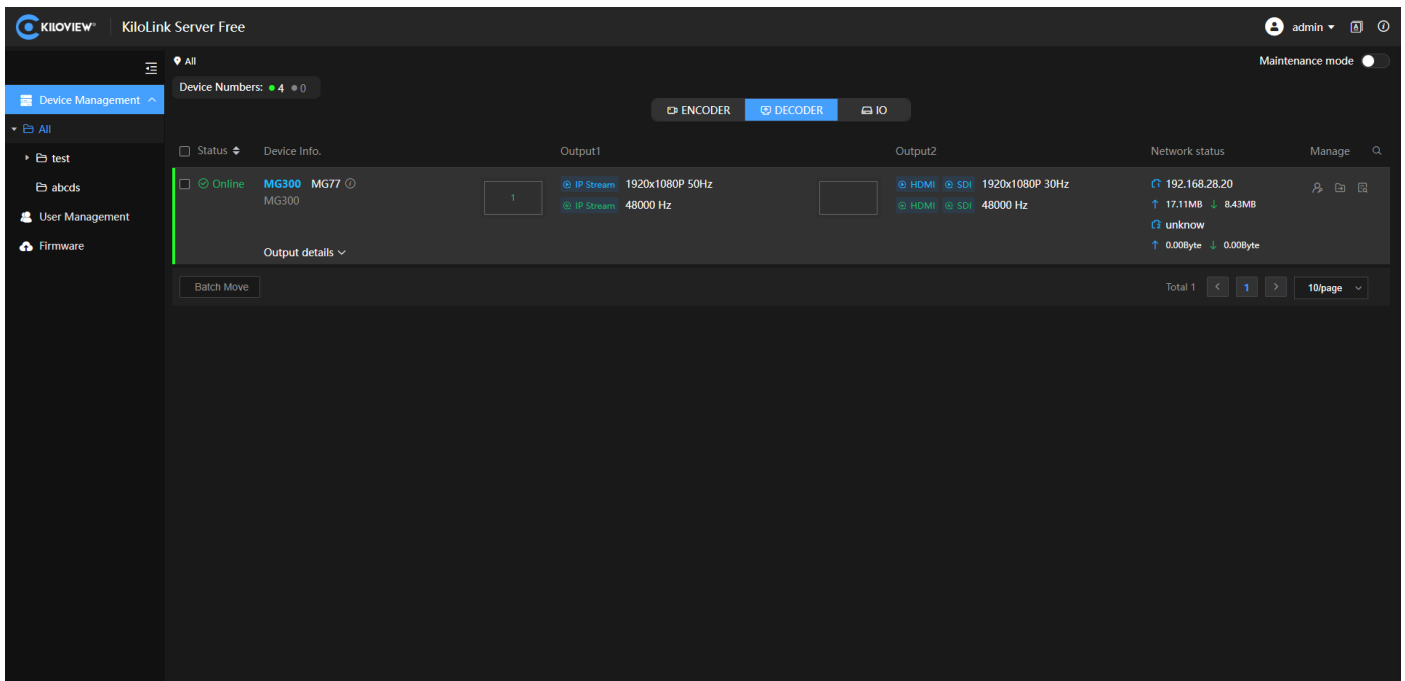


Introduction

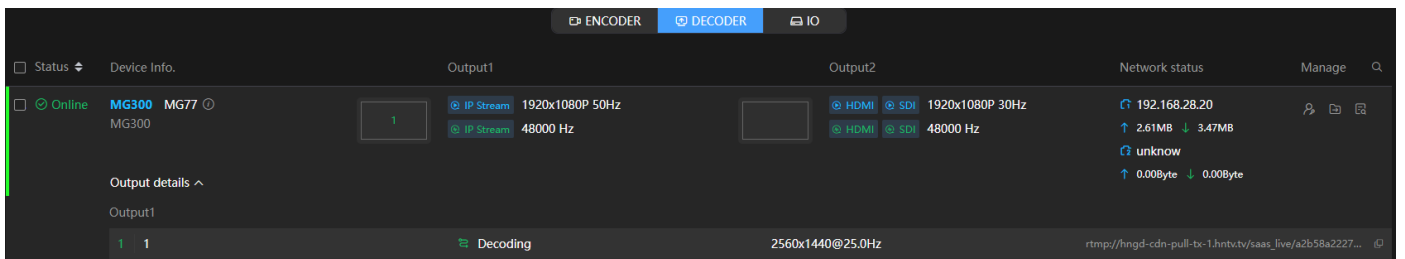
- Click  to sort the devices.
-  shows the online device number,  shows the offline device number
- Device info.: The device model, serial number, version number, etc.
- Video: The information of the video source, including the resolution, the current bitrate, the encoding format and bitrate of the main/sub-stream,  is the main stream and  is the sub-stream;
- Audio: The current audio sample rate, encoding bitrate, encoding format, etc.;
- Network status: IP address and rate of the device,  is the uplink rate,  is the downlink rate;
- Manage:  means "Access Control", "View" means only view the device without other operations, "Edit" means rename the device,  means move the device,  means enter the device webpage;
- Streaming: the device is streaming and you can start or stop it in the system.

3.2.2 Decoder management






On the device management page, you can check the decoder status, device information, network status and output details as below:



For output details, please check the decoding status and the output number related to the window number of the multi-window output.

