



# Smart Managed Switch Client

## User Manual



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# Preface

## Applicable Models

This manual is applicable to smart managed switches.

## Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
 <b>Danger</b>	Indicates a hazardous situation which, if not avoided, will or could result in death or serious injury.
 <b>Caution</b>	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 <b>Note</b>	Provides additional information to emphasize or supplement important points of the main text.

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# 1 Product Introduction

The switches support management through the iVMS-4200 client, including network topology management, network configuration, port management, etc.

## Note

All pictures in this manual are only for illustration, and the specific interfaces are subject to the actual device.

# 2 Device Management

You can perform device configuration and management on the iVMS-4200 client, mainly including network parameter configuration, port configuration, network topology management, etc.

## Note

This chapter will briefly introduce device management via iVMS-4200 client. For other functions, please refer to *iVMS-4200 Client User Manual*.

## 2.1 Activate Device

For an inactive device, you are required to create a password to activate it before it can be added to the client and work properly.

### Before You Start

Make sure that the device to be activated is connected to the network and is in the same network segment with the PC running the client.

### Steps

## Note

This function should be supported by the device.

1. Click **Maintenance and Management** → **Device Management** → **Device**.
2. Click **Online Device**.  
The searched online devices are displayed in the online device list below.
3. Check the device status (shown in the **Security Level** column), and select an inactive device.

IP	Device Model	Firmware Version	Security Level	Port	Enhanced EIC Service Port	Serial No.	Start Time	Online	Support Hik Connect	Hik Connect Status	Operation
192.168.1.101	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.102	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.103	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.104	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.105	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.106	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.107	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.108	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.109	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.110	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.111	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.112	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.113	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.114	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.115	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.116	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.117	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.118	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.119	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞
192.168.1.120	IS-2000-1000	4.0.0	High	8080	8080	00000000000000000000000000000000	2023-10-11 10:10:10	Yes	Yes	Online	⊞ ⊞

Figure 2-1 Online Device List

4. Click **Activate**.

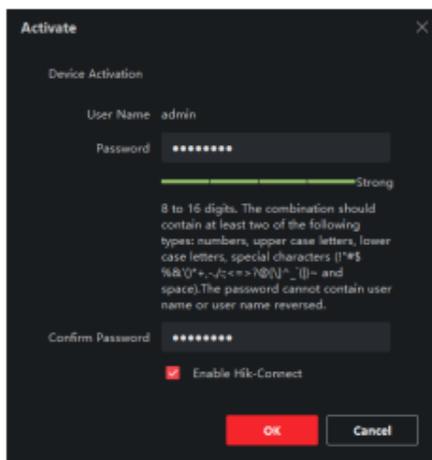


Figure 2-2 Activate Device

5. Create a password in the password field, and confirm the password.



#### Note

- The password strength of the device can be automatically checked. We highly recommend you change the password of your own choosing (using a minimum of 8 characters, including at least three kinds of the following categories: uppercase letters, lowercase letters, digits, and special characters) in order to increase the security of your product. And we recommend you change your password regularly, especially in the high security system. Changing the password monthly or weekly can better protect your product.
- The password cannot contain "admin" or its reverse.
- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

6. **Optional:** Check **Enable Hik-Connect** if the device supports Hik-Connect service.

7. Click **OK**.



#### Note

After the device is activated, you can click  or  in the **Operation** column of the online device list to modify network parameters or reset the password of the device.

## 2.2 Add Device

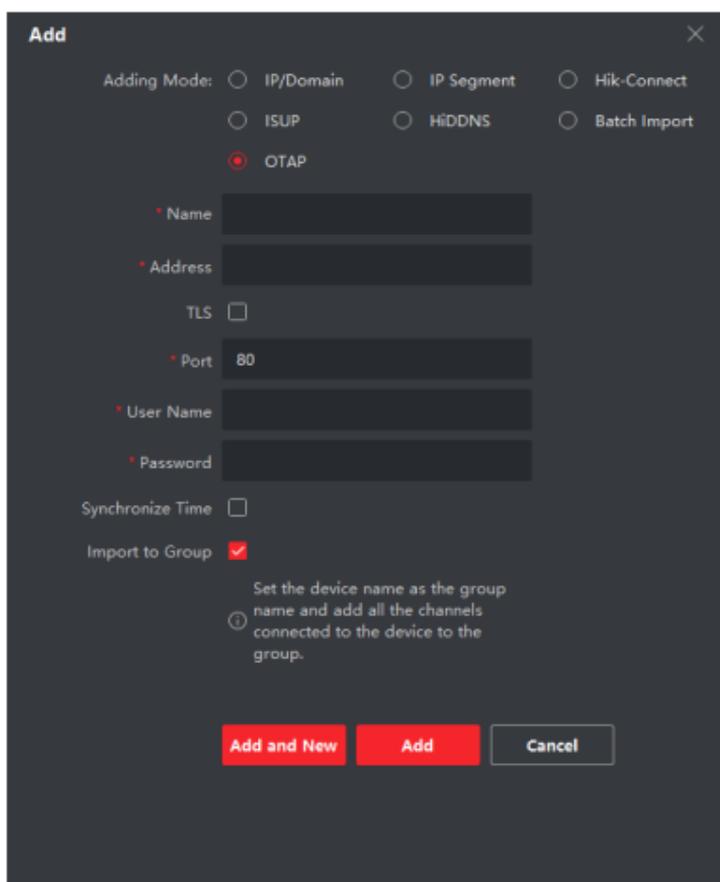
After the device is activated, you can add it to the client in OTAP mode for remote configuration and management.

