

## VNNOX One-Stop Cloud Platform

V7.45.0 NS180100114



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## Overview

With LED display being widely used in various industries such as advertisement, stage, traffic, sports, etc., the business scope of LED display services has been expanded rapidly from original city business to business throughout the country, even international business. LED displays distributed from place to place may have unexpected problems. As a result, how to manage and monitor large quantities of displays uniformly and guarantee normal operation have become pressing problems to be solved in this industry.

For these problems, NovaStar has launched the iCare system globally, an optimized and most practical cloud monitoring and management solution. Based on broadband Internet, iCare can provide a centralized monitoring solution for the multi-screen management system of LED display.

The iCare server is the core of system. It is deployed in Internet Data Center (IDC) and managed through B/S mode. User can log in the website and register an account to acquire access to the system. Each user can register multiple displays without limitation so as to realize monitoring by specified persons, duty distribution, and knowing the operation status of each display at any time.

## Peatures

#### Centralized Management

Based on a broadband Internet architecture, it supports standard HTTPS (HTTP+SSL) and FTPS (FTP+SSL) servers. With stable and high-speed data transmission, it allows to centralize the management and monitoring of data.

#### Comprehensive Monitoring

To monitor the working conditions of sending cards, receiving cards, monitoring cards and multifunction cards of the LED display control system.

To detect environmental parameters such as temperature, humidity, smoke of cabinet.

To monitor cabinet supply voltage and fan revolving speed of LED display.

#### Automatic Alarm

Monitoring server can automatically collect working condition parameters of all display connected to the system. All monitoring parameters are scanned by the given parameters. It will send e-mails to alarm if the alarm conditions are met.

#### Remote Monitoring and Control

Users can use their accounts to log in the monitoring server, search and view monitoring data through browser and snapshot on site. Working condition and actual situation on site of LED display can be gotten timely and accurately.

#### Multi-Device Access

Supported devices: PC, mobile phones with Android V4.0 or above, iPhone, iPad, etc.

Supported systems: synchronous M3 and asynchronous Pluto series control system of NovaStar.

#### Intuitive and Efficient

To intuitively report status, alarm, error and location of LED display.

#### Information Sharing

Information of LED display can be shared with other users.

#### Display handover

LED display managed by one user can be handed over to another user.

## 3 Applications

This software is applied to the field of LED display management system.

The centralized play& control system based on this software is widely applied in various fields like industry, traffic, commercials, information release, sport events, etc.

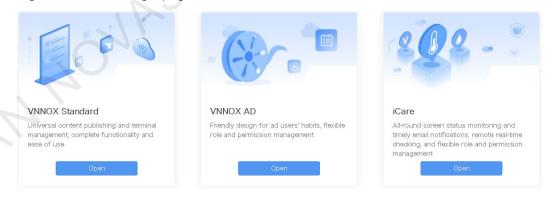
# 4 Operating Instructions

## 4.1 Login

The iCare server has adopted B/S architecture. After users log into iCare, they can register the screens to be monitored (support for synchronous and asynchronous LED displays of NovaStar) at their accounts. In this way, users can log into the account to monitor those screens remotely and manage the screen information uniformly at any time.

- Step 1 Visit www.en.vnnox.com and click **Login** at the top right of the page.
- Step 2 Select the server node and click OK.
- Step 3 Enter the account name and password, and click **Log In**. The service login page is displayed.

Figure 4-1 Service login page



Step 4 Click any position of the image of iCare to enter its homepage.

When you enter iCare for the first time, the default system setting prompt is displayed. After you set iCare as the default system, the homepage of iCare will be displayed directly when you click **Log In**.



Figure 4-2 iCare

## 4.2 Monitoring Information

iCare uses map for precise locating and recording the number of faults. Different colors are used to indicate current status of LED screens. Gray indicates the screen is offline, red indicates it has errors, yellow indicates it has alarms and green indicates it works normally.

Click on the screen to view its real-time monitoring information.



Figure 4-3 Screen information



Figure 4-4 Real-time monitoring information

Then click **More** to view its basic information, monitoring picture, error alarm details, brightness, real-time status and individual LED detection results.

## 4.3 Search

In the search box at the top right of homepage, type a device name or an address to search for screens.

## 4.4 Main Menu

Move mouse to at the top right to show the main menu and submenus.

## 4.5 Update Log

Click at the top right to check system update logs.

## 4.6 Language Settings

Click at the top right to set the system language.

## 4.7 Map Switch

The system uses Baidu Map by default. Users can click on Bing map.

## 4.8 User Settings

## 4.8.1 Personal Settings

Choose -> Personal Settings to set your account information.

- Basic Information: View the roles of the user and set your nickname and email language.
- **Security**: Change the bound phone number and email, and the password.
- Workgroup: View the workgroup that the user belongs to.

## 4.8.2 Player Authentication

Choose > Player Authentication to jump to the Player Authentication page of cloud platform to view, change or copy player authentication information.

For detailed operations, see **Cloud Platform Settings** > **Player Authentication** in the online help.

## 4.8.3 User Management

Choose > User Management to jump to the User Management page of cloud platform to view, create, change or delete users.

For detailed operations, see **Cloud Platform Settings** > **User Management** in the online help.

## 4.8.4 Organization Information

Choose > Organization Info to jump to the Organization Info page to set the information such as website address, name, copyright and logo of the VNNOX system.

For detailed operations, see **Cloud Platform Settings** > **Organization Info** in the online help.

