



Storage Center Maintenance Client
User Manual

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User Manual

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About this Manual

This Manual is applicable to Storage Center Maintenance Client.

The Manual includes instructions for using and managing the product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version in the company website (<http://overseas.hikvision.com/en/>).

Please use this user manual under the guidance of professionals.

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Symbol Conventions

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

Symbol	Description
 NOTE	Provides additional information to emphasize or supplement important points of the main text.
 WARNING	Indicates a potentially hazardous situation, which if not avoided, could result in equipment damage, data loss, performance degradation, or unexpected results.
 DANGER	Indicates a hazard with a high level of risk, which if not avoided, will result in death or serious injury.

Chapter 1 Introduction

Storage center maintenance client is a client software for managing and monitoring the storage system. It is mainly used to monitor storage system status and information, modify network parameters, upgrade storage system BIOS in batch, and download storage system logs.

It helps technical supports and integrators to monitor the running condition of storage products, effectively maintain the storage products, and locate problems and solve them.

Chapter 2 Configuration Wizard

Step 1 Install maintenance client and run it. The configuration wizard will pop up when you log in the client for the first time.

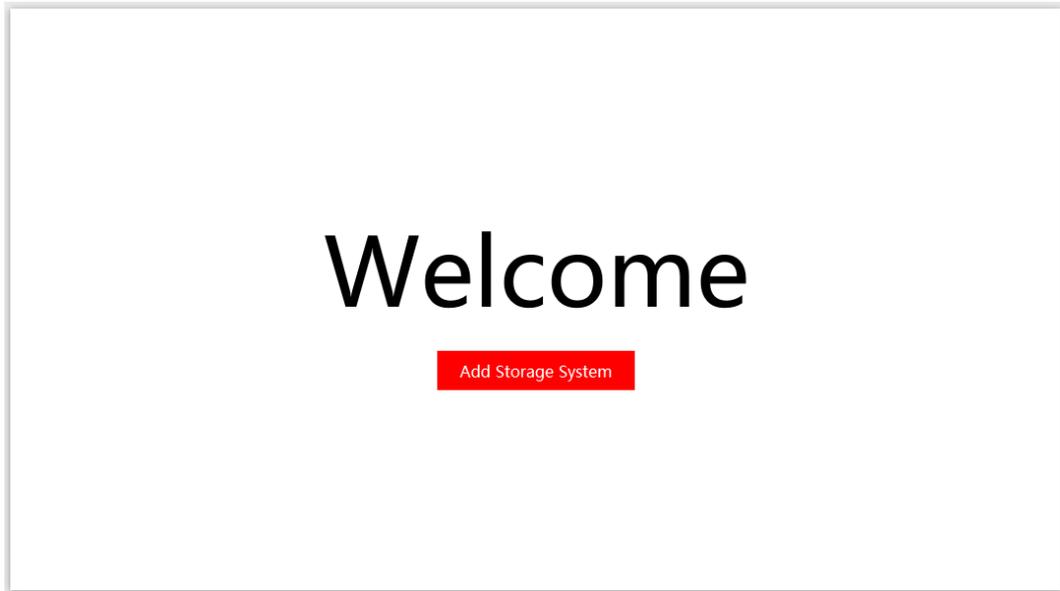


Figure 2-1 Configuration Wizard

Step 2 Click **Add Storage System**.

Step 3 You can manually add storage systems, search online storage systems, and import storage systems in batch. Follow the steps to manually add a storage system.

