VNNOX
One-Stop Cloud Platform

V1.0.0

iCare Quick Start Guide

Change History

Version	Date	Description	Modified By
V1.0.0	2020-06-05	Initial version	Zhang Shengnan

Contents

1   Overview

About This Document

This document introduces how to remotely monitor the synchronous or asynchronous LED display control system with iCare and includes the limitations on product models, monitoring ranges, etc. depending on different hardware connections, helping beginners get started with iCare.

About iCare

iCare is a free cloud monitoring service capable of monitoring LED display control systems in a centralized manner and sending alarm notifications. This service comes with an enterprise-level one-stop monitoring solution that works out of the box for cloud users. By using resource grouping management, iCare enables specially-assigned persons for management, duty allocation and data isolation.

iCare provides all-round monitoring for sending cards, receiving cards, monitoring cards, multifunction cards and smart modules in LED display control systems. By sending emails according to the specified rules for alarms, faulty LED rate, periodic inspection and so on, users are notified of the control system health in a timely manner, improving maintenance efficiency.
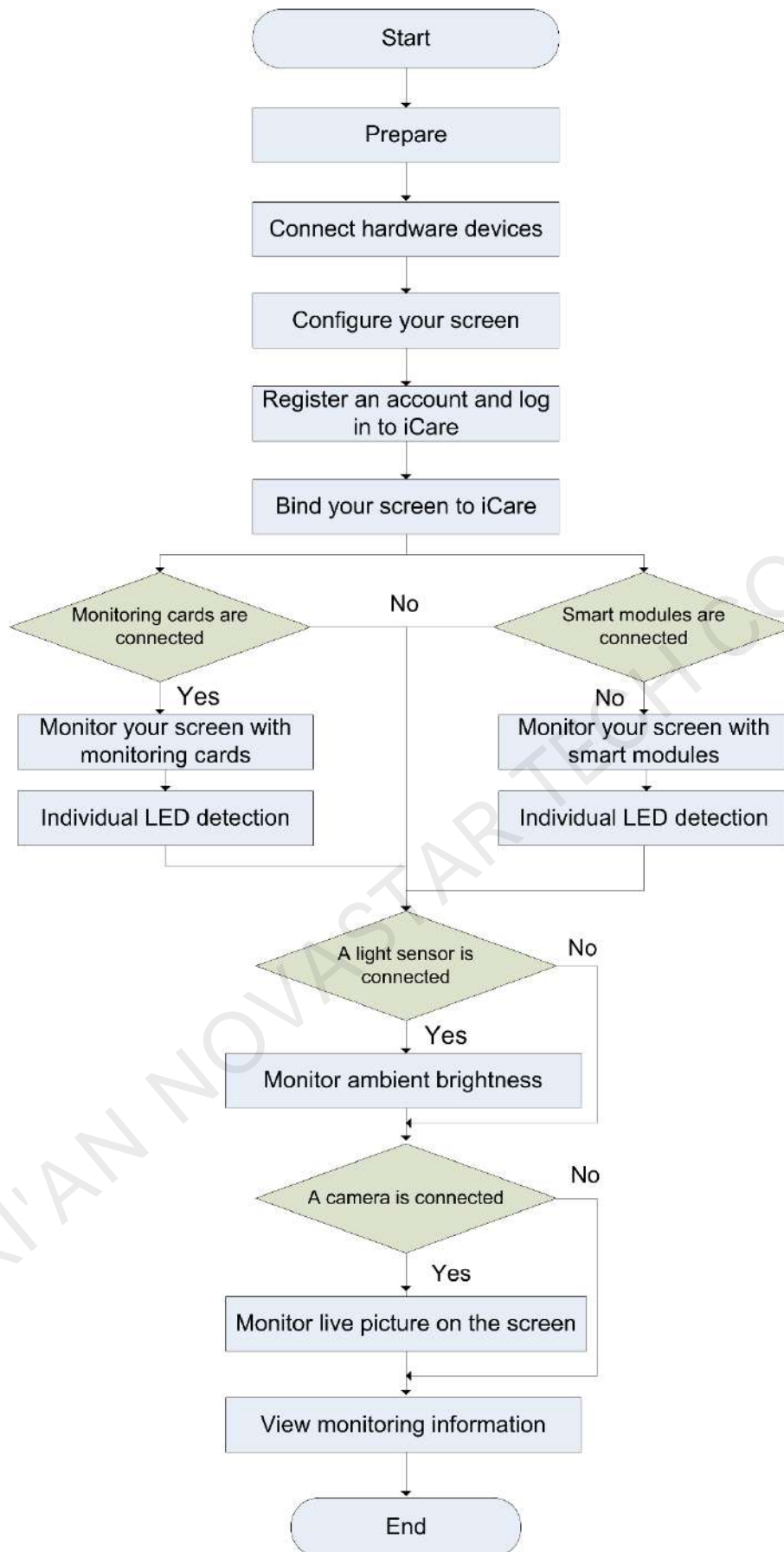
Hardware Configuration and Monitoring Items

Monitoring Item	Basic Hardware Configuration	Additional Hardware Configuration (Optional)			
	Sending Card/Taurus +Receiving Card	Monitoring Card	Smart Module	Multifunction Card +Light Sensor	Camera
Online/Offline time	√				
Control system temperature	√				
Player resource usage	√				
Sending card working status	√				
Sending card Ethernet port redundancy status	√				
DVI status	√				
Hardware connection status	√				
Receiving card	√				
Receiving card working status	√				
Receiving card voltage	√				
Receiving card temperature	√				
Screen brightness readback	√				
Scheduled brightness adjustment	√				
Monitoring card working status		√			
Monitoring card voltage		√			

Monitoring Item	Basic Hardware Configuration	Additional Hardware Configuration (Optional)			
	Sending Card/Taurus +Receiving Card	Monitoring Card	Smart Module	Multifunction Card +Light Sensor	Camera
Smoke alarm		√			
Cabinet door status		√			
Fan speed		√			
Flat cable status		√	√		
Individual LED detection for modules		√	√		
Smart module working status			√		
Smart module voltage			√		
Smart module temperature			√		
Ambient brightness readback				√	
Smart brightness adjustment				√	
Monitoring picture					√

During hardware product selection, please note the following:

- For the basic configuration, choose the appropriate sending card/Taurus series multimedia player and receiving card based on the actual needs and screen size.

  − Synchronous control system: Sending card+Receiving card

  − Asynchronous control system: Taurus series multimedia player+Receiving card

- Monitoring cards and smart modules cannot be used for monitoring simultaneously.

- When a monitoring card is used for monitoring, its model is MON300 and it works with the MRV320 and MRV560 receiving cards.

- When a smart module is used for monitoring, it works with the A4, A4s, A5, A5s, A7, A7s, A8, A8s, A9s, A10s Plus, XC200, XC100 and B4s receiving cards.

- When a light sensor is used for monitoring, it works with the MFN300 multifunction card.

- When a camera is used for monitoring, the supported camera models include Hikvision DS-2DE4223IW-DE (B) and DS-2CD2626FWDV2-IS (2.7-12mm), and Dahua DH-IPC-HFW2433DM-LED.

Getting Started with iCare

Start

↓

Prepare

↓

Connect hardware devices

↓

Configure your screen

↓

Register an account and log in to iCare

↓

Bind your screen to iCare

```
        No
Monitoring cards are          Smart modules are
   connected                     connected
        │Yes                        │No
Monitor your screen with    Monitor your screen with
   monitoring cards            smart modules
        │                          │
Individual LED detection    Individual LED detection
```

A light sensor is connected ───No─┐

│Yes

Monitor ambient brightness

↓

A camera is connected ───No─┐

│Yes

Monitor live picture on the screen

↓

View monitoring information

↓

End

2 Preparation

2.1 Installing Software

Synchronous Control System

Get and install the software listed in Table 2-1.

The table only lists the features mentioned in this document.

Table 2-1 Required software

Name	Type	Description	Where to Get
NovaLCT	PC client	LED configuration tool for Windows only, used mainly for configuring screens, binding screens to iCare and configuring monitoring	www.novastar.tech

Asynchronous Control System

Get and install the software listed in Table 2-2. Install either ViPlex Handy or ViPlex Express.

The table only lists the features mentioned in this document.

Table 2-2 Required software

Name	Type	Description	Where to Get
ViPlex Handy	Mobile client	LAN-based screen management software for Android and iOS, used mainly for binding screens to iCare	
ViPlex Express	PC client	LAN-based screen management software for Windows only, used mainly for binding screens to iCare	http://www.en.vnnox.com/download
NovaLCT	PC client	LED configuration tool for Windows only, used mainly for configuring screens, binding screens to iCare and configuring monitoring	www.novastar.tech

2.2 Obtaining Information

The asynchronous control system requires the information listed in Table 2-3. You are advised to change the default password to enhance security.

Table 2-3 Required information

Action	Default Name	Default Password
Connecting to the Wi-Fi AP of the Taurus	AP name: AP+*Last 8 digits of SN* Example: AP10000033	12345678
Logging in to the Taurus	User name: admin	123456

3 Connecting Hardware Devices

Synchronous Control System

Connect the PC with NovaLCT installed to the sending card with a control cable (USB cable or Ethernet cable), as shown in Figure 3-1. The MCTRL4K is used as an example of a sending card. You can choose the smart module, monitoring card, multifunction card, light sensor, etc. according to your actual needs.