### 4.8.5 Roles

Choose Roles to jump to iCare role management page of cloud platform to view, create, change or delete roles.

For detailed operations, see Cloud Platform Settings > Roles in the online help.

## 4.8.6 Workgroups

Choose > Workgroups to jump to iCare workgroup management page of cloud platform to view, create, change or delete workgroups.

For detailed operations, see **Cloud Platform Settings** > **Workgroups** in the online help.

## 4.9 Feedback

- Step 1 At the bottom right of the homepage, click **Feedback** to enter the page where you can give your feedback.
- Step 2 Select the type of your feedback, enter your feedback and contact information. You can upload attachments if necessary.
- Step 3 Click Submit.

## 4.10 System Switching

Click at the top left to switch between VNNOX homepage, VNNOX Standard, VNNOX AD and iCare.

## **5** Corporate Management

Choose > Corporate Management > SMTP Server to enter email service configuration page.

- **Send Test Email**: Test whether emails can be sent normally after email service is configured.
- Restore Defaults: Clear current email service configuration.

You are advised to use SSL which can increase the security for sending emails.

## 6 Screen Management

## 6.1 Screen List

Select > Screen Management > Screen List to enter the screen list page.

#### Filter

If there are too many screens, you can use the filter function on the left of the page to quickly find out the screens you want. When you are selecting the filter criteria, the screen list shows the filter results in real time.

#### Search

In the search box, type a screen name or an address and click **Search** to search for screens.

### Real-Time Picture of Screen

Click at the top right of the page. The real-time picture(s) captured by the enabled camera(s) supported by the current screen will be shown as tiled.

### List Configuration

Click at the top right of the page. In the dialog box that appears, configure the parameters displayed in the list.



#### List View

Click at the top right of the page. In the dialog box that appears, select the items to be shown in the screen list.

### **Scree Configuration**

Click a screen name to enter its configuration page.

### **Batch Settings**

Select a screen and click **Configuration**, or select multiple screens and click **Batch Settings** to enter the batch configuration page.

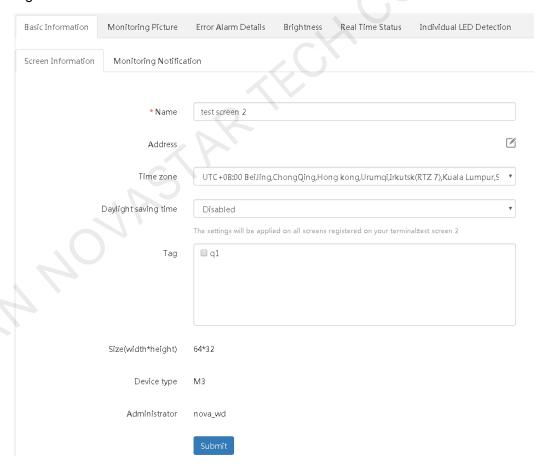
### 6.1.1 Basic Information

Click the name of the target screen to enter its **Basic Information** page which includes **Screen Information** and **Monitoring Notification** tabs.

#### Screen Information

Set the basic information of a screen, such as name, address, time zone, etc.

Figure 6-1 Screen information



## Monitoring Notification

Set email notification and SMS notification.

Basic Information Monitoring Picture Error Alarm Details Brightness Individual LED Detection Screen Information Monitoring Notification Email Support up to 3 email addresses, separated by comma. Do not support QQ email SMS China 86 Send SMS only when faults occur Notification Language Enalish Working Cycle Everyday Working Time 06:00 22:00 Outside this period, fault/alarm/brightness adjustment failure/online/offline notifications would not be

Figure 6-2 Monitoring notification

## 6.1.2 Monitoring Picture

Click a screen name to enter the Monitoring Picture page.

- Select the Latest tab to view the real-time monitoring pictures captured by different cameras.
- Select the **Captured Pictures** tab to view the number and size of captured pictures. Click a date link to tile the captured pictures by time period.
- Select the **Detection History** tab to check the smart display detection result.

## Multi-Camera Function Configuration

- Each screen can support the configuration of up to 4 cameras.
- After the configuration, you can go to section 6.2 Monitoring to view the picture(s) captured by the enabled camera(s).

Step 1 Click **Configuration** at the top right of the page to enter the **Monitoring Picture** configuration page.

Monitoring Picture Individual LED Detection Basic Information Error Alarm Details Brightness Real Time Status Supported camera types Whether Enable No. Camera Name Status Configuration Camera 1 How to configure? 1 Camera 2 How to configure? Camera 3 How to configure? Camera 4 How to configure? Clear Settings Smart Display Detection Configuration

Figure 6-3 Monitoring picture configuration

Step 2 (Optional) Click **Supported camera types** to check the types of cameras supported by iCare.

Figure 6-4 Supported camera types



- Step 3 Check the box under **Whether Enable** to enable the camera function.
- Step 4 Click **How to configure?** on the right side of the target camera. Then, follow the instructions to quickly configure the camera parameters.
- Step 5 After camera configuration, click View Result to check the configuration result.

#### Clear Settings

- Step 1 On the bottom left of the page, click Clear Settings.
- Step 2 Set the period of clearing cached pictures. The quantity and size of current pictures can be previewed.

#### **Smart Display Detection Configuration**

Note: Only one camera is supported during detection configuration.

Step 1 Enable one or multiple cameras and click **Smart Display Detection Configuration** in the bottom-left corner.

Note: Disabling cameras will also disable the smart display detection function at the same time.

- Step 2 Enable the smart display detection function.
- Step 3 Select a camera.