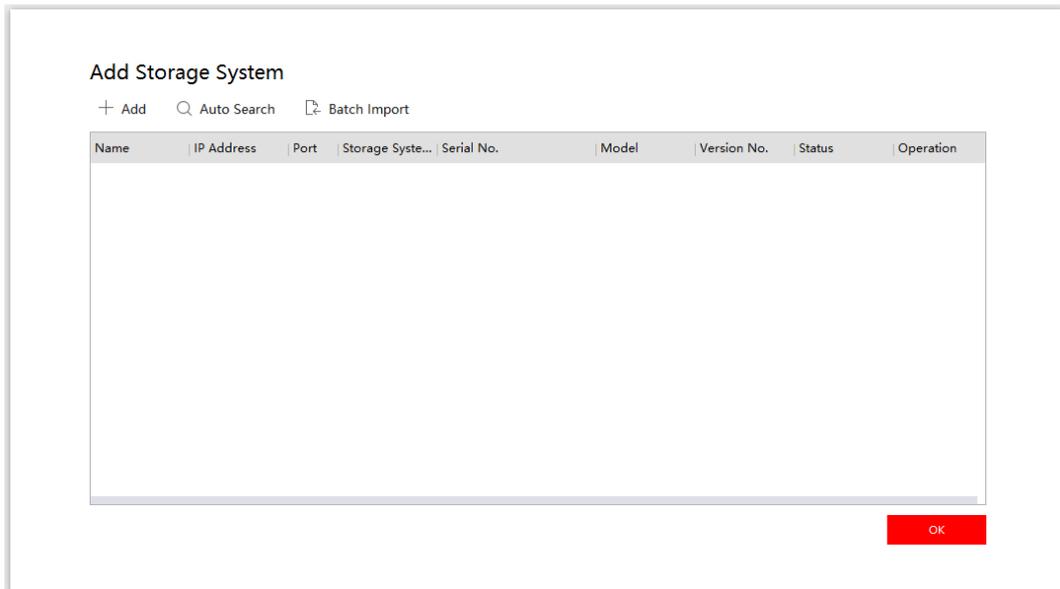


Figure 2-2 Add Storage System

- 1) Click **Add**.
- 2) Enter storage system information, including **IP Address**, **Port**, **Storage System Name**, **User Name**, and **Password**.
 - **IP Address**: The IP address of the storage system you want to add. You can click **Connection Test** to test the network connection between your computer and the storage system.
 - **Port**: Default port is 8006.
 - **Storage System Name**: The default storage system name is the same with the storage system IP address. You can customize it.
 - **User Name**: Admin.
 - **Password**: The password of the storage system.
- 3) Click **Add**.

The screenshot shows a web form for adding a storage system. It includes the following fields and buttons:

- IP Address**: Input field containing "10.192.53.64" with a **Connection Test** button to its right.
- Port**: Input field containing "8006".
- Storage System Name**: Input field containing "10.192.53.64".
- User Name**: Input field containing "admin".
- Password**: Input field with masked characters (dots).
- Add**: A prominent red button at the bottom right of the form.

Figure 2-3 Manually Add a Storage System

Step 4 Click **OK** to finish adding storage systems.

Step 5 Click **Start** to finish configuration wizard.

