

VNNOX One-Stop Cloud Platform

V7.41.0 NS180100104



Contents

Contents	i
1 Overview	1
2 Features	2
3 Applications	3
4 Operating Instructions	4
4.1 Login	
4.2 Monitoring Information	
4.3 Search	
4.4 Main Menu	6
4.5 Update Log	6
4.6 Language Settings	6
4.7 Map Switch	
4.8 User Settings	
4.8.1 Personal Settings	7
4.8.2 Player Authentication	
4.8.3 User Management	7
4.8.4 Organization Information	
4.8.5 Roles	
4.8.6 Workgroups	
4.9 Feedback	
4.10 System Switching	
5 Corporate Management	9
6 Screen Management	10
6.1 Screen List	
6.1.1 Basic Information	11
6.1.2 Monitoring Picture	
6.1.3 Error Alarm Details	
6.1.4 Brightness	
6.1.5 Real Time Status	
6.1.6 Individual LED Detection	
6.1.7 Workgroup	
6.2 Monitoring	

7 Reports	.23
7.1 Periodic Inspection Reports	. 23
7.1.1 Basic Information Configuration	. 24
7.1.2 Associated screen settings	. 25
7.2 Custom Reports	. 25
7.2.1 Creating Reports	. 26
7.2.2 Edit Reports	. 27
7.2.3 Deleting Reports	. 28
8 Advanced Settings	.29
8.1 Tag Management	. 29
8.1.1 Add	. 29
8.1.2 Edit	. 30
8.2 Threshold Templates	. 30
8.2.1 Add	. 30
8.2.2 Edit	
8.3 Brightness Templates	
8.3.1 Add	
8.3.2 Edit	
8.4 Individual LED Detection Templates	
8.4.1 Add	. 32
8.4.2 Edit	
9 IPC Configuration	.34
9.1 Before You Begin	. 34
9.2 Network Parameter Configuration	. 35
9.3 Time Settings	. 36
9.4 Image Display Settings	. 37
9.5 FTP Uploading Parameter Settings	. 38
9.4 Image Display Settings	



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.

2 Features

• 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.



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.

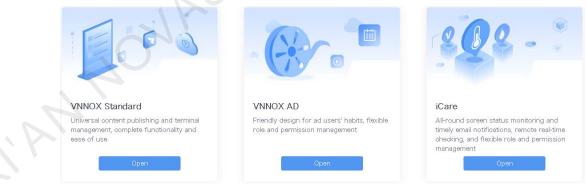


Figure 4-1 Service login page

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

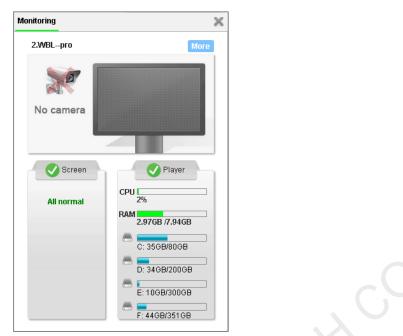


Figure 4-4 Real-time monitoring information

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 II 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 State 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 to switch to 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 **Sumple State** State St

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 **A** > **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.



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.



6.1 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 configuration	×
More than H 30 m if the status update time is not be updated,use to ma	ark it.
Submi	it Cancel

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

Basic Information	Monitoring Picture	Error Alarm Details	Brightness	Real Time Status	Individual LED Detecti	ion
Screen Information	Monitoring Notifica	tion				
	* Name	test screen 2				
	Address					ľ
	Time zone	UTC+08:00 BeiJing,0	ChongQing,Hor	ig kong,Urumqi,Irkuts	k(RTZ 7),Kuala Lumpur,S	•
	Daylight saving time	Disabled				•
		The settings will be applie	ed on all screens r	egistered on your termin	al:test screen 2	
	Tag	🔲 q1				
	Size(width*height)	64*32				
	Device type	M3				
	Administrator	nova_wd				
		Submit				

Monitoring Notification

Set email notification and SMS notification.