The latest picture taken by the camera is displayed on the page.

- Step 4 Mark out the screen on the picture. The range you marked out should not exceed the screen and the images of surrounding objects or watermark cannot be included in the range.
  - Click to select the theme color.
  - Click on the picture to select different points to mark out the LED display range.

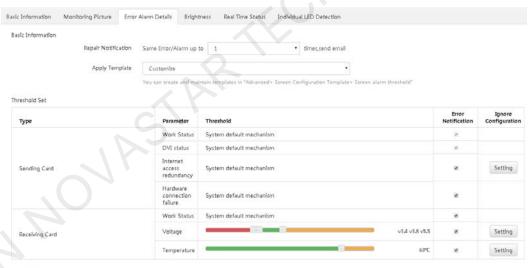
Step 5 Click Submit.

#### 6.1.3 Error Alarm Details

#### **Basic Information**

- Step 1 Click a screen name and then select the **Error Alarm Details** page to view the alarm history and notification emails about the screen.
- Step 2 At the top right of the page, click **Configuration** to enter the threshold configuration page, as shown in Figure 6-5.

Figure 6-5 Threshold configuration



- Submit
- **Repair Notification**: Send an email to notify users if the number of times that same error/alarm happens reach the specified times.
- Apply Template: Apply alarm threshold templates. Choose Advanced > Threshold Template to create and maintain templates.

#### **Threshold Configuration**

When the terminal does not connect to smart module and monitoring card

Figure 6-6 Not connected to smart module and monitoring card

When the terminal connects to smart module

Figure 6-7 Connected to smart module



• When the terminal connects to monitoring card

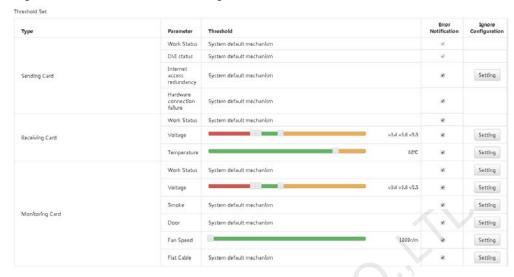


Figure 6-8 Connected to monitoring card

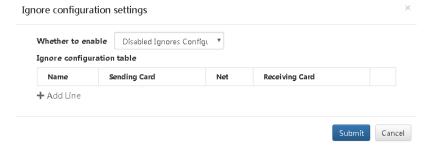
#### Parameter description:

- **Type**: It includes sending card, receiving card, monitoring card, smart module.
- Parameter: It refers to parameter of monitoring data type and mainly includes: "Working status", "DVI status", "Internet access redundancy", "Hardware connection status", "Temperature", "Voltage", "Flat cable", etc.
- **Threshold**: It is parameter value range during normal operation and shown in horizontal bar graph. Threshold options with "System default mechanism" cannot be adjusted.
- **Error Notification**: When this parameter is selected, the system will send error and alarm notifications to users.



An error will occur and the system will send an email when the voltage is lower than 3.4V. The system will give an alarm and send an email when the voltage is higher than 5.5V.

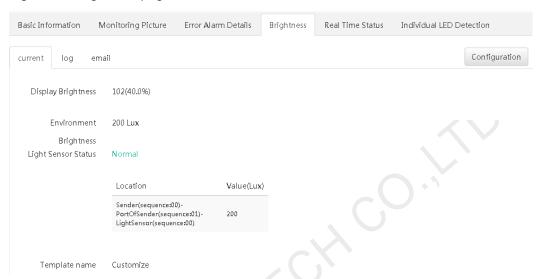
Ignore Configuration: Click Setting to complete Ignore Configuration Settings.



## 6.1.4 Brightness

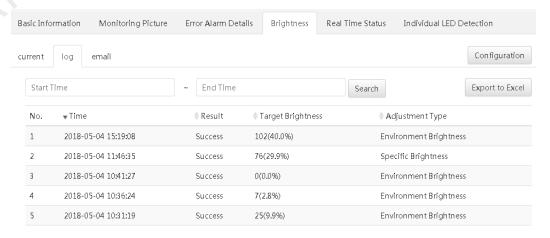
Step 1 Click a screen name and select the **Brightness** page to view the display brightness, environment brightness, light sensor status, and brightness template name.

Figure 6-9 Brightness page — **Current** 



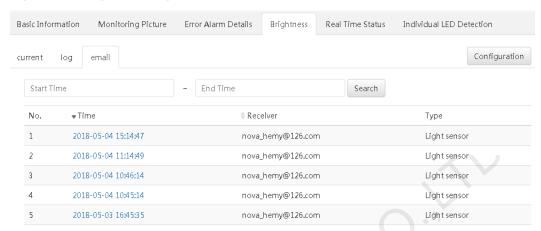
- Display Brightness: Shows the current brightness of the display.
- Environment Brightness: Shows the brightness detected by the light sensor.
   When multiple light sensors are connected, this parameter shows the average brighntess. If Nonsupported is shown, it indicates that no light sensor is connected to the display.
- **Light Sensor Status**: Shows the current status of the light sensor. This parameter is shown when a light sensor is connected.
- **Template name**: Shows the name of the currently used brightness template. When **Customize** is shown, it indicates that no brightness template is used.
- Step 2 Click the **Log** tab to view the logs of brightness adjustment. If you want to export the logs, click **Export to Excel**.

Figure 6-10 Brightness page — Log



Step 3 Click the **Mail** tab and view the time to send light sensor error/alarm emails, recipients, and emai types.