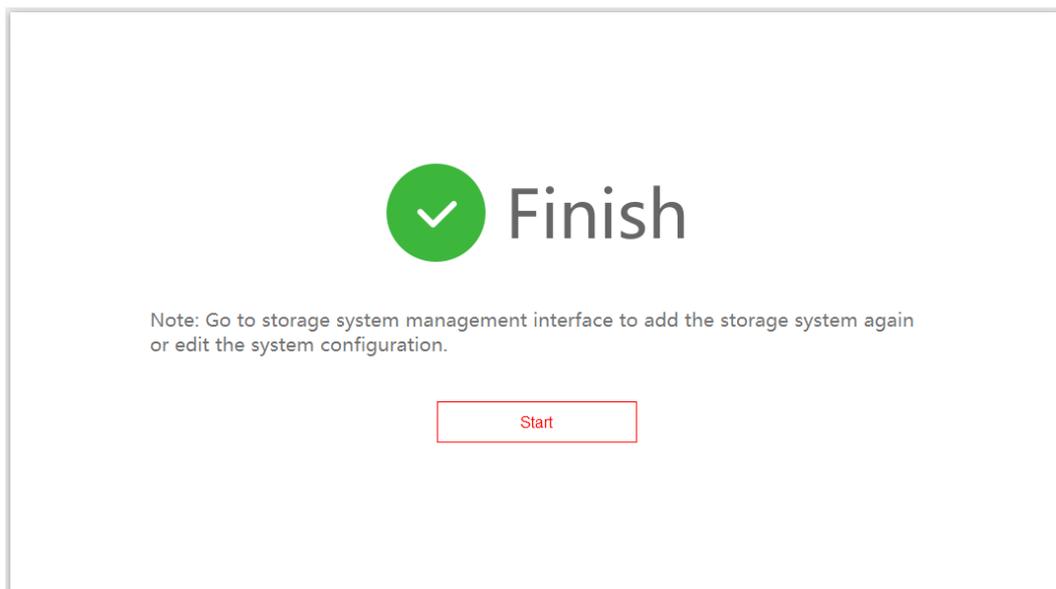


Figure 2-4 Finish Configuration Wizard

Chapter 3 Status Overview

You can view storage system status, alarm status, camera status, environmental control information, and HDD status.

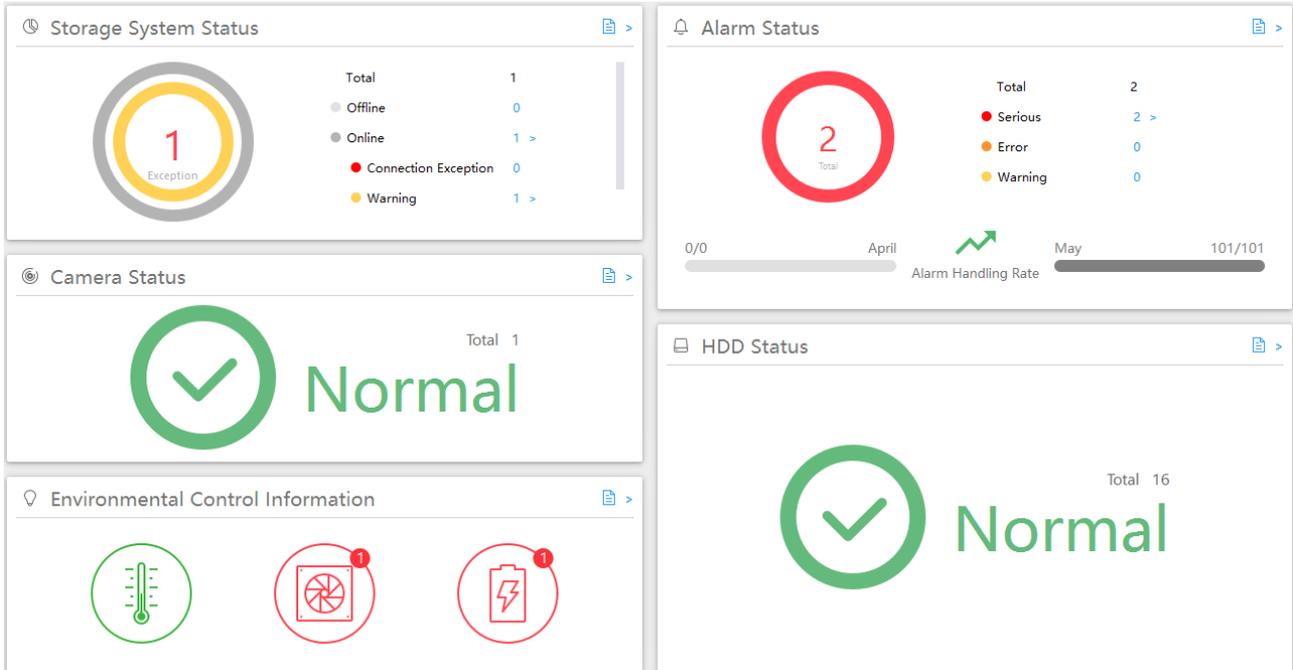


Figure 3-1 Status

3.1 Storage System Status

A storage system status is either **Offline** or **Online**. Online status includes **Connection Exception**, **Warning**, and **Normal**.