Basic Information	Monitoring Picture	Error Alarm Details	Brightness	Real Time Status	Individual LED Detection
Screen Information	Monitoring Notifica	tion			
	Email	Support up to 3 em	ail addresses,sej	parated by comma.Do	not support QQ email
	SMS	China 86	¥		
r	Notification Language	Send SMS only when fau	lts occur		
	Working Cycle	Everyday			
	Working Time	06:00	(~ 22:00	
		Outside this period, fault sent Submit	/alarm/brightness	adjustment failure/online	e/offline notifications would not

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.

) Suppo	orted camera types				
No.	Camera Name	Status	Whether Enab	le	Configuration
1	Camera 1				How to configure?
2	Camera 2				How to configure?
3	Camera 3				How to configure?
4	Camera 4				How to configure?
Clear S	Settings				
 Smart 	Display Detection Configura	ation			
	_				

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

Supported camera types		×
Brand	Model	
Mobotix	MX-T25-D016	
Hikvision	DS-2CD2610var-picf	

- 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 dark 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

Basic Information	Repair Notification	Same Error/Alarm up 1	o 1 • times,send email		
	Apply Template	Customize			
Threshold Set		X	nain templates in "Advanced+ Screen Configuration Template+ Screen alarm threshold"	Error	Ignore
Туре		Parameter Work Status	Threshold System default mechanism	Notification	Configuratio
		DVI status	System default mechanism System default mechanism	*	
Sending Card		Internet access redundancy	System default mechanism	×	Setting
		Hardware connection failure	System default mechanism	*	
		Work Status	System default mechanism		
Receiving Card		Voltage	v3A v3.8 v5.5	×	Setting
		Temperature	60°C		Setting

- **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

Туре	Parameter	Threshold	Error Notification	Ignore Configuration
	Work Status	System default mechanism	8	
	DVI status	System default mechanism	8	
Sending Card	Internet access redundancy	System default mechanism	×	Setting
	Hardware connection failure	System default mechanism	×	
Receiving Card	Work Status	System default mechanism	8	
	Voltage	v3.4 v3.8 v5.5		Setting
	Temperature	60°C	8	Setting

• When the terminal connects to smart module

Figure 6-7 Connected to smart module

Туре	Parameter	Threshold	Email Notification	Ignore Configuration
	Work Status	System default mechanism	V	
	DVI Status	System default mechanism	(2)	
Sending Card	Internet access redundancy	System default mechanism		Setting
	Hardware connection failure	System default mechanism	۵	
	Work Status	System default mechanism		
Receiving Card	Voltage	v1.0 v1.0 v2.3	۵	Setting
	Temperature	69°C	Ø	Setting
	Work Status	System default mechanism	8	Setting
SmartModule	Voltage	v3.4 v3.8 v5.0	۵	Setting
	Temperature	60°C	8	Setting
	Flat Cable	System default mechanism	0	Setting

• When the terminal connects to monitoring card

Туре	Parameter	Threshold	Error Notification	Ignore Configuration
Sending Card	Work Status	System default mechanism	. 10	
	DVI status	System default mechanism	2	
	Internet access redundancy	System default mechanism	8	Setting
	Hardware connection failure	System default mechanism	8	
Receiving Card	Work Status	System default mechanism	8	
	Voltage	v3A v3.8 v5.5	8	Setting
	Temperature	60%	8	Setting
	Work Status	System default mechanism	8	Setting
	Voltage	v34 v3.9 v5.5	8	Setting
Monitoring Card	Smoke	System default mechanism		Setting
	Door	System default mechanism	2	Setting
	Fan Speed	1000r/m		Setting
	Flat Cable	System default mechanism		Setting

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.

Temperature	60℃	*	Setting
It will give an alarm and send an email when temp	erature is hi	gher than	60°C.
Voltage	v3.4 v3.8 v5.5		Setting

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.

hether to enable	Disabled Ignores Configu	*		
nore configuratio	on table			
Name	Sending Card	Net	Receiving Card	
Add Line	Sending Card	Net	Receiving Card	

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.