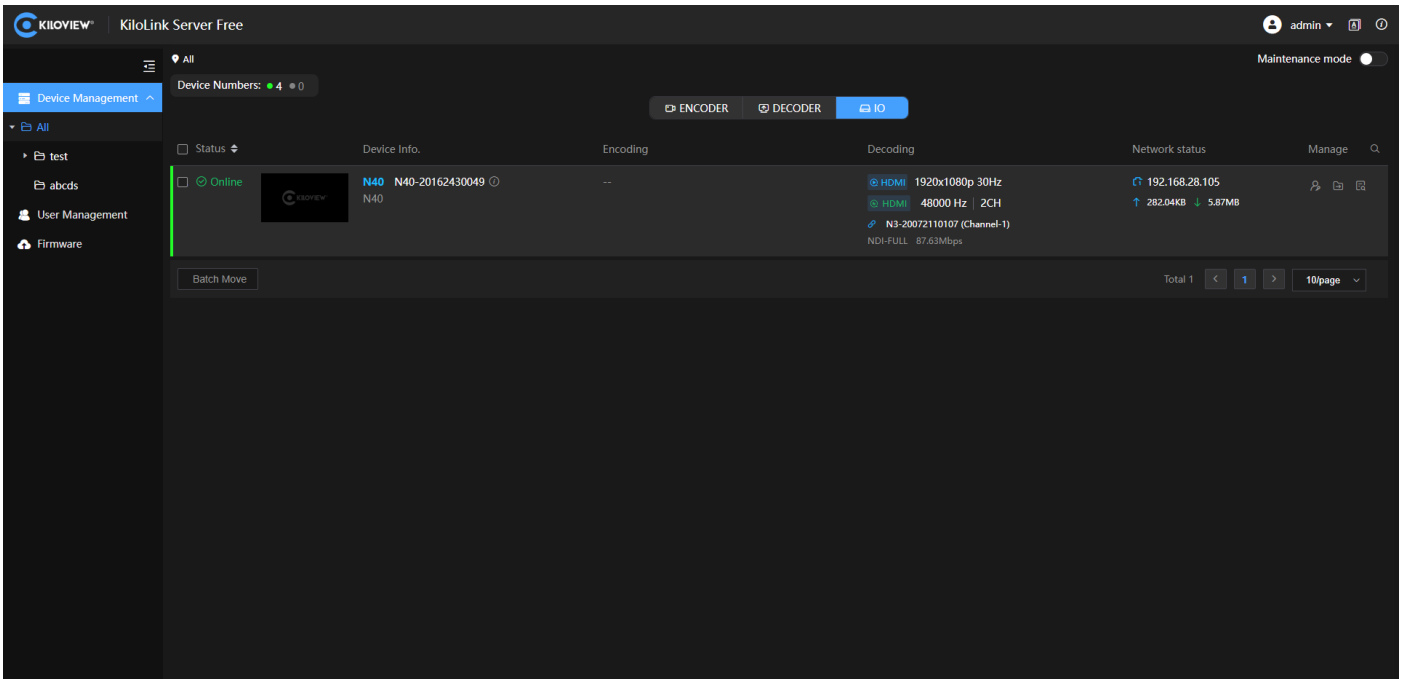


Introduction



- Output 1/Output 2: Configurations of output 1/output 2, including output interface, resolution and audio sample rate;
- Network information: The device network port, the rate of each network port,  is the uplink rate,  is the downlink rate;
-  means that the device is streaming,  is decoding,  is the connection re-established;

3.2.3 NDI device management

On the device management page, you can check the NDI device status, device information, encoding and decoding status and network status.



Introduction

- Encoding: NDI device is in encoding mode, displays the current video encoding information, including video source resolution, audio sample rate, audio channel, real-time bitrate, etc.;
- Decoding: NDI device is in decoding mode, displays the current video decoding information, including video resolution, video output interface, audio sample rate, channel, NDI source name, bitrate, etc.;
- Network status: The network information and the IP address,  is the uplink rate,  is the downlink rate.



Note

- When moving the device, please ensure that the user has the editing permission of the current group and the target group.
- The free version supports up to add 32 devices.




3.3 Device Maintenance

Enabling "Maintenance mode", you can add devices to the system, and manage the devices with one-click reboot or one-click reset.

| Status | Serial Number | Authorization Code | Alias | Type | Device Name | Upgrading status | Current firmware version | Dispatched firmware | Note | Manage |
|--------|---------------|--------------------|--------|--------|------------------|------------------|--------------------------|---------------------|------|--------|
| Online | 210110971 | 7c9bc9d6608f586e | E1-a | E1 | E1-210110971 | | 4.8.2519 | | | |
| Online | 200130064 | 43f7ac2e4bf55418 | E1_NDI | E1_ndi | E1_ndi-200130... | | 4.8.2519 | | asds | |
| Online | K2030040482 | 725d315599fb548b | MG300 | MG300 | MG77 | | 4.6.2515 | | | |
| Online | 20162430049 | 95695e74fd53e787 | N40 | N40 | N40-20162430... | | 2.02.0217 | | | |