Connect the PC with NovaLCT installed to the Internet, and the synchronous control system is connected to the Internet.

Figure 3-1 Hardware connection example

Asynchronous Control System

The PC with NovaLCT installed sends control commands, parameters and configuration files to the multimedia player via Ethernet cable or Wi-Fi network, as shown in Figure 3-2 and Figure 3-3. The TB6 is used as an example of a multimedia player. You can choose the smart module, monitoring card, multifunction card, light sensor, etc. according to your actual needs.

The Taurus can be connected to the Internet via any of the following:

- Wired network
- Wi-Fi network
- 4G network

Notes:

To connect the Taurus to the Internet via Wi-Fi network, the Taurus must support Wi-Fi Sta. The Taurus series products that support Wi-Fi Sta include the TB3, TB6 and TB8.

To connect the Taurus to the Internet via 4G network, buy and install the corresponding 4G module in advance. The Taurus series products that can be installed with 4G modules include the TB1-4G, TB2-4G, TB3, TB4, TB6 and TB8.

Figure 3-2 Direct connection

Figure 3-3 LAN connection
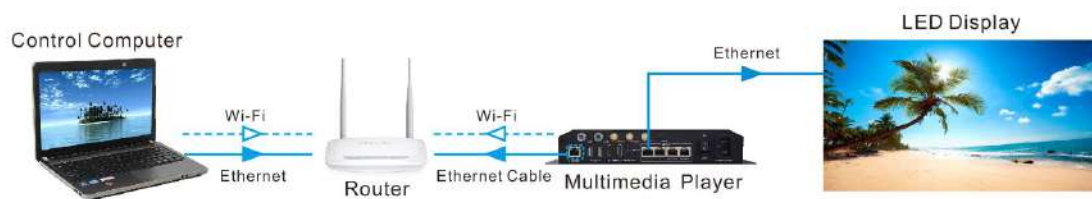
4 Configuring Screens

Applications

To make sure that content can be correctly displayed on an LED screen, screen configuration is required after you set up the LED screen control system. Here we only introduce how to configure a screen when there is an appropriate configuration file. To configure a screen manually, see the Screen Configuration section in the user manual for NovaLCT.

Prerequisites

The system configuration file (.scfg) is prepared.

Operating Procedure

Step 1   Open NovaLCT.

Step 2   Choose **User** > **Advanced Synchronous System User Login**/**Media Player Login**, then enter your user name and password according to the onscreen instructions.

- For the synchronous system, choose **Advanced Synchronous System User Login**. The default password is "admin".

- For the asynchronous system, choose **Media Player Login**, select the target terminal and click **Connect System**. The default user name is "admin" and the default password is "123456".

Step 3   Click [Screen Configuration] or choose **Settings** > **Screen Configuration** from the menu bar to open the dialog box shown in Figure 4-1.

Figure 4-1 Screen configuration method selection
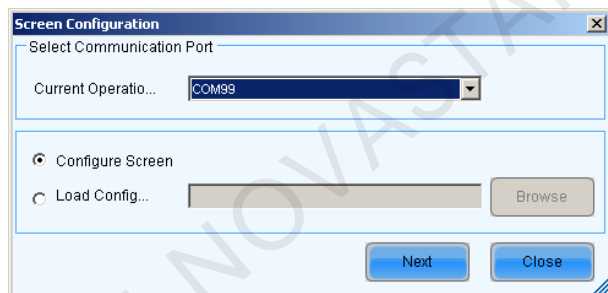
Step 4   Choose a communication port.

Step 5   Select **Load Configuration File**.

Step 6   Click **Browse**, then select the configuration file and click **Open**.

Step 7   Click **Next** to start loading the configuration file.

After the file is loaded, the dialog box shown in Figure 4-2 is closed automatically.

Figure 4-2 Loading the configuration file
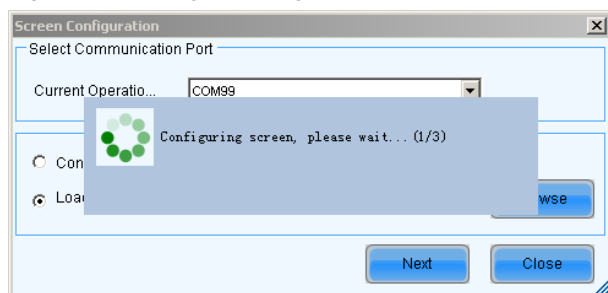
5   Registering for an Account and Logging In to iCare

Applications

iCare is a free service which becomes available to you automatically as soon as you create a VNNOX account.

Operating Procedure

Registering for a VNNOX Account

Step 1   Visit www.en.vnnox.com and click **Sign Up** at the upper right of the page.

Step 2   Select a server node and click **OK**.

Step 3   Select **Register by Phone** or **Register by Email**, then enter the required information.

Step 4   Click **Register**.

Logging In to iCare

Step 5   Visit www.en.vnnox.com and click **Log In** at the upper right of the page.

Step 6   Select a server node and click **OK**.

Figure 5-1 Home page of the cloud platform

Step 7   Click anywhere in the iCare section to access the home page of iCare.

When you access iCare for the first time, the onscreen instructions of setting the default system will be displayed. If you set iCare as the default system, you will access the home page of iCare directly after logging in to VNNOX next time.

Viewing iCare Authentication Information

Step 8   After successful login, choose 👤 > **Player Authentication**.

Step 9   View iCare authentication information, as shown in Figure 5-2.

Figure 5-2 Player authentication information
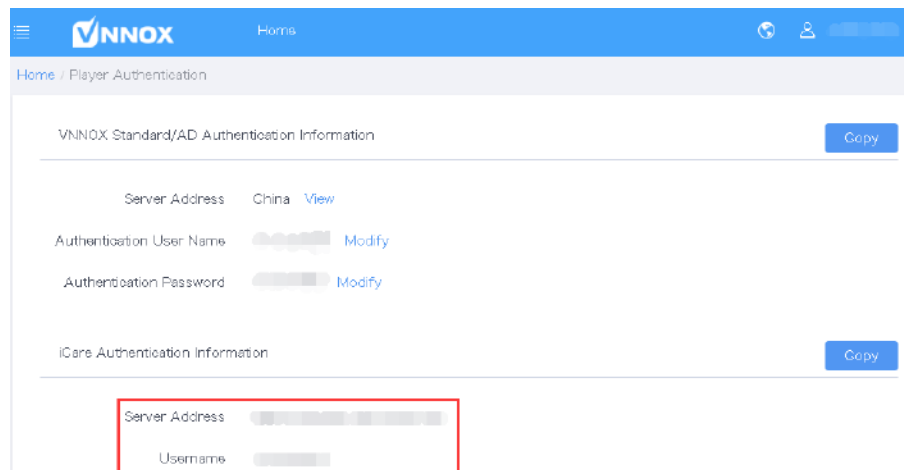
6 Binding Screens to iCare

After you bind your screens to NovaStar's iCare, you can access iCare anytime, anywhere to remotely monitor the working conditions of your screens in a centralized manner.

- For NovaStar's synchronous control system, go to 6.1   Binding to iCare with NovaLCT.
- For NovaStar's asynchronous control system, go to 6.2   Binding to iCare with ViPlex.

6.1 Binding to iCare with NovaLCT

Prerequisites

- The screen configuration is done.
- Your computer is connected to the Internet.
- The iCare authentication information is obtained.

  Log in to VNNOX (www.en.vnnox.com). On the home page of the cloud platform, choose 🔲 > **Player Authentication**.

Operating Procedure

Step 1   Open NovaLCT.

Step 2   Click 〽️ Monitoring or choose **Tools** > **Monitoring** from the menu bar.

Step 3   Click **Configuration**.

Step 4   On the **Refresh Period** tab page, select **Automatic Refresh** and **Link to NovaiCare**, then click **Save** and **OK**.

Figure 6-1 Monitoring configuration
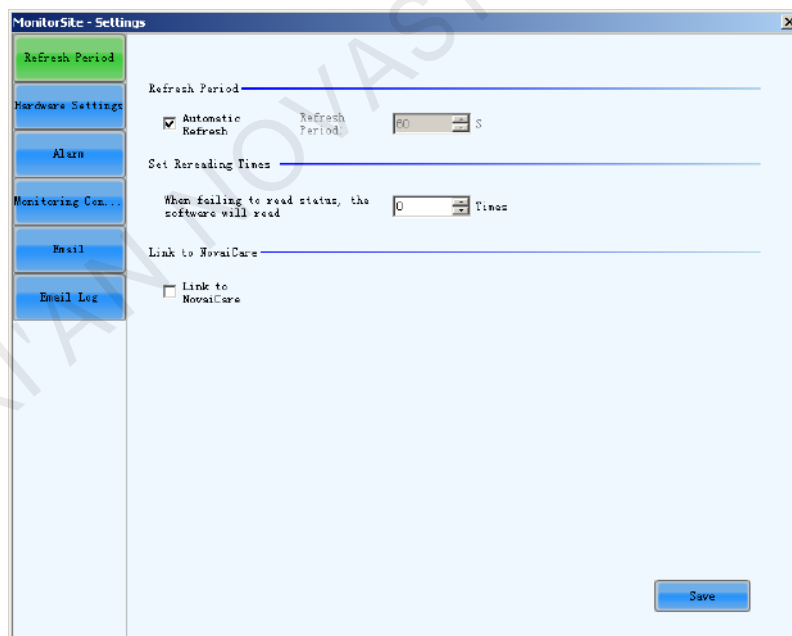
Note:

If your settings cannot be saved, please do the following:

1. On the desktop taskbar, right-click 📊, select **Exit** and click **OK**.

2. Click 〽️ Monitoring to restart the monitoring function.

Step 5   Click or choose **Settings** > **Cloud Monitoring** from the menu bar.