Basic Information M	Ionitoring Picture Error Al	larm Details	Brightness	Real Time Status	Individual LED Detection
current log ema	ail				Configuration
Display Brightness	102(40.0%)				
Environment	200 Lux				
Brightness Light Sensor Status	Normal				
	Location	Value(Lux)		
	Sender(sequence:00)- PortOfSender(sequence:01)- LightSensor(sequence:00)	200			
Template name	Customize				

- **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**.

asic Infor	mation Monitoring Picture	Error Alarm Det	tails Brightness	Real Time Status Individu	ual LED Detection
urrent	log email				Configuration
Start Ti	me	~ End Time		Search	Export to Exce
No.	▼Time	Result	Target Brightnes	s 🕴 Adjustment	Туре
1	2018-05-04 15:19:08	Success	102(40.0%)	Environment	Brightness
2	2018-05-04 11:46:35	Success	76(29.9%)	Specific Brigh	tness
3	2018-05-04 10:41:27	Success	0(0.0%)	Environment	Brightness
4	2018-05-04 10:36:24	Success	7(2.8%)	Environment	Brightness
5	2018-05-04 10:31:19	Success	25(9.9%)	Environment	Brightness

Figure 6-10 Brightness page — Log

Figure 6-9 Brightness page — Current

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

sic Inforr	mation Monitoring Picture	Error Alarm Details	Brightness	Real Time Status	Individual LED De	etection
rent	log email					Configuratio
Start Ti	me	~ End Time		Search		
No.	▼ Time	♦ Rec	eiver		Туре	
1	2018-05-04 15:14:47	nova	_hemy@126.com	I	Light senso	r
2	2018-05-04 11:14:49	nova	_hemy@126.com	I	Light sense	r
3	2018-05-04 10:46:14	nova_	_hemy@126.com	I	Light senso	r
4	2018-05-04 10:45:14	nova_	_hemy@126.com	l	Light sense	r
5	2018-05-03 16:45:35	nova	hemy@126.com		Light senso	r

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

Basic Information	Monitoring Picture Error Alarm De	tails Brightness Real Time Status Individual LED Detection	
Basic Information			
	Brightness Control Fallure Email N	otice 🧭	
	Light Sensor Repair Notifica	ation 🐼 Same Error/Alarm up to 1	 times,send email
	Brightness Range Thres	hold	55468Lux
		When the difference between the maximum reading and the minimum reading is greater than the three	shald, alarm email will be
	Apply Temp	olate Customize	· 🏛
		You can create and maintain templates in "Advanced> Screen Configuration Template> Brightness"	
🗸 Automatic Brigh	tness Adjustment		
	phtness Map		

- 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.

Automatic Brightness Adjustment							
Time	Туре	Brightness(%)	Gamma	Enable			
16:00	Environment brightness			۲	î C		
17:00	Environment brightness		2.8	۲	î C		
New							

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.

ght sensor failure setting When the reading enviro	nment brightness fails, the brightness is adjusted to that value.	
Environment Brightness(Lux)	Display Brightness(%)	
20	40	Dele
1218	44	Dele
2416	48	Dele
3614	52	Dele
4812	56	Dele
6010	60	Dele
7208	64	Dele
8406	68	Dele
9604	72	Dele
10802	76	Dele
12000	80	Dele

- **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

Basic Information	Monitoring Picture	Error Alarm Details	Brightness	Real Time Status	Individual LED Detection	
Status Overview						Configuration
📣 Offline Time :	2016-11-28 00:59:57					
Check Logs						
Control System				Player		
Max Temperature:52 Avg Temperature:41				CPU		4%
Min Temperature:30				RAM		1.81G/3.25G
				C:		28.78G/80G
Smart Module Work	Time			D:		17.17G/101.91G
Longest Time:158h5 Shortest Time:158h5				E:		75.5G/142.01G
				F:		34.1G/141.74G