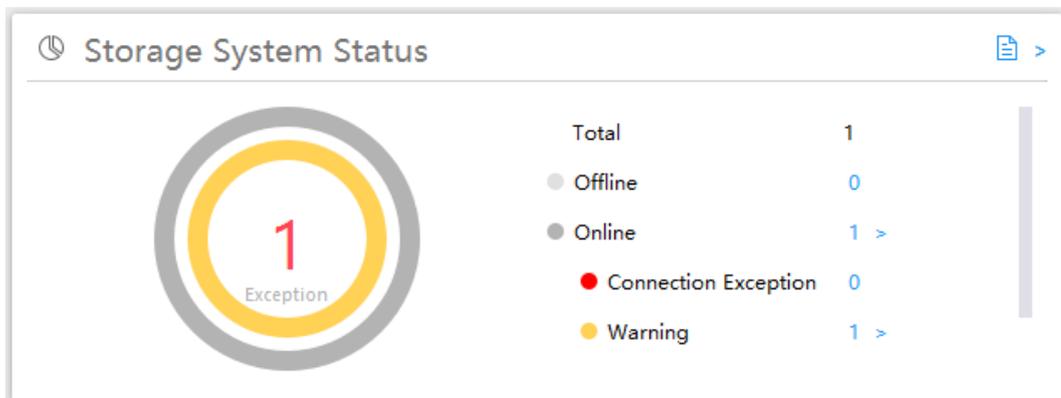


Figure 3-2 Storage System Status

You can locate storage system status by viewing the cycle color.

Table 3-1 Cycle Color Description

Cycle	Color	Description
Outer cycle	Dark grey	The storage system is online.
	Light grey	The storage system is offline.
Inner cycle	Red	Connection exception.
	Yellow	Warning
	Green	Normal

Click  to jump to storage system information interface.

3.2 Alarm Status

Alarm status includes **Serious** (red), **Error** (orange), and **Warning** (yellow). Client will count the number of alarms. Click  of an alarm to jump to alarm interface. The alarm handling rate of latest two months will be listed in the below of the interface.

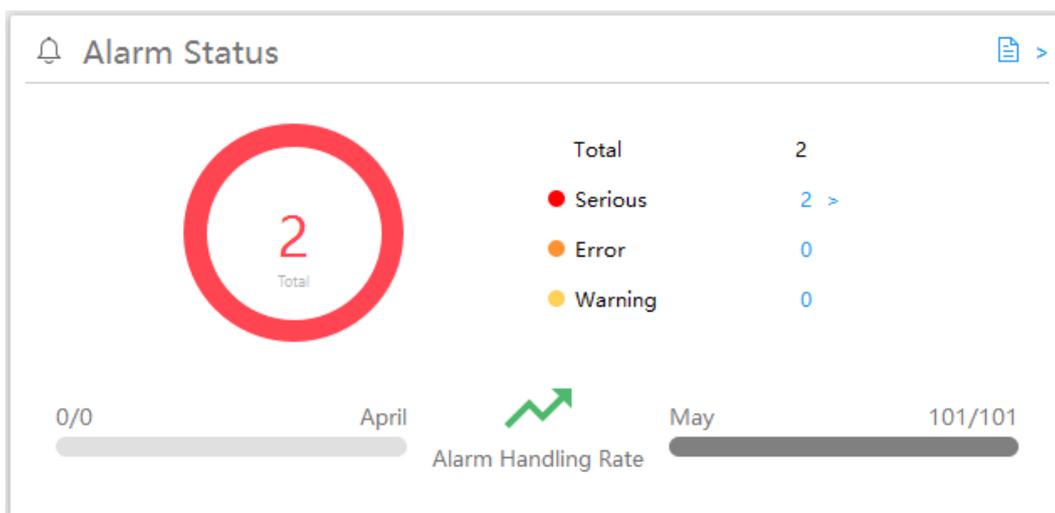


Figure 3-3 Alarm Status

3.3 Camera Status

You can view the status of added cameras.