Figure 6-2 Registering screens with iCare

Step 6   Click **Modify Registration**.

Figure 6-3 Modifying registration
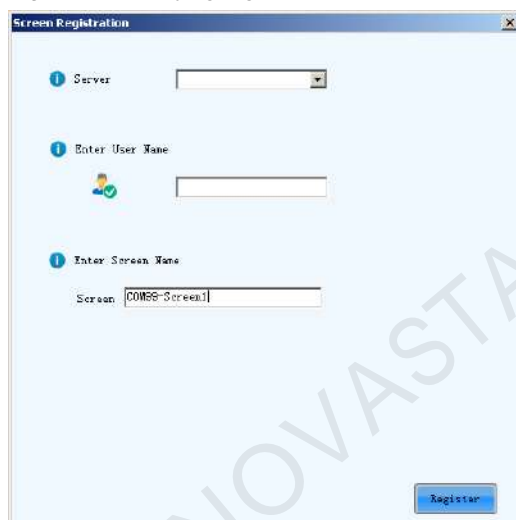
Step 7   Select a server, and enter your VNNOX user name and screen name. Click **Register**.

The authentication information must be consistent with the iCare authentication information in VNNOX.

Step 8   After the registration is done, click **OK**.

6.2   Binding to iCare with ViPlex

Prerequisites

- The screen configuration is done.
- Your computer is connected to the Internet.
- The iCare authentication information is obtained.

   Log in to VNNOX (www.en.vnnox.com). On the home page of the cloud platform, choose 👤 > **Player Authentication**.

Operating Procedure

You can bind screens to iCare with ViPlex Express or ViPlex Handy. Here we use ViPlex Express as an example.

Step 1   Connect your PC to the Wi-Fi AP of the Taurus.

Step 2   Open ViPlex Express.

Step 3   Click **Refresh** to refresh the screen list.

After detecting the Taurus, ViPlex Express will try to log in to the Taurus with the default account or the account used for the last login.

- 🟠: Denotes that the Taurus is online and you can log in to it. Go to Step 4.
- ⚫: Denotes that the Taurus is offline and you cannot log in to it.
- 🟢: Denotes that you have successfully logged into the Taurus.

Step 4   Click **Connect** next to the screen information.

Step 5   Enter the password for the "admin" user and then click **OK**.

The default password is "123456".

Step 6   Choose **Terminal Control** > **Server configuration**.

Step 7   Select the target terminal from the terminal list.

Figure 6-4 Server configuration
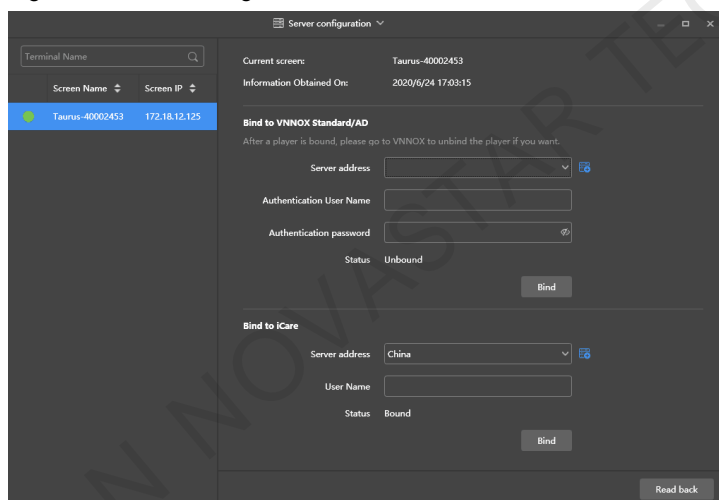
Step 8   In the **Bind to iCare** area, select a server and enter your VNNOX user name.

The authentication information must be consistent with the iCare Authentication Information in VNNOX.

7   Monitoring Screens with Monitoring Cards

If a monitoring card is connected between the module and receiving card, complete the operations in 7.1 Configuring Monitoring Items and 7.2   Setting Monitoring Thresholds in turn to enable remote monitoring of the monitoring card humidity, monitoring card voltage, smoke, fan, monitoring device power supply, flat cable, cabinet door, etc., allowing you to know about and deal with the abnormal conditions in a timely manner.

7.1   Configuring Monitoring Items

Applications

If monitoring cards are connected, you need to connect NovaLCT to the monitoring cards and configure the monitoring items in NovaLCT.

Applicable Products

Applicable to the MON300 monitoring card. This card works with the MRV320 and MRV560 receiving cards.

Operating Procedure

Step 1   Open NovaLCT.

Step 2   Choose **User** > **Advanced Synchronous System User Login**/**Media Player Login**, then enter your user name and password according to the onscreen instructions.

- For the synchronous system, choose **Advanced Synchronous System User Login**. The default password is "admin".

- For the asynchronous system, choose **Media Player Login**, select the target terminal and click **Connect System**. The default user name is "admin" and the default password is "123456".

Step 3   Click [Monitoring] or choose **Tools** > **Monitoring** from the menu bar.

Step 4   Choose **Monitoring** to open the monitoring page.

Figure 7-1 Monitoring
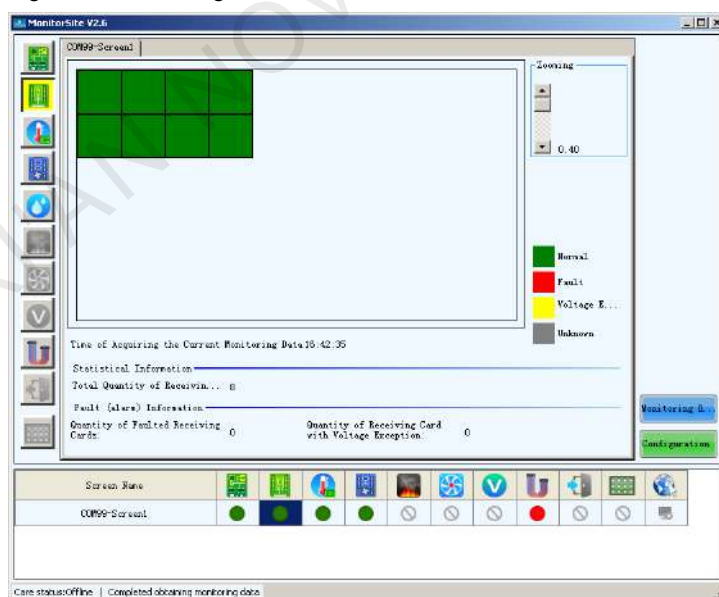
Step 5   Click **Configuration**.

Step 6   On the **Hardware Settings** tab page, select **Connect to Monitoring Card** and set the monitoring items. After the settings are done, click **Save**.

Monitoring items include monitoring card humidity, monitoring card voltage, smoke status, fan speed, device power supply, flat cable status and cabinet door status.

Figure 7-2 Hardware settings
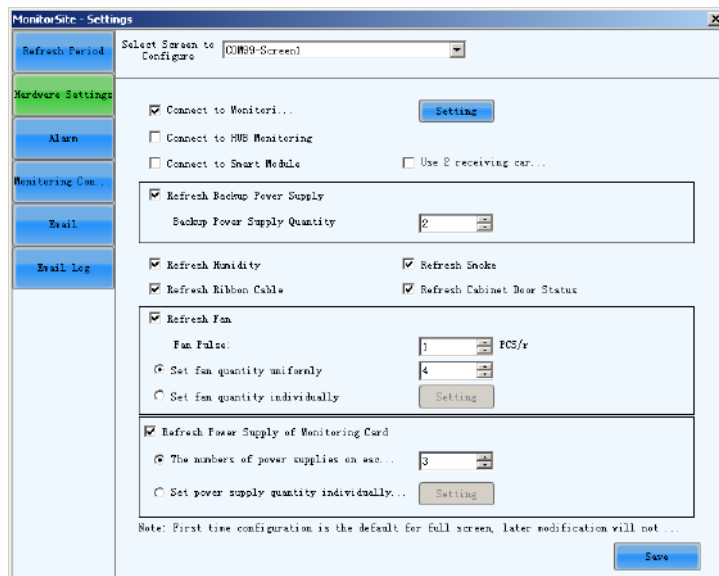
7.2 Setting Monitoring Thresholds

Applications

Specify the alarm threshold for each monitoring item so that you can be notified of the abnormal conditions in a timely manner.

Prerequisites

- The configuration for monitoring with monitoring cards is done. For detailed operations, see 7.1 Configuring Monitoring Items.
- You have logged in to iCare.

Operating Procedure

Step 1   Log in to iCare. See detailed operations in 5   Registering for an Account and Logging In to iCare.

Step 2   On the home page of iCare, choose 　　 > **Screen Management** > **Screen List** to access the screen list page.