- 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

Basic Information	Monitorir	ng Picture	Err o r Alarm Details	Brightness	Real Time Status	Individual LED Detection
Apply Template		Customiz	e		¥	
		You can crea	ate and maintain templat	es in "Advanced	> Screen Configuration	Template≻ Spot Check"
Template Data						
Individual LED Det	ection Period	Never			Ŧ	
Submit						

- 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

Basic Information	Monitoring Picture	Error Alarm Details	Brightness	Real Time Status	Individual LED Detection	Workgroup
		Q Search				
- Workgroup N ■ ● ■ All(1 / 2)	lame (User Count / Sc	reen Count)				
😑 🔿 🔁 group 1	(0 / 0)					
🔿 📴 grou	p11(0 / 0)					
🗆 🔿 📴 grou	p12(0 / 0)					
Submit						

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.

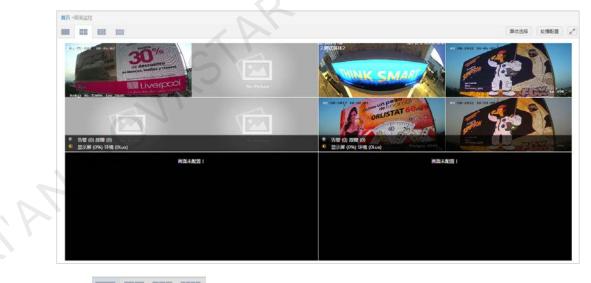


Figure 6-16 Monitoring

- Step 2 Click 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

	Select	Screen(2)			×
	Q	. Search by screen name or t	tag	Screen(s) 2 selected	
		Screen Name	Tag	test screen 1	×
		test screen 1	,	test screen 2	×
	•	test screen 2			
					OK Cancel
				\mathbf{O}^{*}	Cancer
Step 4	Click	Carousel Settings	on the top right corr	er to choose time inte	erval
etep i	Chort		en die top light oon		

Figure 6-18 Carousel settings

Time Interval 1 3 5 m	
	OKCand



7.1 Periodic Inspection Reports

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

Time:0	016-12-30 9:00 Jumber : 9					
No.	▼ Screen Name	Current brightness	Environment brightness	\\$ Address		≑ Statu
1	前瞻03	0 (0%)	Unsupport			Offlin
2	前瞻02	0 (0%)	Unsupport			Offlin
3	前瞻01	255 (100%)	Unsupport		2016-12-05 09:28	Offlin
4	XI'AN Software	0 (0%)	Unsupport	Xi'An Software park		Offlin
5	wf111111	Failure	Failure		2016-10-31 02:01	Offlin
6	wf	153 (60%)	Unsupport		2016-09-12 01:52	Offlin
7	wf	0 (0%)	Unsupport			Offlin
8	SYD XTCHATSW NORTHbb	0 (0%)	Unsupport	陕西省西安市雁塔区二环南路西段		Offlin
9	COM12-屏1	Failure	Unsupport		2016-10-14 03:05	Offlin

Figure 7-1 Periodic inspection report-Latest status

Figure 7-2 Periodic inspection report-History status

No.	▼ Time	Screen Number
1	2016-12-30 09:00	9
2	2016-12-30 00:32	9
3	2016-12-29 09:00	9
4	2016-12-29 00:32	9
5	2016-12-28 09:00	9
6	2016-12-28 00:32	9
7	2016-12-27 09:00	9
8	2016-12-27 00:32	9
9	2016-12-26 09:00	9
10	2016-12-26 00:32	9

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 Cycle	Every day	
*Report Time (UTC)	03:39	Ð
* Report Email	nova_chenggp@126.com	
	Support up to 3 email addresses, separated by comma. Do not support QQ email.	
* Email Language	English	
	Submit	
	od: Report the current status of LED display according to the p it defaults to "Never", it means that the LED display won't be	eriod

• 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

ne > Perioc	dic Inspection Report >Configuration				
ic Informa	ation Associated screen settings				
ssociatio	n Screen (0) Tip: the associated operat	ion will cover the original association relationship			
8	* Screen Name	Size (Width*Height)	Device Type	Tag	Address
0	测试用体1	64*32	M3		
0	测试屏体2	64*32	M3		