### Before You Start

Obtain the IP address, user name, and password of the device to be added.

### Steps

1. Click **Device Management** → **Device**.
2. Click **Add**.



**Figure 2-3 Add Device**

3. Select **OTAP** as **Adding Mode**.

4. Enter the required information.

**Name**

Enter a descriptive name for the device.

**IP Address**

Enter the IP address of the device.

**Port**

Set the port number of the device. The default port number is 80.

**User Name**

Enter the user name set when the device is activated. By default, the user name is **admin**.

**Password**

Enter the password set when the device is activated.

5. **Optional:** Check **TLS** to enable transmission encryption using TLS (Transport Layer Security) protocol for security purposes.



**Note**

- This function should be supported by the device.
- The client does not support security certificate authentication. Importing a trusted device certificate is not required. You only need to set **Enhanced SDK Service Port** (443 by default) to enable transmission encryption.

6. Check **Synchronize Time** to synchronize the device time with the PC running the client.

7. **Optional:** Check **Import to Group** to create a group by device name, and import all channels of the device to this group.

8. Click **Add** to finish device adding, or click **Add and New** to continue adding another device.

## 9. Optional: Perform the following operations.

- Perform Remote Configuration** Click  in the **Operation** column for remote configuration of the corresponding device.
- View Device Status** Click  in the **Operation** column to view the device status.
- Edit Device Information** Click  in the **Operation** column to edit the device information, including the device name, IP address, port number, user name, and password.
- Refresh** Click  in the **Operation** column or click  to get the latest device information.
- Delete Device** Select one or multiple devices, and click  to delete the selected device(s) from the client.
- View Alarm Events** The device reports an alarm event when the device is offline, the port is disconnected, PoE is powered off, or the whole device PoE power reaches or exceeds the upper limit. You can click the corresponding button in the lower right corner of the interface to automatically hide, lock, maximize, or manually hide the alarm event list. The client supports viewing device alarm event information and batch processing alarm events.

## 3 Device Status

You can view the device status, port status, port statistics, and PoE port status.

Click **Device** → **Operation** →  .

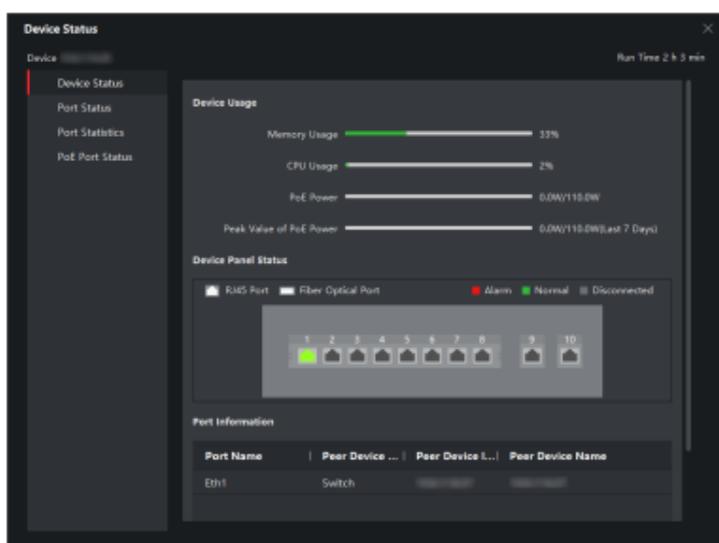


Figure 3-1 Device Status

### Device Status

You can view the device usage, device panel status, and port information.

### Port Status

You can view the rate, duplex mode, and flow control enabling status of each port.

### Port Statistics

You can view the number of bytes sent or received, the number of packets sent or received, sending or receiving rate, and peak value of the sending or receiving rate (in the last seven days). You can also set the interval at which port statistics are automatically refreshed, manually refresh port statistics, or clear port statistics.



#### Note

You can drag the scroll bar to view all statistics.