Step 3   Click a screen name. On the page that appears, select the **Fault & Alarm Details** tab to view the alarm history and notification emails of the screen.

Figure 7-3 Fault & alarm details
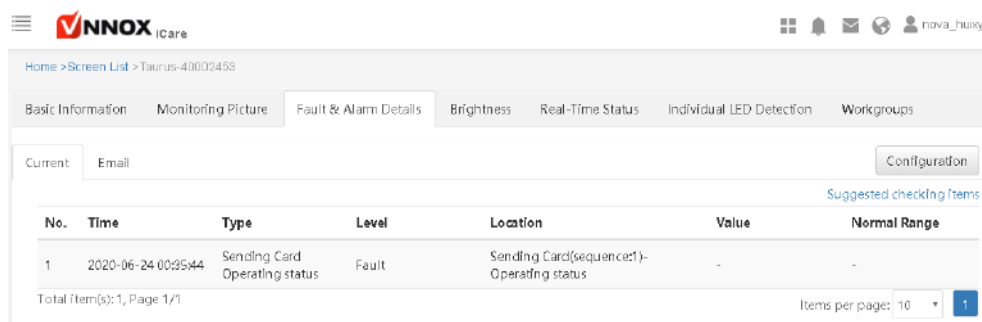
Step 4   At the upper right of the page, click **Configuration** to access the threshold settings page and set thresholds as required.

Figure 7-4 Threshold settings

iCare collects the parameters of sending cards, receiving cards and monitoring cards. If the value of a parameter is not within its normal range, the system will send an alarm notification which can be viewed on the home page.

Figure 7-5 Screen alarm information

8 Monitoring Screens with Smart Modules

Smart modules allow for a smaller monitoring unit, requiring no independent monitoring cards and saving cabinet space. If smart modules are connected, complete the operations in 8.1　　Configuring Monitoring Items and 8.2　　Setting Monitoring Thresholds in turn to enable remote monitoring of the module temperature, voltage and flat cable communication status so that you can be notified of the abnormal conditions in a timely manner.

8.1 Configuring Monitoring Items

Applications

If smart modules are connected, you need to connect NovaLCT to the smart modules and configure the monitoring items in NovaLCT.

Applicable Products

Applicable to the A4, A4s, A5, A5s, A7, A7s, A8, A8s, A9s, A10s Plus, XC200, XC100, B4s receiving cards

Operating Procedure

Step 1　Open NovaLCT.

Step 2　Choose **User** > **Advanced Synchronous System User Login**/**Media Player Login**, then enter your user name and password according to the onscreen instructions.

- For the synchronous system, choose **Advanced Synchronous System User Login**. The default password is "admin".

- For the asynchronous system, choose **Media Player Login**. The default user name is "admin" and the default password is "123456".

Step 3　Click Monitoring, or choose **Tools** > **Monitoring** from the menu bar.

Step 4　Choose **Monitoring** to open the monitoring page.
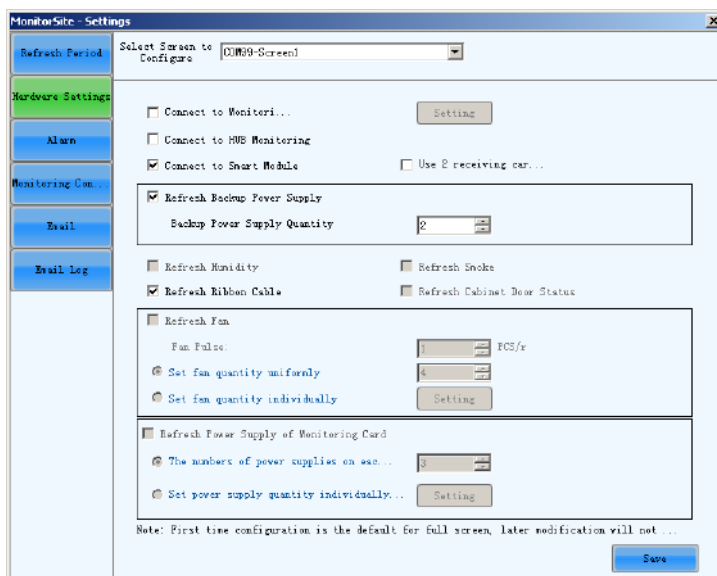
Figure 8-1 Monitoring
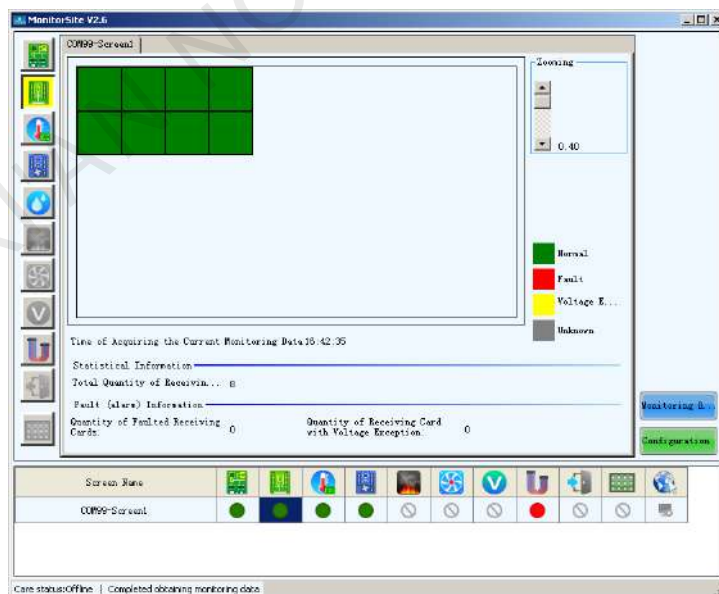
Step 5　Click **Configuration**.

Step 6 On the **Hardware Settings** tab page, select **Connect to Smart Module** and set the monitoring items. After the settings are done, click **Save** to save your settings.

Monitoring items include backup power and flat cable status.

Figure 8-2 Connecting to smart module

8.2 Setting Monitoring Thresholds

Applications

Specify the alarm threshold for each monitoring item so that you can be notified of the abnormal conditions in a timely manner.

### Prerequisites

- The monitoring configuration for smart modules are completed. For detailed operations, see 8.1 Configuring Monitoring Items.
- You have logged in to iCare.

Operating Procedure

Step 1 Log in to iCare. See detailed operations in 5 Registering for an Account and Logging In to iCare.

Step 2 On the home page of iCare, choose ▦ > **Screen Management** > **Screen List** to access the screen list page.

Step 3 Click a screen name. On the page that appears, select the **Fault & Alarm Details** tab to view the alarm history and notification emails of the screen.

Figure 8-3 Fault & alarm details
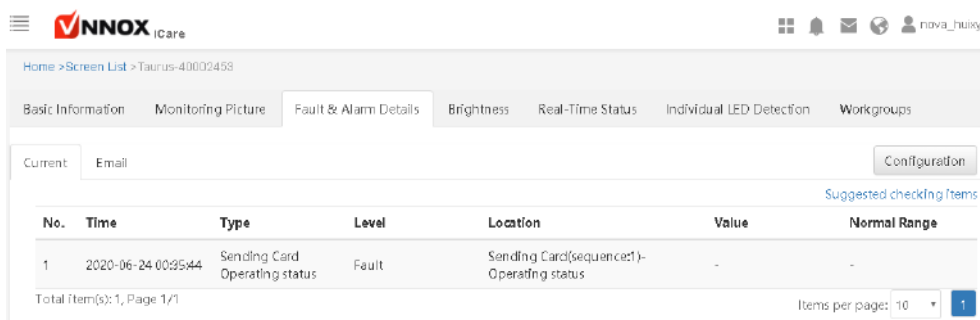
Step 4 At the upper right of the page, click **Configuration** to access the threshold settings page and set thresholds as required.

Figure 8-4 Threshold settings

iCare collects the parameters of sending cards, receiving cards and smart modules. If the value of a parameter is not within its specified range, the system will send an alarm notification which can be viewed on the home page.

Figure 8-5 Screen alarm information

9 Individual LED Detection for Screens

If the driver chips of modules support individual LED detection, complete the operations in 9.1   Setting Individual LED Detection Parameters and 9.2   Setting Individual LED Detection Cycle in turn to enable remote monitoring of the number of faulty LEDs, faulty LED rate, etc. If the faulty LED rate exceeds the specified value, you will receive a repair notification in a timely manner, improving maintenance efficiency.

9.1   Setting Individual LED Detection Parameters

Applications

When you configure individual LED detection for the first time, you need to configure the parameters in NovaLCT and then specify the detection cycle in iCare so that you can get the latest result of individual LED detection in iCare according to the specified cycle.

Applicable Products

- Individual LED detection with monitoring cards: Applicable to the MRV320 and MRV560 receiving cards
- Individual LED detection with smart modules: Applicable to the A4, A4s, A5, A5s, A7, A7s, A8, A8s, A9s, A10s Plus, XC200, XC100 and B4s receiving cards

Prerequisites

- The operations in 7.1   Configuring Monitoring Items for monitoring with monitoring cards or 8.1 Configuring Monitoring Items for monitoring with smart modules are done.
- The module driver chips available for individual LED detection include MBI5037, MBI5036, MBI5030, DM13H, P2518, RFI3630, MBI5034, MBI5040, MBI5051, MBI5052, MBI5053, MBI5045, MBI5039, MBI5152.