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

Ke	y Words		Q Choose	Conditions	Configuration Down
	No.	Client Name	Report Name	Screen Number	• Report Generated Time (UTC)
	1	1430_6_cus	1430_6	10	2017-01-11 06:31:51
	2	1430_6_cus	1430_6	10	2017-01-11 06:31:49
	3	1430_6_cus	1430_6	10	2017-01-11 06:31:47
	4	1430_6_cus	1430_6	10	2017-01-11 06:31:45
	5	1430_6_cus	1430_6	10	2017-01-11 06:31:43
	6	1430_6_cus	1430_6	10	2017-01-11 06:31:41
	7	1430_6_cus	1430_6	10	2017-01-11 06:31:39
	8	1430_6_cus	1430_6	10	2017-01-11 06:31:37
	9	1430_6_cus	1430_6	10	2017-01-11 06:31:35
	10	1430_6_cus	1430_6	10	2017-01-11 05:31:33

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

Figure	7-6	Configuration
iguio		Configuration

	Add Edit De				
No.	• Report Name	¢ Client Name	Send Period	Next Send Time(UTC)	Screen Number
1	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
2	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
3	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
4	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
5	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
6	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
7	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
8	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
9	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10
10	1430_6	1430_6_cus	Everyday	2017-01-11 06:30:00	10

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

Home >Client Custom	Report >Configuration >Add
Report Name	1 ~ 60 characters
Report Period	Every month
Report Date(UTC)	1
Report Time(UTC)	09:00
Client Name	1 ~ 60 characters
Report Email	
	Separate by comma, supports up to three email
Email Language	Chinese
	Submit

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

· · · · · · · · · · · · · · · · · · ·				
* Screen Name	Size (Width*Height)	Device Type	0 Tag	Address
American	128*128	M3	nova	ул. Большая Черкизовская, 103/105, Москва, Россия, 107553
對試算能不能注册	140*140	M3	nova	Бутырская ул., вл86Г, Москва, Россия, 127015
1111	32*32	. M3	nova	
COM11-J#1	128*192	MB	nova	
WBLpro	256*256	M3	nova	
PPSD100-J-123	32*32	Pluto	nova	
COM4-#11111	128*128	M3		
OldS	128*128	EM3		a 25年後
用此用相不相比主册333	128*128	MB		

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

7	Home >Client Custom	Report >Configuration >Edit
	Basic Informatio	Associated screen settings
	Report Name	1430_6
	Report Period	Everyday
	Report Time(UTC)	06:30
	Client Name	1430_6_cus
	Report Email	nova_yubin@126.com
	Email Language	Chinese
	Edit	

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.



8.1 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

	No.	≑ Tag Name	Association Screen				
	1	test1	1				
	2	swclxsw	0				
	3	sdw	1				
	4	gvfdv	1				
	5	axzx	2				
0	6	888888	2				
	7	454535345	7				
	8	32423423423	6				
	9	111111	7				

8.1.1 Add

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

Figure 8-2 Add tags

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

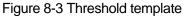
Click Submit and the page of Edit will appear.

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.



Home >T	hresho	ld Template		
				Add Edit Delete
	No.	Threshold Name	+ Association Screen	
	1	test	1	
	2	dfdsa	0	
Tota	12 No	o. 1/1		10 • for each of pages

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

Template				
Name	1~32 characte	er		
Template Set	If LED di	'splay doesn't support monitori	ng card or smart module, the module settings will not take effect	
Туре		Parameter	Threshold	1
Dessisters	Cand	Temperature		
Receiving	Card	Voltage		v3.4 v
		Humidity		
Monitorii	ng Card	Voltage		v3.4 v
		Fan Speed		1
SmartMo	de de s	Voltage		v3.4 v
Smartivio	aule	Temperature		

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

				Add Edit Delete
	No.	Threshold Name	Association Screen	
	1	111	0	
	2	123	0	
	3	11	0	
Total	3 No	o. 1/1		10 T for each of pages

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.