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### PoE Port Status

For devices that support PoE, you can view the PoE enabling status and output power of each PoE RJ45 port.

## 4 Topology Management

You can view and configure the network topology between devices added to the client.

### 4.1 Related Operations

Select an added device, and click  → **General Application** → **Topology**.

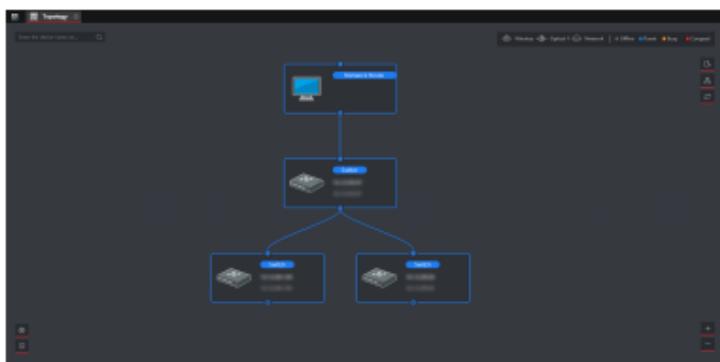


Figure 4-1 Topology Management

### Interface Description

- In the upper left corner, you can enter a device name or IP address to search the desired device.
- In the upper right corner, you can obtain the meanings of different link icons and colors, select two devices to show the transmission path between them, and export or refresh the topology view.
- In the lower left corner, you can enable security protection with one click, perform topology settings, and view the tips.
- In the lower right corner, you can click the icons or scroll your mouse wheel to zoom in or out on the topology view.



#### Note

- Before generating the topology, make sure that all devices have been added to the client. If a device is added to the client for

the first time, click **Add Topology** to generate the device's network topology.

- If no topology is displayed when you access the topology interface for the first time, click  to refresh the topology view or get topology again.

## Related Operations

Operation	Description
Double-click a device to view the device details.	You can view the basic device information such as the device type, model, and IP address as well as the device usage, panel status, and port information.
Double-click a link to view the link details.	You can view the transmission rates of the link and the information about devices at both ends of the link.
Right-click a device, and select <b>Device Status</b> , <b>Event Handling</b> , <b>Remote Configuration</b> , <b>Edit Name</b> , or <b>Set as Root Node</b> from the shortcut menu.	<b>Device Status:</b> You can jump to the <b>Device Status</b> interface. For details, see <a href="#">Device Status</a> .
	<b>Event Handling:</b> You can view the information about alarm events such as the event time, event source, and event details, or clear events.
	<b>Remote Configuration:</b> You can jump to the web page of the device for remote configuration. For detailed operations, see <i>Smart Managed Switch Web User Manual</i> .
	<b>Edit Name:</b> You can customize the device name.
Click  to export the topology view.	<b>Set as Root Node:</b> You can set the device as the root node on the topology view.
	You can select the saving path and format, and export the topology view.  <b>Note</b> The default format is PDF.
Click  to show the transmission path.	You can select a network camera (IPC) and the current device to show the path of signal transmission between them.

## 4.2 Topology Settings

### Steps

1. Click  in the lower left corner to edit topology settings.

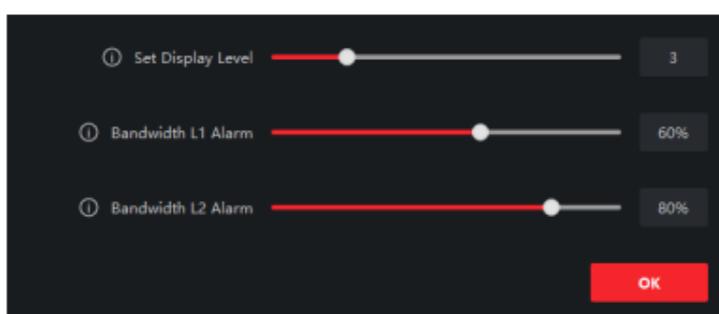


Figure 4-2 Topology Settings

### Set Display Level

Set the topology display level. The value ranges from 1 to 10.

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 **Note**

You need to manually refresh the topology view for the setting to take effect.

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### Bandwidth L1 Alarm

Set the L1 alarm threshold of bandwidth. The value ranges from 1% to 100%.

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 **Note**

The link will turn yellow (busy) when the bandwidth exceeds this threshold.

---

### Bandwidth L2 Alarm

Set the L2 alarm threshold of bandwidth. The value ranges from 1% to 100%.

---

 **Note**

- The link will turn red (congested) when the bandwidth exceeds this threshold.
  - The L2 alarm threshold should be larger than the L1 alarm threshold.
- 

2. Click **OK**.

---

 **Note**

After topology settings are changed, you can click  to obtain the latest topology.

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