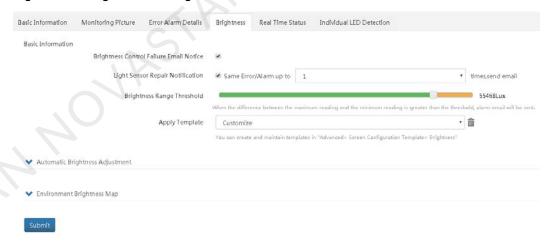
Figure 6-11 Brightness page — Mail



Meanings of the values of Type:

- Brightness: Brightness adjustment failure emails
- Light sensor: Light sensor error or alarm emails
- Step 4 At the top right of the page, click **Configuration** to set the parameters related to brightness.

Figure 6-12 Brightness settings



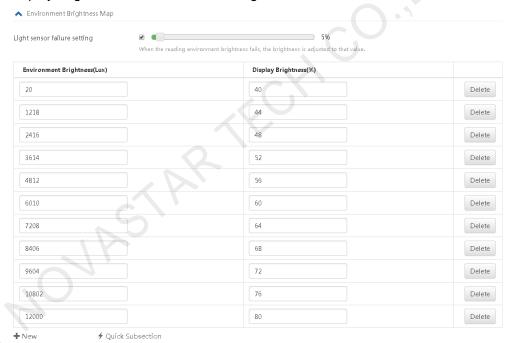
- **Brightness Control Failure Email Notice**: Allows to decide whether to send notification emails when the brightness control fails.
- Light Sensor Repair Notification: This parameter is shown when the display supports light sensors. When the number of the times of a same error or alarm continuously occurs reach the value you set, the system will send a notification email.
- Brightness Range Threshold: This parameter is shown when the display supports light sensors and multiple light sensors are connected to the display. When the difference between the maximum and minimum readings of the light sensors is greater than the threshold you set, the system will send a notification email.

 Automatic Brightness Adjustment: Allows to configure the rules for automatic brightness adjustment.



#### Meanings of the values of **Type**:

- Specific brightness: The brightness of the display changes based on the specified value.
- Environment brightness: The brightness of the display changes based on the configuration in the environment brightness mapping table.
- **Environment Brightness Map**: Allows to configure the relationship between display brightness and environment brightness.



- Light sensor failure setting: When this parameter is selected, if the system fails to read the environment brightness, the brightness of the display will be adjusted to the value you set here.
- Quick Subsection: Allows to quickly configure the environment brightness mapping table.

#### 6.1.5 Real Time Status

Step 1 Click a screen name and select the Real Time Status page.

The **Real Time Status** tab page displays the status of online/offline, real-time temperature of the control system, and the storage space usage details about the player. When a smart module is connected to the terminal, the **Real Time Status** tab page also displays the record of the smart module's working hours.

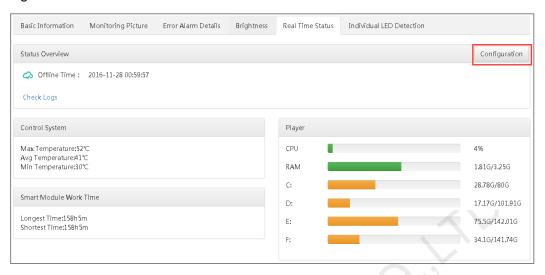


Figure 6-13 Real time status

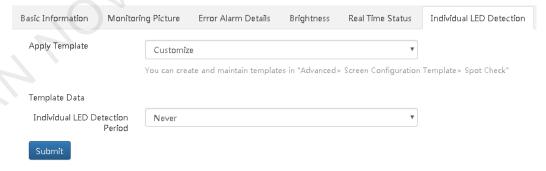
- Step 2 Click Check Logs to view the status in history and the email details.
- Step 3 At the top right of the page, click **Configuration** to set a time period after which a notification email would be sent if the screen goes offline.

### 6.1.6 Individual LED Detection

If this function is configured in both NovaLCT and iCare, users can check the result of individual LED detection.

- Step 1 Click a screen name and select the **Individual LED Detection** page.
- Step 2 At the top right of the page, click **Configuration** to set the template and period individual LED detection.

Figure 6-14 Configuration of individual LED detection

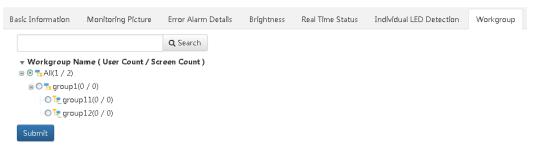


- Apply Template: Apply individual LED detection templates. Choose Advanced > Individual LED Detection Template to create and maintain templates.
- Template Data: Set the period of individual LED detection.

## 6.1.7 Workgroup

- Step 1 Select a screen and click **Configuration** at the top left of the page.
- Step 2 Click the **Workgroup** page to set the workgroup that the current screen belongs to.

Figure 6-15 Workgroup



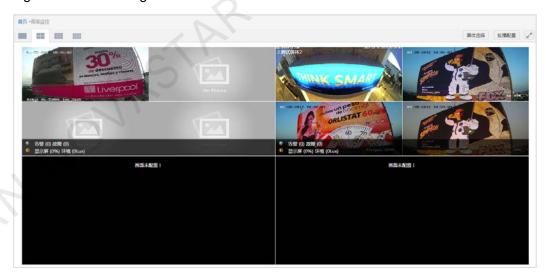
## 6.2 Monitoring

Step 1 Choose > Screen Management > Monitoring to access the monitoring page.