Table 3-2 Cycle Color Meaning

Cycle Color	Description
Red	The number of abnormal cameras.
Grey	The number of normal cameras.

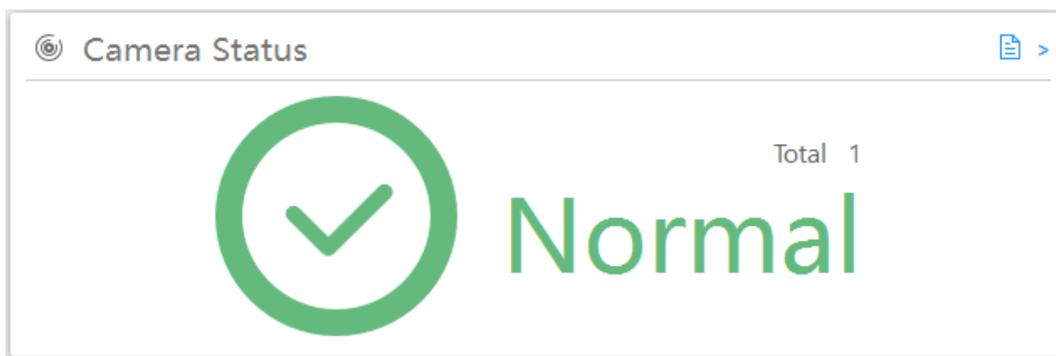


Figure 3-4 Camera Status

Click [➤](#) to jump to camera detection interface.

3.4 Environmental Control Information

Environmental control information includes temperature status, fan status, and battery status. Green icon indicates normal status. Red icon indicates abnormal status. The number on the icon indicates the number of exception systems. For example, Figure 3-5 indicates that the temperature of all the systems is normal, the fan of one system is abnormal, and the battery of one system is abnormal. Click [➤](#) to jump to device information interface.

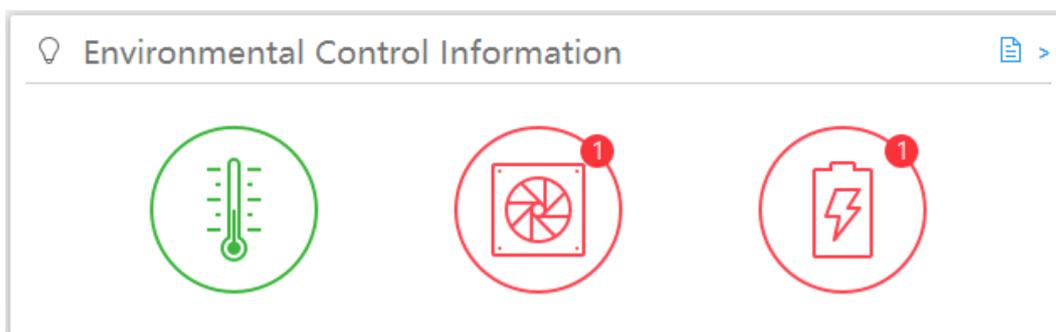


Figure 3-5 Environmental Control Information

3.5 HDD Status

You can view the number of HDDs, the number of normal HDDs, and the number of abnormal HDDs. Abnormal HDD status includes **Warning** (red), **Handling** (orange), and **Unavailable** (yellow). Click [➤](#) to jump to HDD status interface.