Operating Procedure

Step 1   Open NovaLCT.

Step 2   Choose **User** > **Advanced Synchronous System User Login**/**Media Player Login**, then enter your user name and password according to the onscreen instructions.

- For the synchronous system, choose **Advanced Synchronous System User Login**. The default password is "admin".
- For the asynchronous system, choose **Media Player Login**, select the target terminal and click **Connect System**. The default user name is "admin" and the default password is "123456".

Step 3   On the menu bar, choose **Tools** > **Led Error Detection**.

Figure 9-1 Individual LED detection
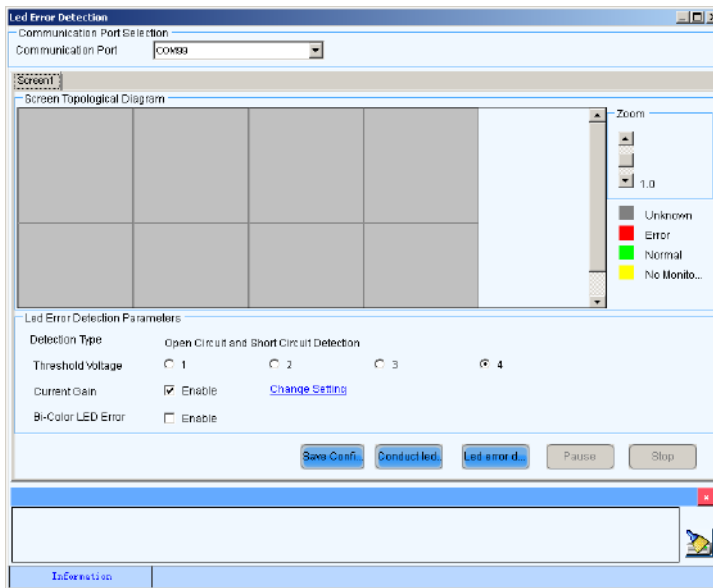
Step 4   Choose a communication port.

Step 5   Configure individual LED detection parameters.

- Detection Type: Detection type supported by the driver chip

- Threshold Voltage: This is the threshold voltage of the driver chip, which can be set based on the information provided by the screen manufacturer.

- Current Gain: Choose whether to enable the current gain function. Click **Change Setting** to adjust the current gain.

- Bi-Color LED Error: When this function is enabled, individual LED detection only covers the red and green LEDs.

Step 6   Click **Conduct led error detection for full screen**.

Step 7   After the detection is done, click **OK**.

The number displayed in the topological diagram indicates the number of faulty LEDs. Hover the mouse over the topological diagram to view the detailed detection information.

Figure 9-2 Detection result
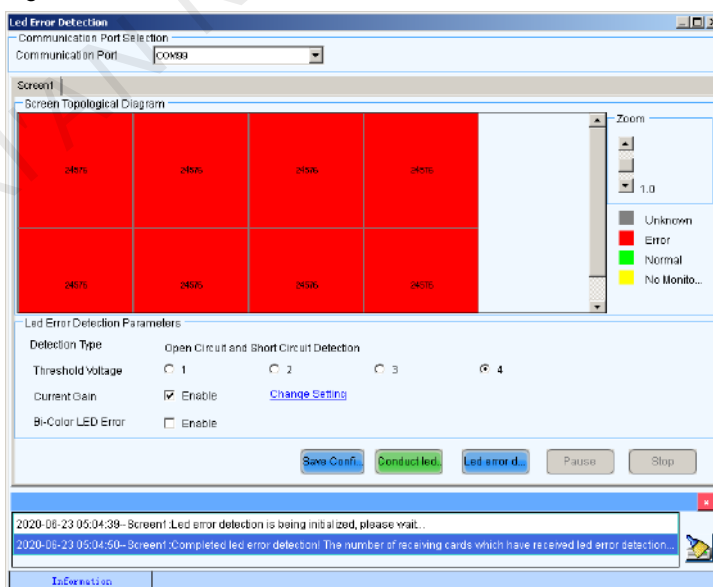
9.2   Setting Individual LED Detection Cycle

Applications

Set individual LED detection cycle and the rules for sending repair notifications so that users can be notified of the abnormal conditions in a timely manner.

Prerequisites

- The individual LED detection parameters are configured in NovaLCT. For detailed operations, see 9.1 Setting Individual LED Detection Parameters.
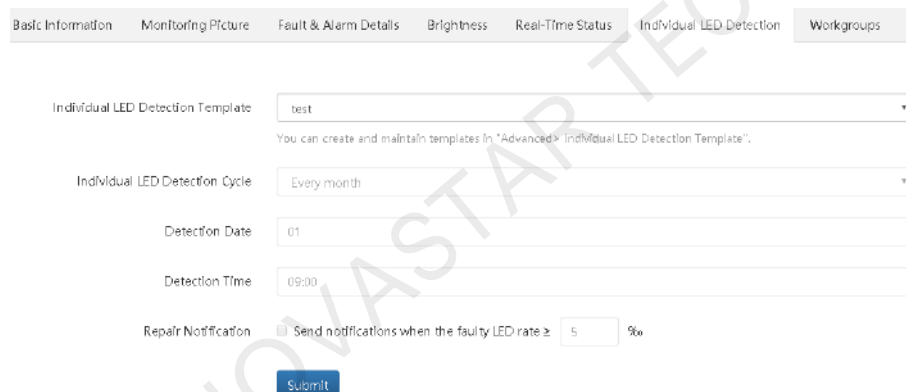- You have logged in to iCare.

Operating Procedure

Step 1   Log in to iCare. See detailed operations in 5   Registering for an Account and Logging In to iCare.

Step 2   On the home page of iCare, choose ▦ > **Screen Management** > **Screen List** to access the screen list page.

Step 3   Click a screen name. On the page that appears, select the **Individual LED Detection** tab page.

Step 4   At the upper right of the page, click **Configuration** to access the individual LED detection configuration page and set individual LED detection cycle and repair notification rule as required.

Figure 9-3 Setting individual LED detection cycle

Individual LED detection is done according to the specified time and the result is reported to iCare. You can access iCare on your PC and view the faulty LED rate of your screen anytime, anywhere.

10   Monitoring Ambient Brightness

If a light sensor is connected, complete the operations in 10.1   Configuring Multifunction Card and 10.2 Setting Brightness Adjustment Rules in turn to enable smart screen brightness adjustment according to ambient brightness.

> **Note:**
>
> In the asynchronous control system, The T3, T6, TB3, TB4, TB6 and TB8 have on-board light sensor connectors and no multifunction card is required for connecting to light sensors.

10.1   Configuring Multifunction Card

<u>Applications</u>

If a light sensor is connected to the multifunction card, you need to configure the multifunction card and complete peripheral light sensor configuration in NovaLCT.

### <u>Applicable Products</u>

MFN300 multifunction card

<u>Operating Procedure</u>

Step 1   Open NovaLCT.

Step 2   Choose **User** > **Advanced Synchronous System User Login**/**Media Player Login**, then enter your user name and password according to the onscreen instructions.

- For the synchronous system, choose **Advanced Synchronous System User Login**. The default password is "admin".

- For the asynchronous system, choose **Media Player Login**, select the target terminal and click **Connect System**. The default user name is "admin" and the default password is "123456".
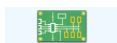
Step 3   Click ![Multi-function Card] or choose **Settings** > **Multi-function Card** from the menu bar.

Figure 10-1 multifunction card management
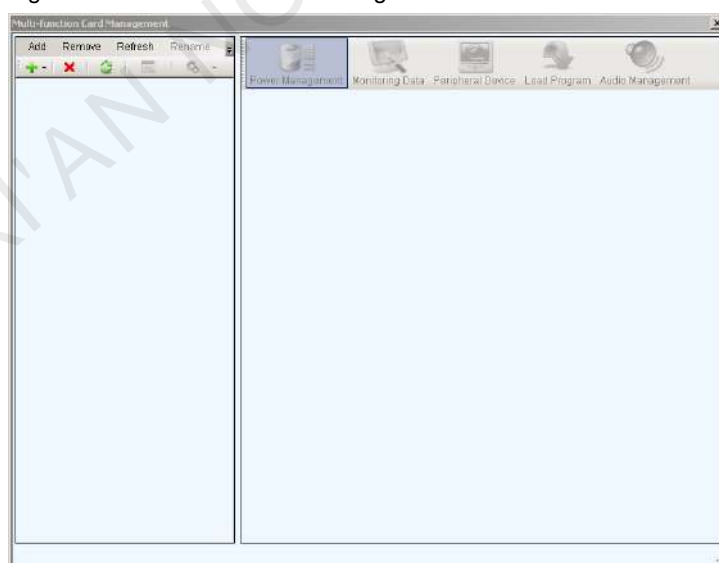

Step 4   Click **Add** and select the connection type of the multifunction card.

- Serial Port Connection: Select this option when the serial port of the multifunction card is connected to the USB port of the PC.

- Ethernet Port Connection: Select this option when the Ethernet port of the multifunction card is connected to that of the sending card or receiving card.

Step 5   For serial port connection, choose a communication port and click **OK**. For Ethernet port connection, choose a communication port and set other parameters shown in Figure 10-2, and then click **OK**.