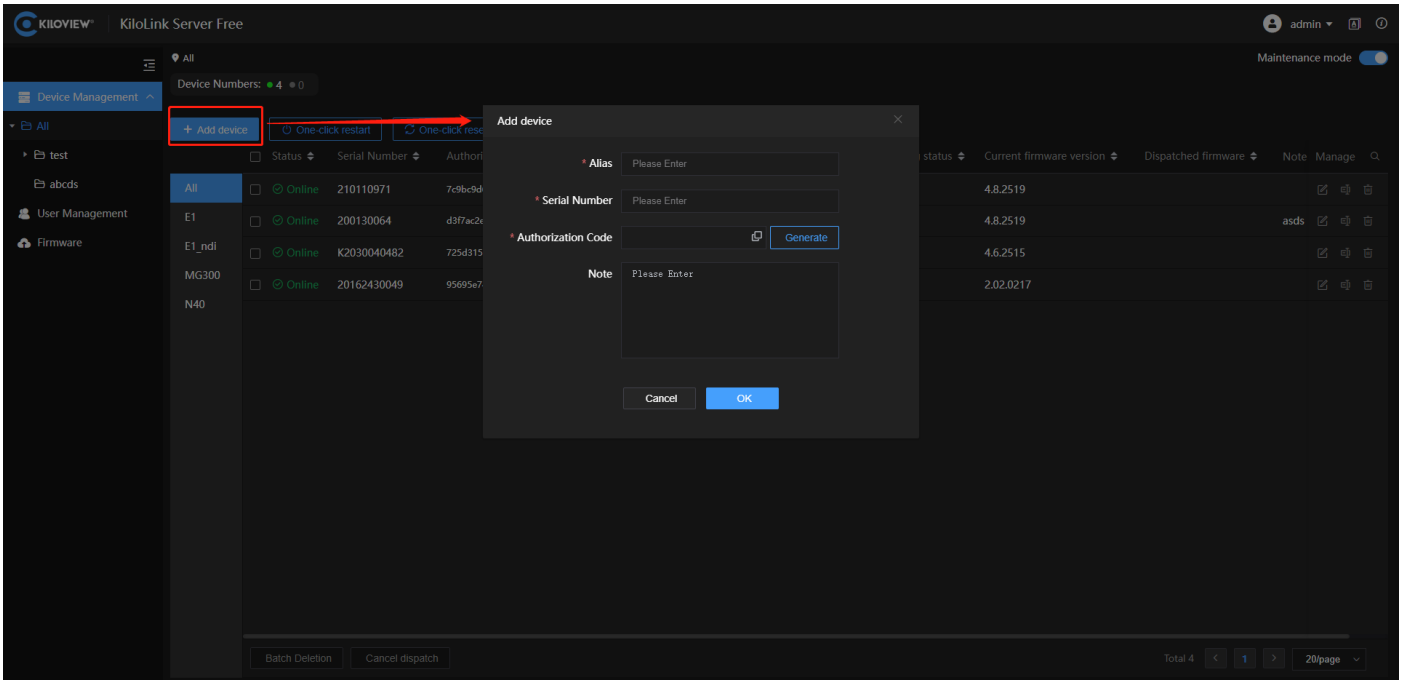


Introduction

- : Edit authorization code and note of the device;
- : Rename the device;
- : Delete the device;

3.3.1 Add device

Click "Add Device", enter the device name and serial number to generate an authorization code.