One grid shows a LED display's real-time picture(s) captured by the enabled camera(s) (16 LED displays can be monitored simultaneously at most, while each LED display can support a maximum of 4 enabled cameras).

Note: For 1-grid, 4-grid and 9-grid, each grid can be further split into 4 sub-grids, each of which displays the picture captured by one camera. 16-gird does not support splitting.

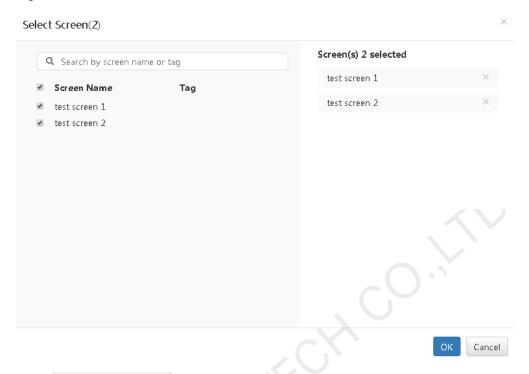
Figure 6-16 Monitoring



- Step 2 Click to set the grid, which can be divided into four types: 1 grid, 4-grid, 9-grid, and 16-grid.
- Step 3 Click Select Screen on the upper-right corner of the page to select the screen to be monitored.

In the selected screen(s) area, drag the screen name to change the order. Thus the screen order in the Monitoring page changes accordingly.

Figure 6-17 Select screen



Step 4 Click Carousel Settings on the top right corner to choose time interval.

Figure 6-18 Carousel settings

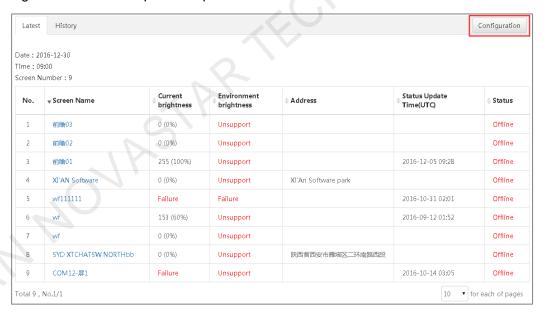


## Reports

## 7.1 Periodic Inspection Reports

Choose > Report > Periodic Inspection Report to access the periodic inspection report setting page, as shown in the figure below.

Figure 7-1 Periodic inspection report-Latest status



Latest History Configuration No. **▼ Time** Screen Number 2016-12-30 09:00 2016-12-30 00:32 2016-12-29 09:00 2016-12-29 00:32 2016-12-28 09:00 2016-12-28 00:32 2016-12-27 09:00 2016-12-27 00:32 2016-12-26 09:00 2016-12-26 00:32 Гotal 129 , No.1/13 ▼ for each of pages

Figure 7-2 Periodic inspection report-History status

## 7.1.1 Basic Information Configuration

Click **Configure** to access the page of configuration which includes "Basic Information" and "Associated screen settings". Click **Edit** on the page of basic information to edit basic information, as shown in the figure below.

Figure 7-3 Periodic inspection report-Basic information



- Report Period: Report the current status of LED display according to the period selected. If it defaults to "Never", it means that the LED display won't be monitored.
- Report Time (UTC): Refers to the specific time to report the status of LED display. Click on the icon
   to add one time. It defaults to 9:00 am.
- Report Email: The number of email addresses can be one or more, but 3 at most. If the user registered via email, here will show the email address used during registration, otherwise, it is empty.
- Email Language: The language of the content of emails.

#### Note:

 When "Everyday" is selected as "Report Period", click on the input box of "Report Time (UTC)", then the dropdown menu will show a time picker and you can select a proper time.

- When "Every week" is selected as "Report Period", "Report Date (UTC)" will be added under "Report Period". Click "Report Time (UTC)" to select a date in the drop-down menu.
- When "Every month" is selected as "Report Period", "Report Date (UTC)" will be added
  under "Report Period". Click on the input box of "Report Date (UTC)" and a time picker will
  pop up. Then you can select a specific data.
- When "Never" is selected as "Report Period", the input boxes of "Report Time (UTC)" and "Report Email" cannot be edited.

## 7.1.2 Associated screen settings

Click **Associated screen settings** to select the screen(s) which will be associated by the device.

Figure 7-4 Periodic inspection report-Associated screen settings



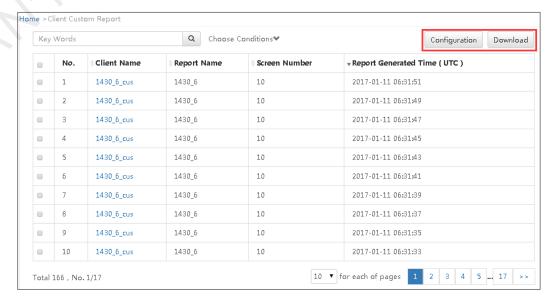
Association Screen (the number of screens associated): Set the screens to be monitored. The screens of the user are shown in the table.

## 7.2 Custom Reports

Choose > Report > Client Custom Report to access the client custom report setting page.

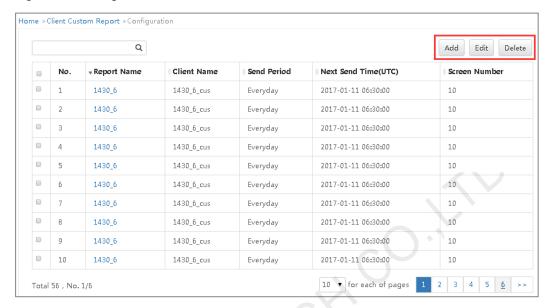
Note: Only enterprise users are able to access.