Figure 10-2 Adding a multifunction card
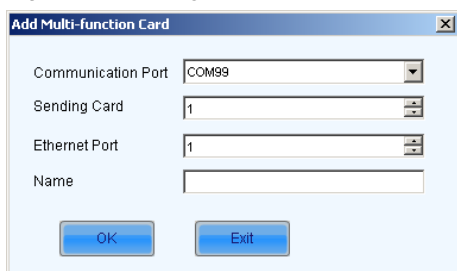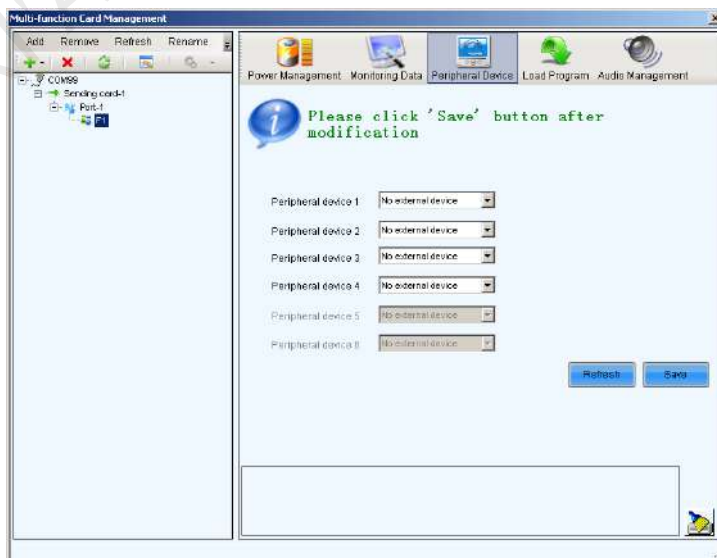

As shown in Figure 10-3, the multifunction card is successfully added via Ethernet port connection. The following procedure takes Ethernet port connection as an example to illustrate the function.

Figure 10-3 Ethernet port connection

Step 6   Select **Peripheral Device** and add light sensors as required. Then click **Save**.

Figure 10-4 Peripheral device

10.2   Setting Brightness Adjustment Rules

Applications

Adjust the brightness manually or set rules for smart brightness adjustment.

Prerequisites

- You have logged in to iCare.

- The light sensor is connected.

  If the light sensor is connected to a multifunction card, you need to complete the multifunction card configuration. See detailed operations in 10.1   Configuring Multifunction Card.

Operating Procedure

Step 1   Log in to iCare. See detailed operations in 5   Registering for an Account and Logging In to iCare.

Step 2   On the home page of iCare, choose   > **Screen Management** > **Screen List** to access the screen list page.

Step 3   Click a screen name. On the page that appears, select the **Brightness** tab to view screen brightness, ambient brightness, light sensor status, etc.

Figure 10-5 Brightness tab page
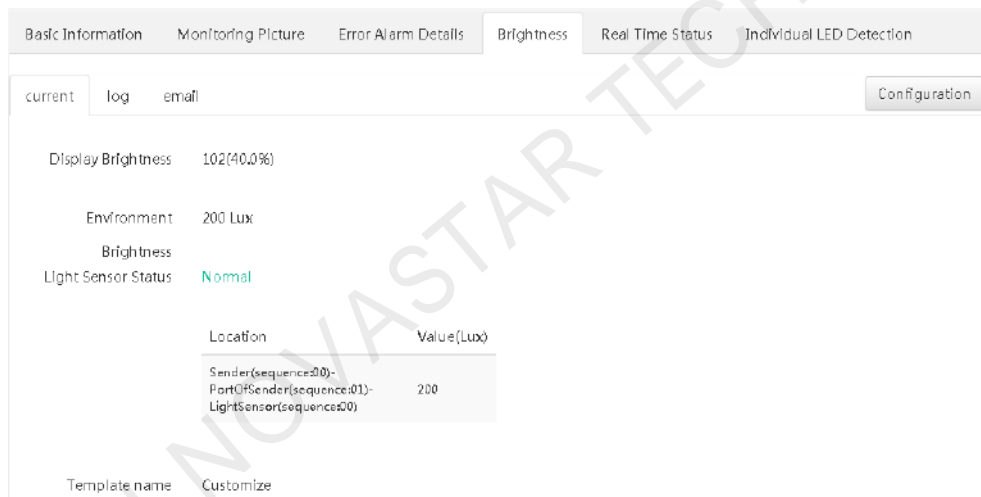
Step 4   At the upper right of the page, click **Configuration** to access the brightness configuration page and set rules for brightness adjustment and brightness thresholds as required.

- Automatic brightness adjustment: The screen brightness is the specified brightness or changes automatically according to the ambient brightness within the specified time range.

  Ambient brightness adjustment: The screen brightness changes according to the ambient brightness mapping table. The ambient brightness mapping table shows the relationship between screen brightness and ambient brightness.

- Brightness threshold monitoring: Set the normal screen brightness range. If the screen brightness goes out of the normal range you set, iCare will send you a fault notification.

Figure 10-6 Brightness adjustment

❤ Automatic Brightness Adjustment Table

Time	Type	Brightness (%)	Enable	Operation
05:00	Custom Brightness	29.1	☑	🗑 ✎
08:00	Custom Brightness	47.9	☑	🗑 ✎

➕ New

❤ Ambient Brightness Mapping Table

Display brightness when reading ambient brightness fails   ☑ ▬▬▬▬▬▬▬▬   23.6%

The display brightness will be adjusted to this value when reading ambient brightness fails.

Ambient Brightness(Lux)	Display Brightness(%)	Operation
1	1.0	Delete
11	7.9	Delete
21	14.8	Delete
31	21.8	Delete

Figure 10-7 Brightness threshold

Adjustment | Monitoring

Monitoring Log: ☑ Record screen brightness every 10 ⌄ minute(s)

▲ Brightness Monitoring Threshold Table

Start time(h)	End Time(h)	Brightness Thresholds			Notify Faults	Operation
06:00	11:00	▬▬▬▬▬▬▬	72 (28.2%)	255 (100.0%)	☑	🗑 ☐

➕ New

Submit

11 Monitoring Pictures

If cameras are connected, complete 11.1 Configuring Monitoring Pictures and 11.2 Configuring Cameras in turn to enable remote monitoring of the live pictures on the screen, and you can perform smart display detection for the pictures taken by the camera.

11.1 Configuring Monitoring Pictures

Applications

When you associate the monitoring pictures for the first time, you need to enable the monitoring picture function, obtain the storage location for snapshots to configure the relationship between the camera and screen.

Prerequisites

You have logged in to iCare.

Operating Procedure

Step 1   Log in to iCare. See detailed operations in 5   Registering for an Account and Logging In to iCare.

Step 2   On the home page of iCare, choose   > **Screen Management** > **Screen List** to access the screen list page.

Step 3   Click a screen name. On the page that appears, select the **Monitoring Picture** tab.

Step 4   At the upper right of the page, click **Configuration** to access the monitoring picture configuration page.

Figure 11-1 Enabling cameras

Step 5   Under the **Enable** column, select the corresponding camera.

Step 6   On the right of the target camera, click **How to configure?** Then follow the instructions to configure the camera.

For the detailed operations to configure a camera, see 11.2   Configuring Cameras.

Figure 11-2 Instructions for configuring a camera

Step 7   After the camera parameters are configured, click **View Result** to view the camera configuration result.

After the camera configuration is done, access iCare on your PC according to the specified picture uploading schedule to view the latest monitoring picture, monitoring picture history, smart display detection results anytime, anywhere, as shown in Figure 11-3.

Figure 11-3 Latest monitoring picture
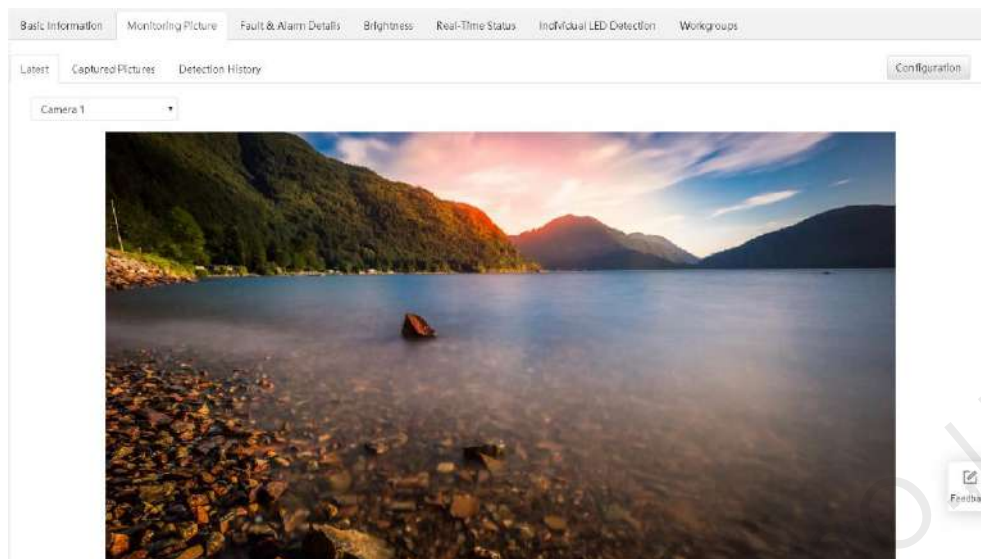
11.2 Configuring Cameras

Applications

Configure the relationship between the screen and cameras and specify the snapshot capture interval and storage location.