* temp1 Template Name			
Automatic Brightness Adjustment			
Time	Туре	Brightness(%)	Enable
09:00	Specific brightness	20	• î c
+ New			
Environment Brightness Map			
Light sensor failure setting	When the reading environment brig	0%	
Environment Brightness(Lux)		Display Brightness(%)	
+New ≁Quick	Subsection		
Submit Cancel			

• 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 Ir	ndividual LED	Detection	Templates
1 19010 0 0 1		0.000.001	romplatoo

				Add Edit Delet
	No.	Threshold Name	Association Screen	
	1	P1	0	
	2	dewdewdew	0	
	3	sdxsdxs	0	
	4	СДЖС	0	
otal	4 No	. 1/1		10 • for each of page

$8.4.1 \; \text{Add}$

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

Name Template Data Individual LED Detection Period Monthly Inspection Date 01 Inspection Time 09:00 Maintenance Notice Bad Rate ≥ 5 %o, Notification Servie Submit Cancel	Template Data Individual LED Detection Period Monthly Inspection Date 01 Inspection Time 09:00 Maintenance Notice Bad Rate ≥ 5 %o, Notification Servite	* Template	S1			
Individual LED Detection Period Monthly • Inspection Date 01 Inspection Time 09:00 Maintenance Notice Bad Rate ≥ 5 ‰, Notification Service	Individual LED Detection Period Monthly ▼ Inspection Date 01 Inspection Time 09:00 Maintenance Notice Bad Rate ≥ 5 %o, Notification Servite	Name				
Inspection Date 01 Inspection Time 09:00 Maintenance Notice Bad Rate ≥ 5	Inspection Date 01 Inspection Time 09:00 Maintenance Notice Bad Rate ≥ 5	Template Data				
Inspection Time 09:00 Maintenance Notice ■ Bad Rate ≥ 5 %, Notification Service	Inspection Time 09:00 Maintenance Notice ■ Bad Rate ≥ 5 %, Notification Servi	Individual LED De	etection Period	Monthly		•
Maintenance Notice ■ Bad Rate ≥ 5 ‰, Notification Servi	Maintenance Notice ■ Bad Rate ≥ 5 ‰, Notification Servi	Ir	nspection Date	01		
Maintenance Notice ■ Bad Rate ≥ 5 %, Notification Servi	Maintenance Notice ■ Bad Rate ≥ 5 %, Notification Servi	Ir	nspection Time	09:00		
				Bad Rate >	5	% Notification Servi
Ch Ch	NOVASTAR				-],
						С.,

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

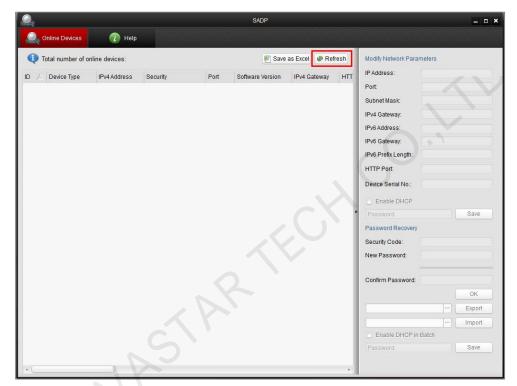
	HIK VISION	Headquarters
R	Support 2 Notice Download SDK Clent Software 3 User Manual Product Catalog Leaftet Regional Materials Firmware	Bandwidth Calculator V2.0.0.3 Disk Space Calculator V4.0.0.2 SADP V3.0.0.2 MFPlugins V6.2.1.2 VSPlayer V7.2.0 Format Converter V4.0.1 VSPlayer for Mac OS
	Knowledge Base FAQ White Paper Video Training Security Center	Web Plugin for Mac OS V3.0.5.43 DSFilters V6.1.2.2 Hikvision DVR Menu Simulator V3.2.0 SADP V2.2.3.6 IPC Calculator (V1.0)
	Product Selector	