Figure 7-5 Client custom report



Click Configuration on the top right corner to "Add", "Edit", "Delete" reports.

Figure 7-6 Configuration

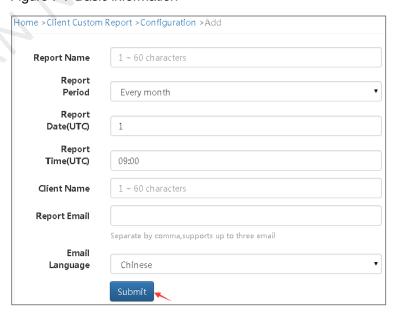


## 7.2.1 Creating Reports

### **Basic Information**

- Step 1 On the **Configuration** page of **Client Custom Report**, click **Add** to enter the **Add** page.
- Step 2 Edit the basic information about the new client custom report.
- Step 3 Click Submit to go to the editing page.
- Step 4 Click Edit to edit the basic information.

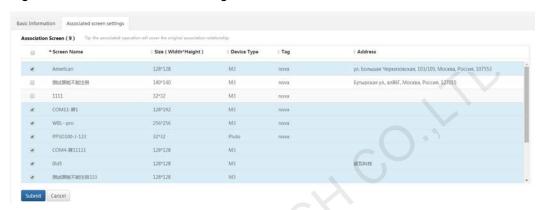
Figure 7-7 Basic information



### Associated screen settings

- Step 1 Click the Associated screen settings tab.
- Step 2 Click **Edit** and select a screen to associate (multiple screens can be associated at the same time).
- Step 3 Click Submit.

Figure 7-8 Associated screen settings

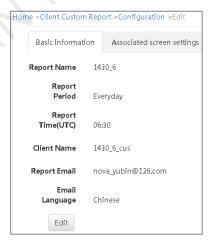


## 7.2.2 Edit Reports

#### **Basic Information**

- Step 1 On the Client Custom Report list page, click Configuration at the top right to enter the Configuration page of Client Custom Report.
- Step 2 Select a report.
- Step 3 Click **Edit** at the top right to enter the **Basic Information** page. Then, click **Edit** to edit such information as report name, report date, report period, client name and so on.

Figure 7-9 Basic Information



## **Associated Screen Settings**

- Step 1 Click the Associated screen settings tab.
- Step 2 Click **Edit** and select a screen to associate (multiple screens can be associated at the same time).
- Step 3 Click Submit.

## 7.2.3 Deleting Reports

- Step 1 On the Client Custom Report list page, click Configuration at the top right to enter the Configuration page of Client Custom Report.
- Step 2 Select one or multiple reports.
- Step 3 Click **Delete** at the top right to delete the selected reports.

#### Note:

- When "Everyday" is selected as "Report Period", click on the input box of "Report Time (UTC)", then the dropdown menu will show a time picker and you can select a proper time.
- When "Every week" is selected as "Report Period", "Report Date (UTC)" will be added under "Report Period". Click "Report Time (UTC)" to select a date in the drop-down menu.
- When "Every month" is selected as "Report Period", "Report Date (UTC)" will be added under "Report Period". Click on the input box of "Report Date (UTC)" and a time picker will pop up. Then you can select a specific data.
- When "Never" is selected as "Report Period", the input boxes of "Report Time (UTC)" and "Report Email" cannot be edited.

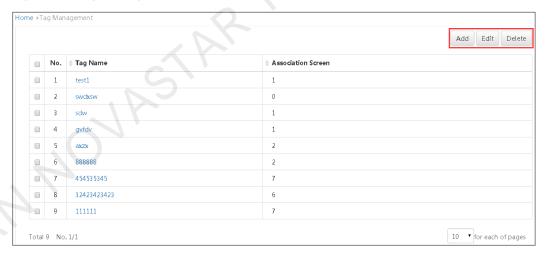
## 8 Advanced Settings

## 8.1 Tag Management

Choose > Advanced > Tag Management to access the tag management page, as shown in figure below.

Add tags to screens, which can show the features of screens more initiatively. Tags can be customized such as stadiums, LED advertisement displays, etc.

Figure 8-1 Tag management



## 8.1.1 Add

Click Add on the page of Tag management to add tags.

Figure 8-2 Add tags

Home >Tag Man	agement >Add
Tag Name	Maximum 10 Chinese or 20 English
Submit	

Click Submit and the page of Edit will appear.

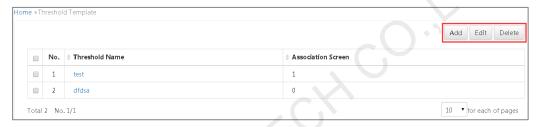
#### 8.1.2 Edit

Select a screen to be edited on the page of Tag Management and click **Edit** to the name of its tag and associate screens to the tag. Click **Submit** upon completion.

## 8.2 Threshold Templates

Choose > Advanced > Threshold Template to access the threshold template page, as shown in figure below.

Figure 8-3 Threshold template



#### 8.2.1 Add

- Step 1 On the **Threshold Template** page, click **Add** to pop up the **Add Template** dialog box. Then, edit **Template Name** in the box.
- Step 2 Click **Submit** to go to the **Edit** page of the new threshold template.
- Step 3 Click **Edit** to edit the new threshold template information.
- Step 4 Edit the name of the new template.
- Step 5 Click and drag the slider to set the threshold parameters of the receiving card, monitoring card or smart module.