Applicable Products

Applicable to Hikvision DS-2DE4223IW-DE (B) and DS-2CD2626FWDV2-IS (2.7-12mm) cameras and Dahua DH-IPC-HFW2433DM-LED camera

Prerequisites

Before you configure the cameras, complete the following:

● Connect your PC and cameras to the same network segment.

● Download and install an online device search tool on your PC. For example, SADP is a tool that detects Hikvision cameras on the local area network. Download SADP from Hikvision's official website (https://www.hikvision.com/en/). Figure 11-4 shows where the SADP tool is on the website.

Figure 11-4 Downloading an online device search tool
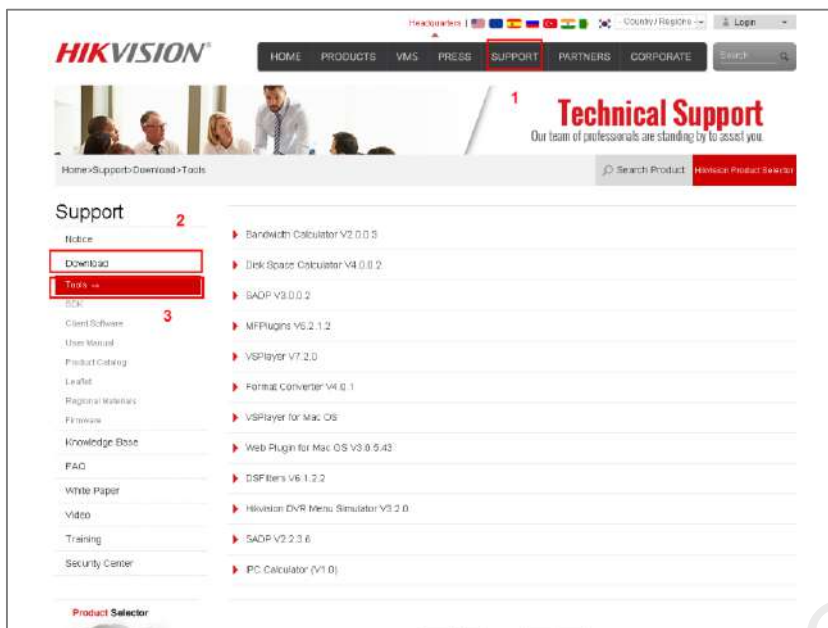
Operating Procedure

The configuration pages of different IP cameras vary, but the configuration procedures are the same. Hikvision cameras are used as an example to describe the following procedure.

**Network Parameter Configuration**

Step 1   Open the installed online device search tool and click **Refresh** on the home page.

Figure 11-5 Home page of the online search tool
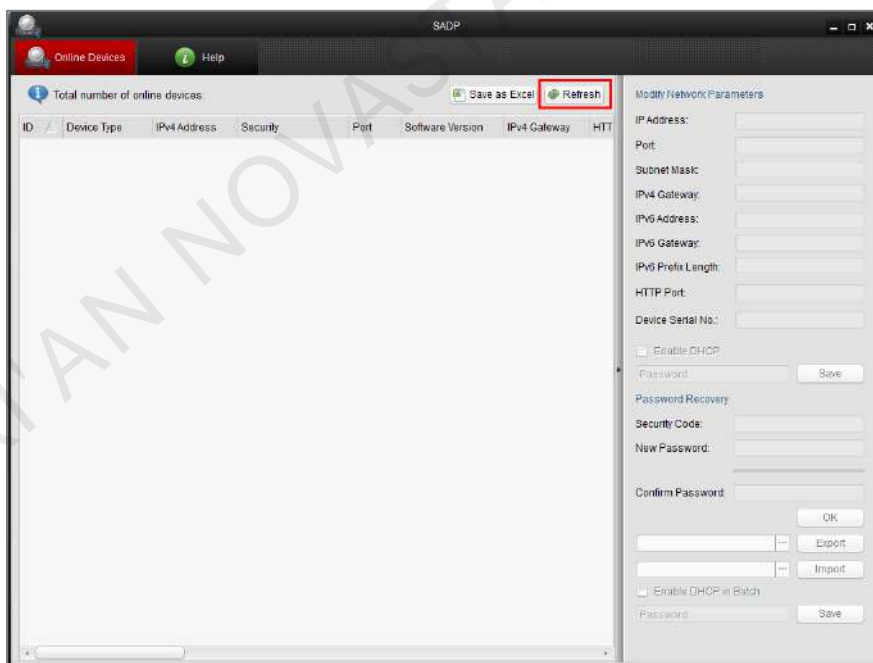
Step 2   Click to select the camera to be configured and configure the network parameters for the camera on the right of the page. No admin password is required by default. If you want to set a password, enter your password in the **Password** field box at the lower right of the page and then click **Save**.

Figure 11-6 Network parameter configuration
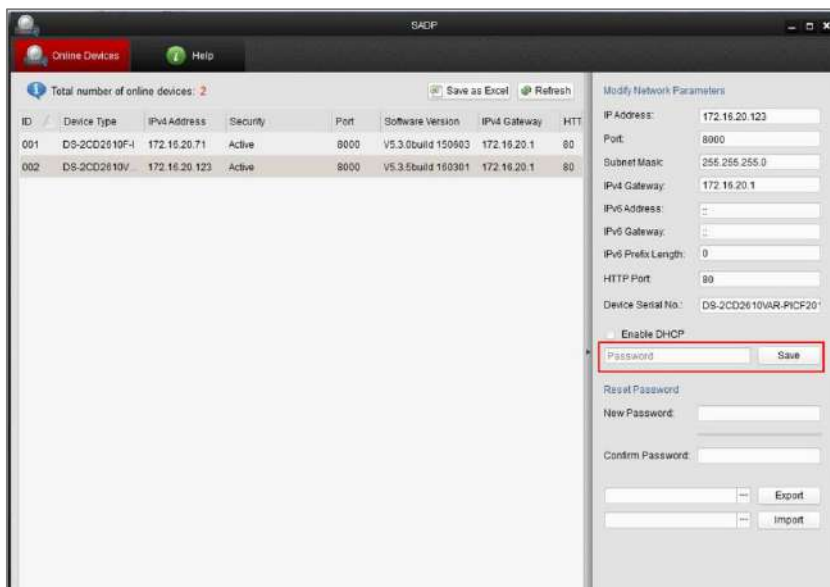
Note:

The configuration procedure is similar to the procedure of setting an IP address on a PC. You can set a static IP address or choose to obtain an IP address automatically. When you set a static IP address, the IP addresses of the camera and PC must be on the same network segment and cannot conflict. Make sure that the PC has access to the public network.

Syncing Camera Time

Step 3   Enter the IP address of the camera into the address bar of a browser (Internet Explorer 11 recommended) and then press the **Enter** key on the keyboard (or double click the IP address of a corresponding device in the device list shown in Figure 11-6) to access the device login page. The default user name is "admin" and the password is empty.

Figure 11-7 Logging in to a camera

Step 4   After logging in to a camera, you are prompted to download a plug-in.

Step 5   Click to download the plug-in, install it and then refresh the page. Select **All sites operation** from the prompt that appears.

Step 6   On the page that appears, choose **Configuration** > **System** > **System Settings** > **Time Settings**, then select **Sync. with computer time** and click **OK**.
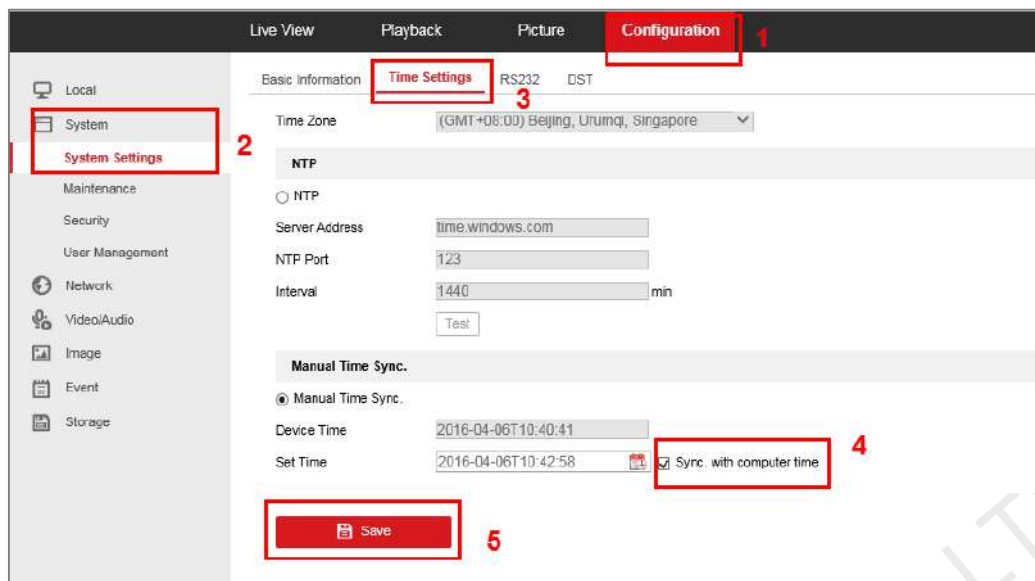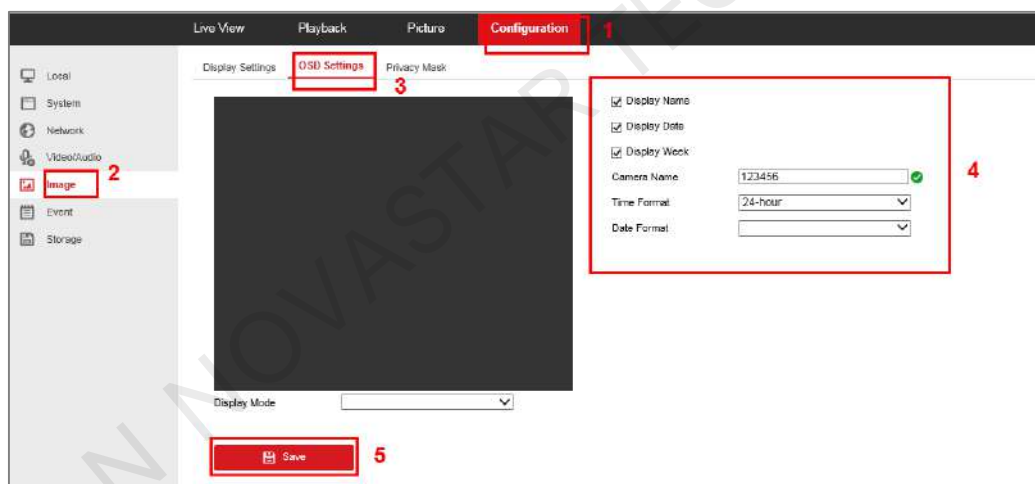
Figure 11-8 Setting time