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

<u>_</u>					SADP				- o ×
<u>_</u>	Online Devices	🕜 Help							
Q 1	Total number of onli	ine devices: 2			I Save a	as Excel 🖉 🖗 Ref	fresh	Modify Network Para	ameters
ID /	Device Type DS-2CD2610F-I	IPv4 Address 172.16.20.71	Security Active	Port 8000	Software Version V5.3.0build 150603	IPv4 Gateway 172.16.20.1	HTT 80	IP Address: Port	172.16.20.123 8000
001	DS-2CD2810F-4 DS-2CD2810V			8000 8000	V5.3.0build 160301		80	Poli: Subnet Mask: IPv4 Gateway: IPv6 Address: IPv6 Gateway: IPv6 Prefix Length: HTTP Port: Device Serial No.: Enable DHCP Password Reset Password New Password: Confirm Password:	255.255.0 172.16.20.1 :: : 0 80 DS-2CD2610VAR-PICF201 Save

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.



- 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".

		Live View Play	back Picture	Configuration
₽	Local	Basic Information	RS232 DST	
	System	Time Zone	(GMT+08:00) Beijing, Uru	umqi, Singapore 🗸
	System Settings	2 NTP		
	Maintenance			
	Security	Server Address	time.windows.com	
	User Management	NTP Port	123	
Ð	Network	Interval	1440	min
<u>Q.</u>	Video/Audio		Test	
1	Image	Manual Time Sync.		
Ē	Event	Manual Time Sync.		
	Storage	Device Time	2016-04-06T10:40:41	4
		Set Time	2016-04-06T10:42:58	Sync. with computer time
		🗎 Save	5	

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

		Live View	Playback	Picture	Configuration	1		
Ţ	Local	Display Settings	OSD Settings	Privacy Mask				
	System					Display Name		
Ð	Network					Display Date		
<u>Q.</u>	Video/Audio					🖌 Display Week		
1	Image 2					Camera Name	123456	4
Ē	Event					Time Format	24-hour V	
8	Storage					Date Format	~	
		Display Mode			V			
		E	Save	5				

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.

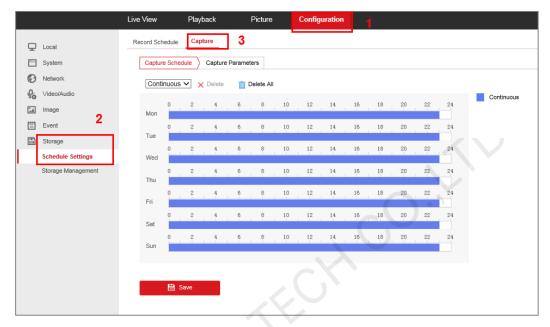


Figure 9-7 Schedule settings

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

Server Address	v0.ftp.upyun.com	Please enter server address,
User Name	xuzhurong/novatest-003	user name and password
Password	•••••	provided by system
Confirm	•••••	
Directory Structure	Save in the child directory	•
Parent Directory	Custom	140117F000000748-00_30315300C
Child Directory	Use Camera Name	v 1
Picture Filing Interval	OFF	Day(s) Please fill in the storage directory provided by system
Picture Name	Default	T
	Upload Picture E	nable this option
	Test	

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

Note	×
Testing succeeded	
	ок

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

Copyright © 2019 Xi'an NovaStar Tech Co., Ltd. All Rights Reserved.

No part of this document may be copied, reproduced, extracted or transmitted in any form or by any means without the prior written consent of Xi'an NovaStar Tech Co., Ltd.

Trademark

NOVA STAR is a trademark of NovaStar Tech Co., Ltd.

Statement

You are welcome to use the product of Xi'an NovaStar Tech Co., Ltd. (hereinafter referred to as NovaStar). This document is intended to help you understand and use the product. For accuracy and reliability, NovaStar may make improvements and/or changes to this document at any time and without notice. If you experience any problems in use or have any suggestions, please contact us via contact info given in document. We will do our best to solve any issues, as well as evaluate and implement any suggestions.

Official website www.novastar.tech

Technical support support@novastar.tech