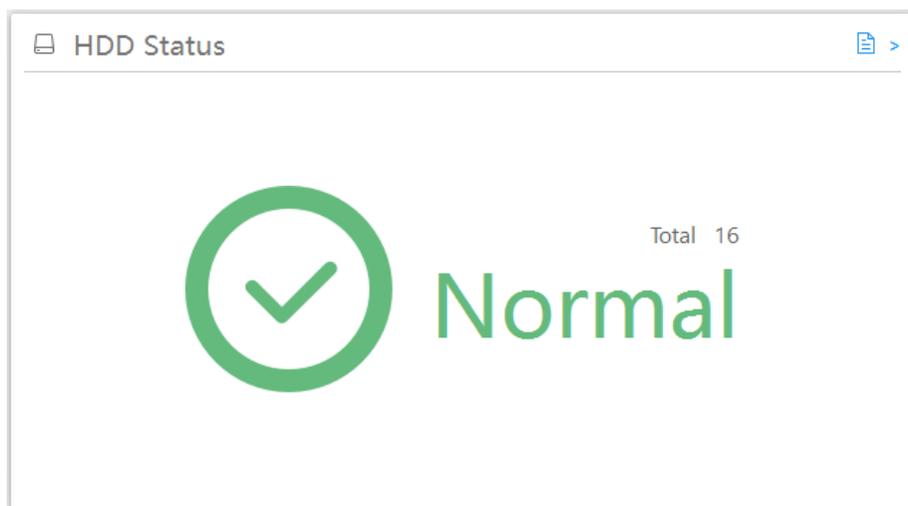


Figure 3-6 HDD Status

Chapter 4 Operation and Maintenance

Operation and maintenance interface shows camera information, storage system information, parts detection, HDD information, and device information.

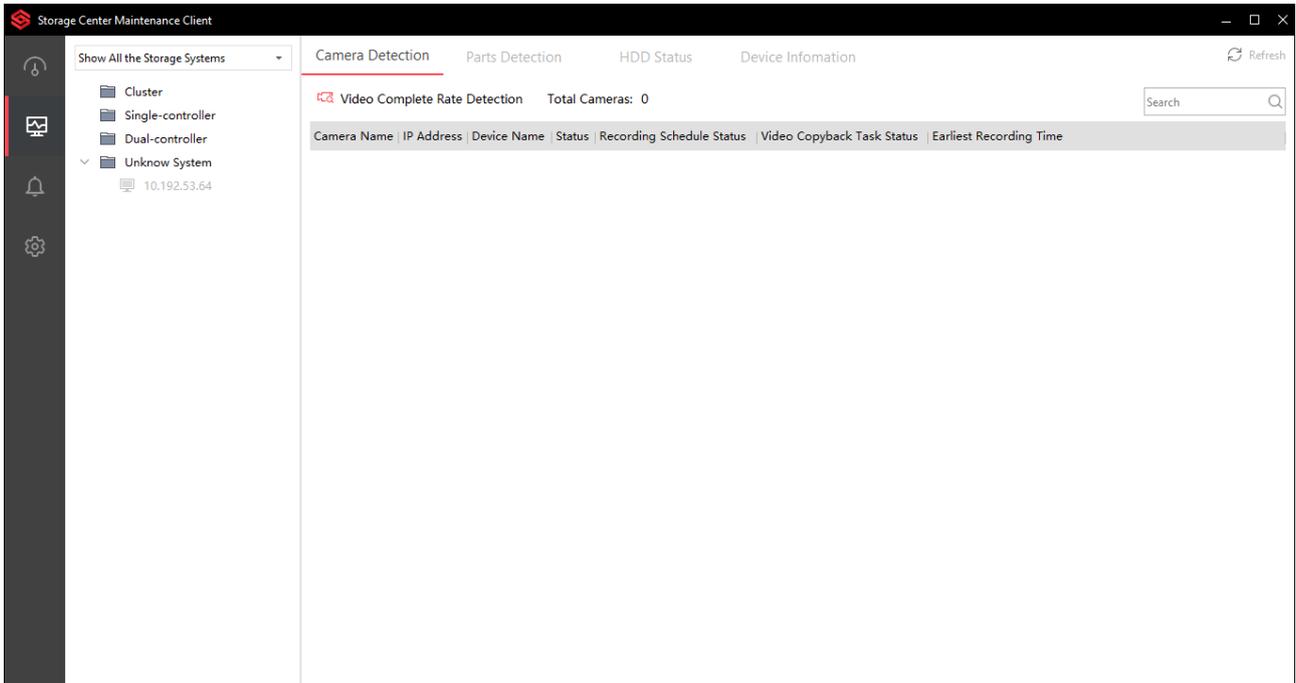


Figure 4-1 Operation and Maintenance Interface

4.1 Filter Storage Systems

Select storage systems to show.