Image Display Settings

Step 7   Choose **Configuration** > **Image** > **OSD Settings**, then set the parameters as required and click **Save**, as shown in Figure 11-9.
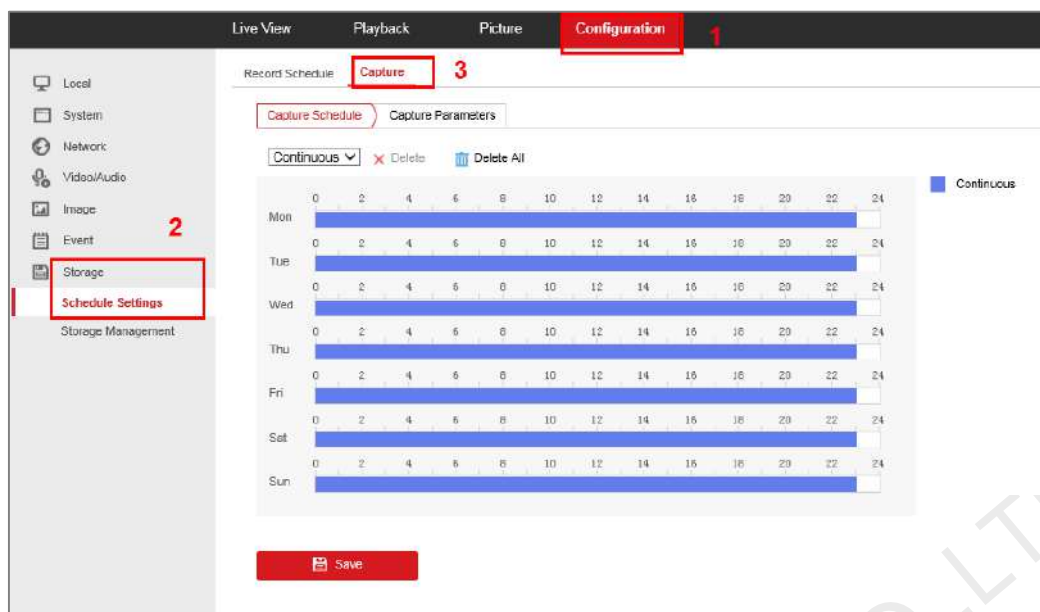
Figure 11-9 OSD settings

Step 8   Configure snapshot capture interval, five minutes or longer are recommended (It will occupy bandwidth and affect transmission if the interval is too short).

Step 9   Set the schedule to upload snapshots. Click **Edit** to set the start time and end time of taking snapshots. Click **Save** after your settings are done. As shown in Figure 11-10, the blue bar denotes the time of taking snapshots (this figure shows that snapshots will be taken and uploaded during the specified time every day).

Figure 11-10 Schedule

Step 10   Click **Save**.

DNS Configuration

Step 11   Choose **Configuration** > **Network** > **Advanced Settings** > **FTP**.

Figure 11-11 FTP upload parameter settings

Step 12   Enter the FTP information of the corresponding LED display.

- Parent Directory: Select **Custom**, enter the snapshot storage path.

- Child Directory: Select **Custom**. This directory can contain uppercase letters and numbers only and cannot be longer than 8 characters. Once the child directory is specified, it cannot be changed, otherwise, it will affect the display of images.

- Upload Picture: Check the box.

Step 13   Click **Test** to start testing and then click **OK** when the prompt box saying "**Testing succeeded.**" appears.

Figure 11-12 Testing succeeded
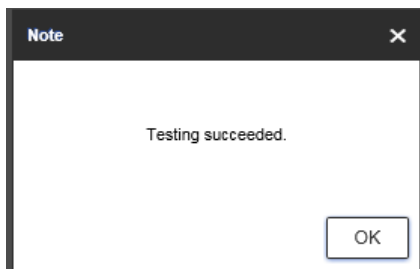
Step 14   Click **Save** at the lower left.

12   Viewing Monitoring Information

Applications

Introduce the monitoring ranges of iCare depending on different hardware configurations.

Prerequisites

- You have logged in to iCare.
- Hardware connection is done.
- Hardware configuration is done in NovaLCT and monitoring configuration is done in iCare.

Operating Procedure

Step 1   Log in to iCare. See the detailed operations in 5   Registering for an Account and Logging In to iCare.

Step 2   On the home page, click a screen on the left to view its real-time monitoring information on the window that appears on the right of the page.

The real-time monitoring information of a screen includes the following:

- Monitoring picture: Displays the latest picture taken by the camera.
- Screen information: Displays the abnormal information of the monitoring items such as sending card, receiving card, monitoring card and smart module.
- Player: Displays system resource usage of the player.

Figure 12-1 Real-time monitoring information
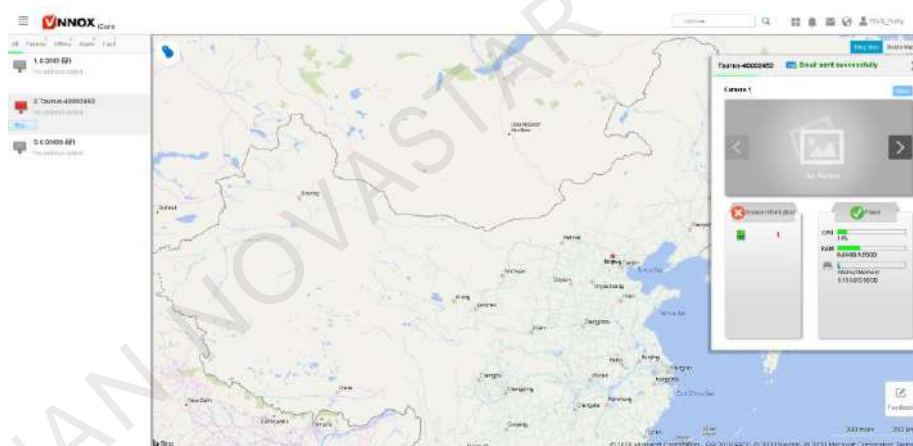
Step 3   At the upper right of the window, click **More** to view the basic information, monitoring picture, fault & alarm details, brightness, real-time status, individual LED detection, etc of the current screen. Supported monitoring items are shown in Table 12-1.

Table 12-1 Monitoring details

Screen Details	Item	Hardware Requirements
Basic information	Screen name	/
	Screen time zone	/
	Screen resolution	/
	Device type	/
Monitoring picture	Latest monitoring picture	IP camera
	Monitoring picture history	
	Smart display detection history	

	Sending card working status	/
	DVI status	/
	Receiving card Ethernet port redundancy status	/
	Sending card connection status	/
	Receiving card working status	/
	Receiving card voltage	/
	Receiving card temperature	/
Fault & alarm details	Monitoring card working status	• Monitoring card: MON300 • Receiving card: MRV320, MRV560
	Monitoring card voltage	
	Smoke alarm	
	Cabinet door	
	Fan speed	
	Flat cable status	
	Smart module working status	• Smart module • Receiving card: A4, A4s, A5, A5s, A7, A7s, A8, A8s, A9s, A10s Plus, XC200, XC100, B4s
	Smart module voltage	
	Smart module temperature	
	Flat cable status	
Brightness	Screen brightness	/
	Ambient brightness	• Light sensor • Multifunction card: MFN300
	Light sensor status	
Real-time status	Online/Offline time	/
	Control system temperature	/
	Player resource usage	/
Individual LED detection	Faulty LED rate	• Monitoring card or smart module • Module driver chip available for individual LED detection

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