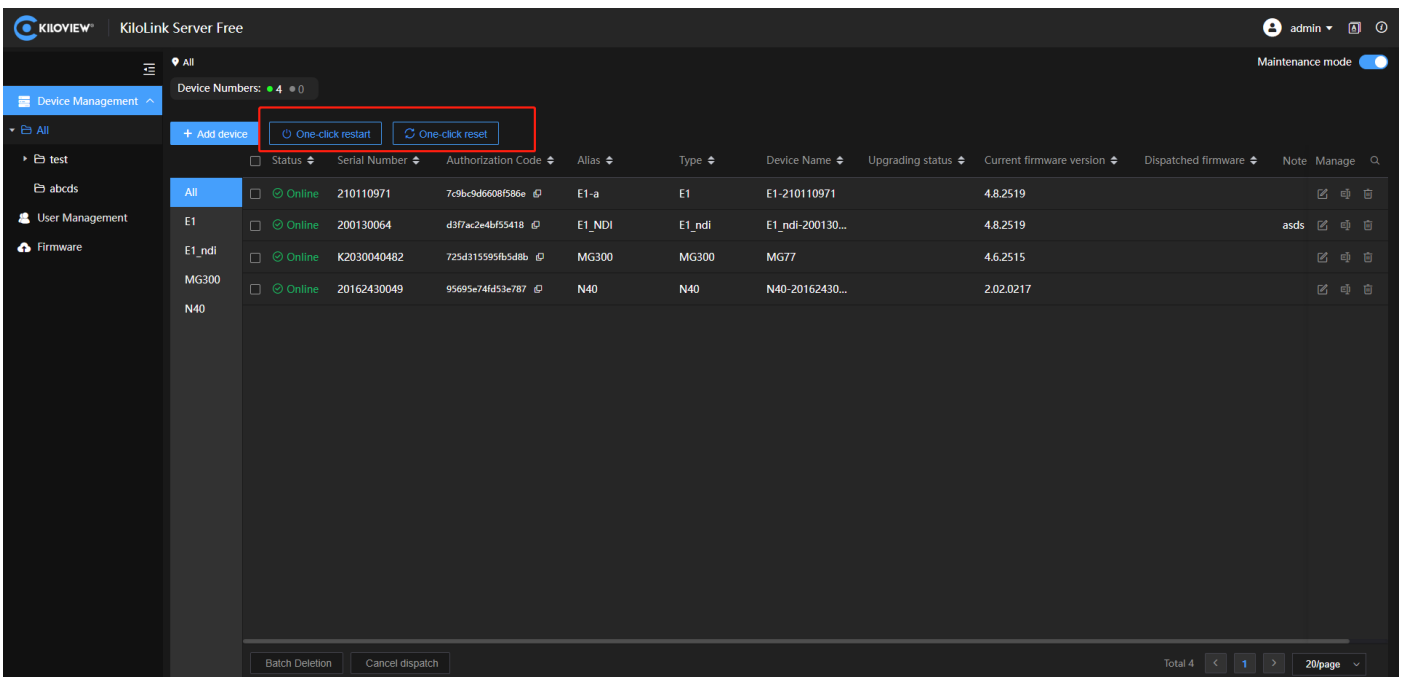


Note

- The authorization code generated when a device is added to the server. It will be used to authorize the device to log in to the server from the device webpage.

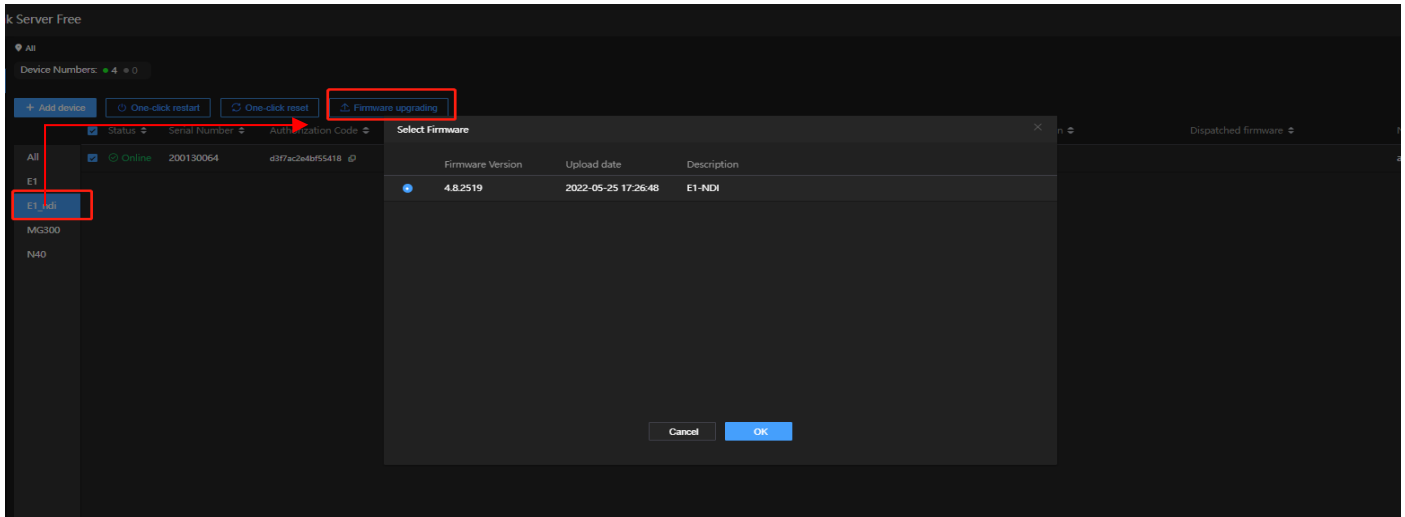
3.3.2 Reboot and reset

Select the devices that need to be restarted and reset with one-key restart or one-key reset.



3.3.3 Firmware upgrade

Select the product model to be upgraded, and click "Firmware Upgrading" appeared at the top of the page, select the firmware, then the firmware will be dispatched to the device. After dispatched, please reboot the device to complete the firmware upgrading.