Figure 8-4 Add template



#### Current status denotes:

- It will give an alarm when the temperature is higher than 60°C.
- The screen will be faulty when the voltage is lower than 3.4V. It will give an alarm when the voltage is between 3.4V and 3.8 or higher than 5.0V.
- It will give an alarm when the fan speed is lower than 1000 r/m.

#### 8.2.2 Edit

Select a template to be edited and click **Edit** for parameter settings and associated screen settings.

## 8.3 Brightness Templates

Choose > Advanced > Brightness Template to access the brightness template page, as shown in figure below.

Figure 8-5 Brightness template

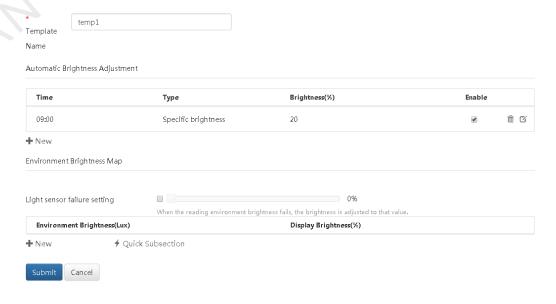


#### 8.3.1 Add

At the top right of the page, click Add to add a brightness template.

#### 8.3.2 Edit

Select a brightness template and click **Edit**, or click a template name. Then, click **Edit** on the editing page.



 Automatic Brightness Adjustment: Allows to configure the rules for automatic brightness adjustment.

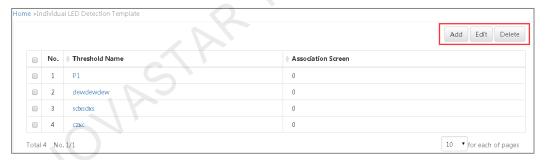
Meanings of the values of Type:

- Specific brightness: The brightness of the display changes based on the specified value.
- Environment brightness: The brightness of the display changes based on the configuration in the environment brightness mapping table.
- Environment Brightness Map: Allows to configure the relationship between display brightness and ambient brightness.
  - Light sensor failure setting: When this parameter is selected, if the system fails to read the environment brightness, the brightness of the display will be adjusted to the value you set here.
  - Quick Subsection: Allows to quickly configure the environment brightness mapping table.

## 8.4 Individual LED Detection Templates

Choose > Advanced > Individual LED Detection Template to access the individual LED detection template page, as shown in figure below.

Figure 8-6 Individual LED Detection Templates



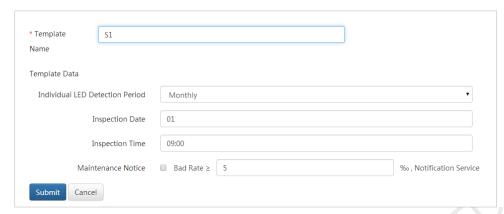
#### 8.4.1 Add

- Step 1 Click Add to go to the Add Template dialog box and edit Template Name.
- Step 2 Click Submit to go to the Edit page of the new individual LED detection template.

#### 8.4.2 Edit

Select the template to be edited and click **Edit** for template parameter settings.

Figure 8-7 Edit templates



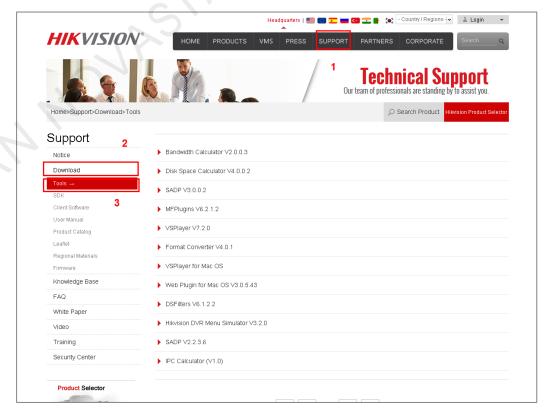
## 9 IPC Configuration

## 9.1 Before You Begin

Following preparations need to be done before connecting IP Camera:

- PC x 1
- IP Camera x 1
- Download network search software of camera units and install it on your computer. HIKVISION camera network search software is SADP\_ version. Please visit HIKVISION official website at http://overseas.hikvision.com/en/ to download SADP software. The specific download operation of the software is shown as follows.

Figure 9-1 Downloading network search software of camera unit

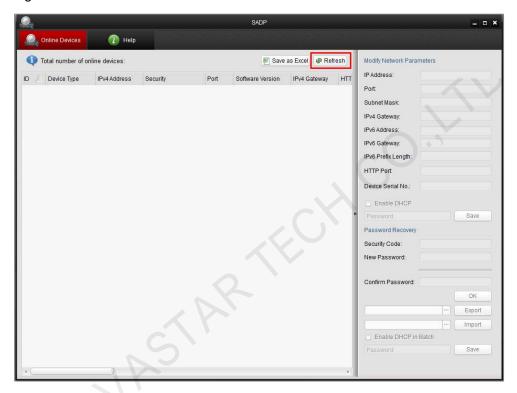


Note: PC and IP Camera need to be connected in the same network segment!

## 9.2 Network Parameter Configuration

Step 1 After installing the equipment network search software, open it and click Refresh.

Figure 9-2 Window of the network search software of camera unit



Step 2 Click and select the camera to be configured. Set network parameter configuration of the camera on the right side. It defaults to no administrator password. If it is required to set password, please enter password in "Password" box at the lower right position of the page.

Tip:

The configuration process is similar to that of the IP address of PC, and static IP and automatic access can be set. Please note when setting static IP: Camera IP and IP of PC must be in the same network segment and do not conflict with the IP of other LAN network equipment. In addition, please confirm that PC can access the public network normally.

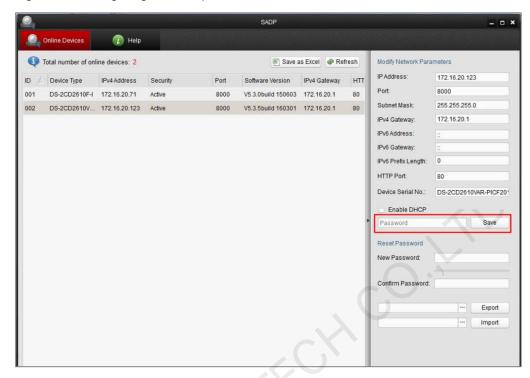


Figure 9-3 Configuring network parameters

## 9.3 Time Settings

Step 1 Input IP address of camera in the address bar of the browser (360 browser or IE11 are recommended) and press **Enter** key for confirmation (or double click the IP address of corresponding device in the device list of above figure). Enter device login interface with the user name of "admin" and empty password by default. Users can set the login password after logging in and the login password is same as that of administrator.

Figure 9-4 Login page

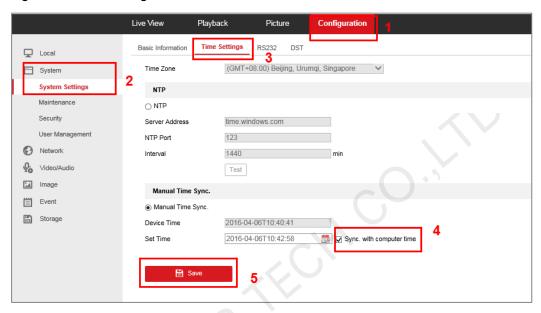


Step 2 Download plug-in after logging in as per the prompt.

Please click here to download and install the plug-in. Close the browser when installing the plug-in.

- Step 3 Click and download the plug-in. Refresh the page after finishing installation. Select "All sites operation" as per the prompt.
- Step 4 Enter the device interface and select **Configuration>System>System Settings>Time Settings**. Check "Sync. with computer time" and click "Save".

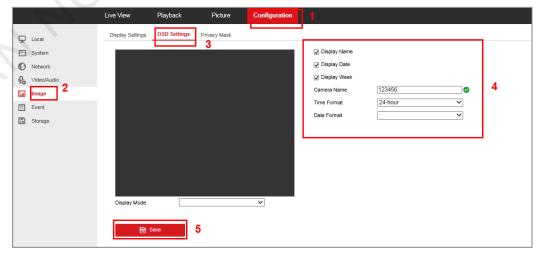
Figure 9-5 Time settings



## 9.4 Image Display Settings

Step 1 Select **Configuration** > **Image** > **OSD Settings** and set the parameters as required. Click "**Save**" after the settings.

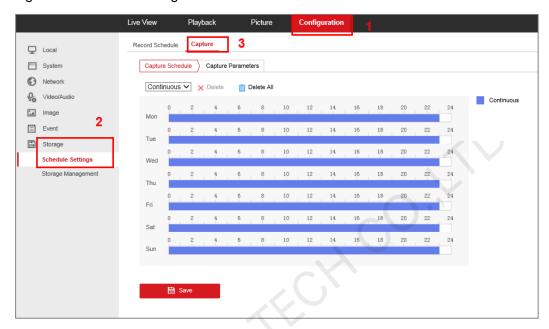
Figure 9-6 OSD settings



Step 2 Configure snapshot interval, which is recommended to be set as five minutes or longer (It will occupy bandwidth and affect transmission if the interval is too short).

Step 3 The time range of snapshot on everyday can be set. Set the start and end time of snapshot first (if the time of everyday is same, you can copy.). Click "OK" after the setting is completed.

Figure 9-7 Schedule settings



Step 4 At last, click the "Save" button.

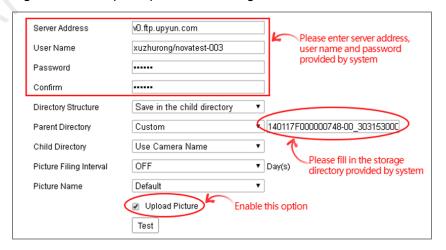
Note:

Do not check **Enable Event-Triggered Snapshot** in the bottom of the configuration page, for fear of influencing the effect timing snapshot.

## 9.5 FTP Uploading Parameter Settings

Step 1 Enter Configuration > Network > Advanced Settings > FTP.

Figure 9-8 FTP upload parameter settings



Step 2 Input corresponding FTP information of LED display.

- Parent Directory: Select custom settings, input associated LED display snapshot storage path and the source of this information is shown in the following figure.
- **Child Directory**: Select **custom settings**. The format is only limited to the capital English letters and numbers, which shall not exceed 8-bit. Once the child directory is set well, it shall not be changed, otherwise, it will affect the display of images.
- Upload Picture: Checked.
- Step 3 Click **Test** to test and click **OK** when the prompt box of "Testing succeeded." appears.

Figure 9-9 Testing succeeded



Step 4 Click **Save** at the bottom-right corner.

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