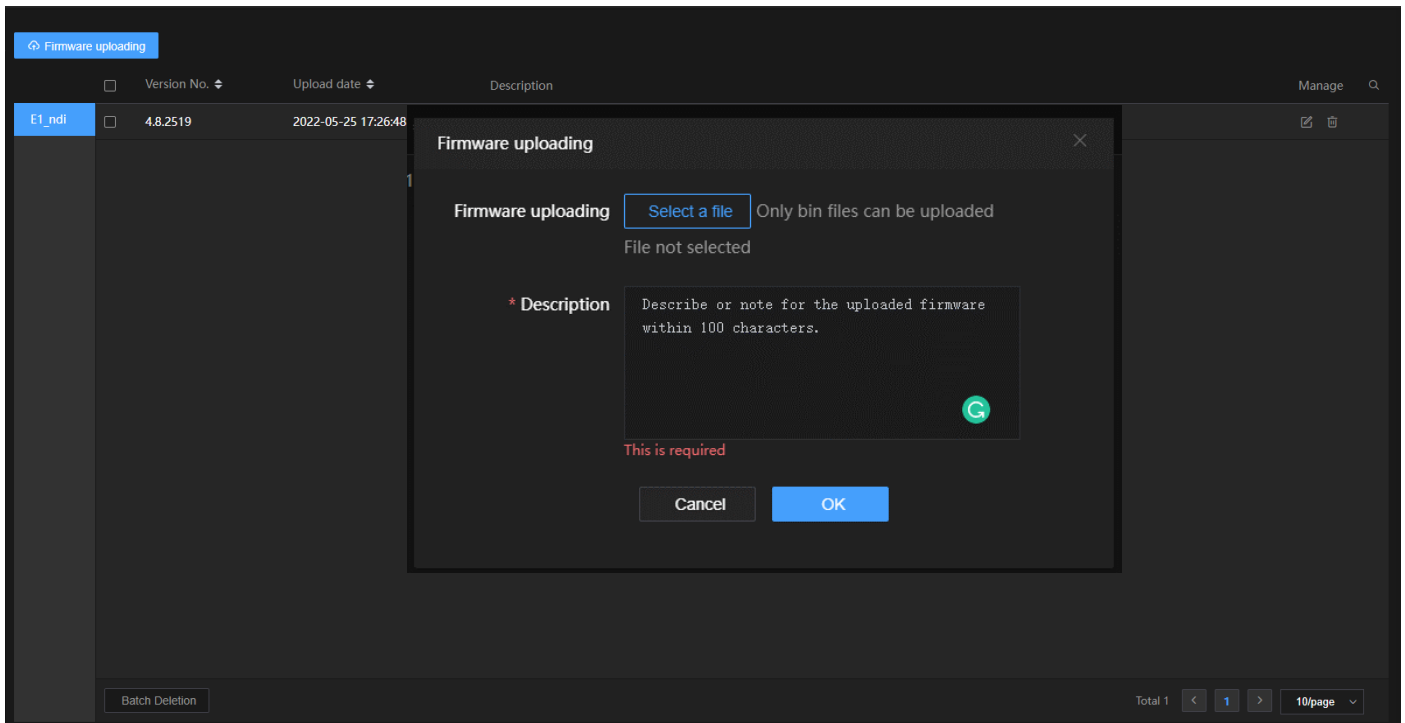


Note

- After the firmware dispatched, the device needs to be rebooted to complete the firmware upgrading;
- Firmware download: if multiple channels download together, each channel will occupy about 2M bandwidth. Therefore, the download will be slow when the downlink bandwidth is not enough.

4 Firmware

The users can upload the firmware to the system, and upgrade the firmware of the device.



For more questions, please contact us via:

<https://www.kiloview.com/en/support>



Please scan with browser.

KILOVIEW Electronics CO., LTD.

Tel: 86-18573192787 Email: support@kiloview.com Web: www.kiloview.com/en

Address: B4-106/109, Jiahua Intelligence Valley Industrial Park, 877 Huijin Road, Yuhua District, Changsha City, Hunan Province, China.