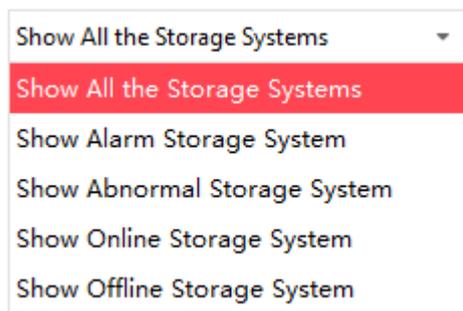


Figure 4-2 Select Storage Systems

If you select **Show Abnormal Storage System**, you can further select exception type.

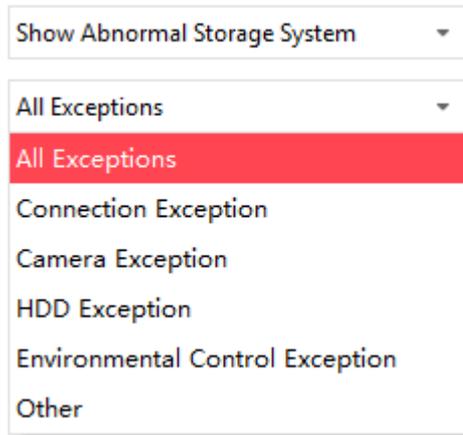


Figure 4-3 Show Abnormal Storage System

4.2 Display Storage Systems by Type

Added storage systems are classified into three types: cluster, single-controller storage system, and dual-controller storage system.

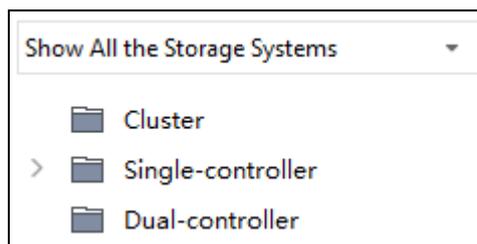


Figure 4-4 Storage System Type

Click > to show storage systems and nodes in the type. Normal, abnormal, alarming storage systems will be shown. When a storage system is offline or its connection is abnormal, it will not be shown in the interface.

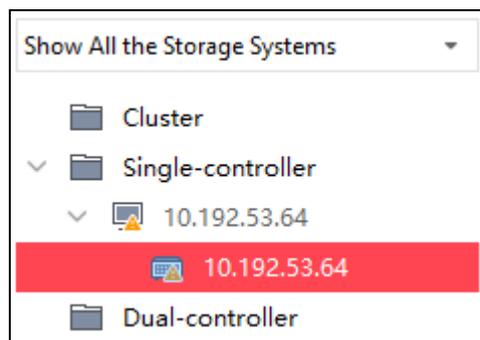


Figure 4-5 Display by Type

4.3 Camera Detection

Step 1 Select a storage system in the tree.

Step 2 Click **Camera Detection**. Cameras added in the storage system will be listed. You can view camera information like camera name, IP address, device name, status, and recording schedule status.



Figure 4-6 Camera Detection

Step 3 Click **Video Complete Rate Detection**.

Step 4 Select storage systems.

Step 5 Select **Time of Statistics**.

Step 6 Click **Start**.



The detection time is the integral time 2 hours forward the current time. For example, if the current time is 2017-12-26 23:30:00 and time of statistics is selected as last 3 days, then videos during 2017-12-24 00:00:00 to 2017-12-26 21:00:00 will be detected.

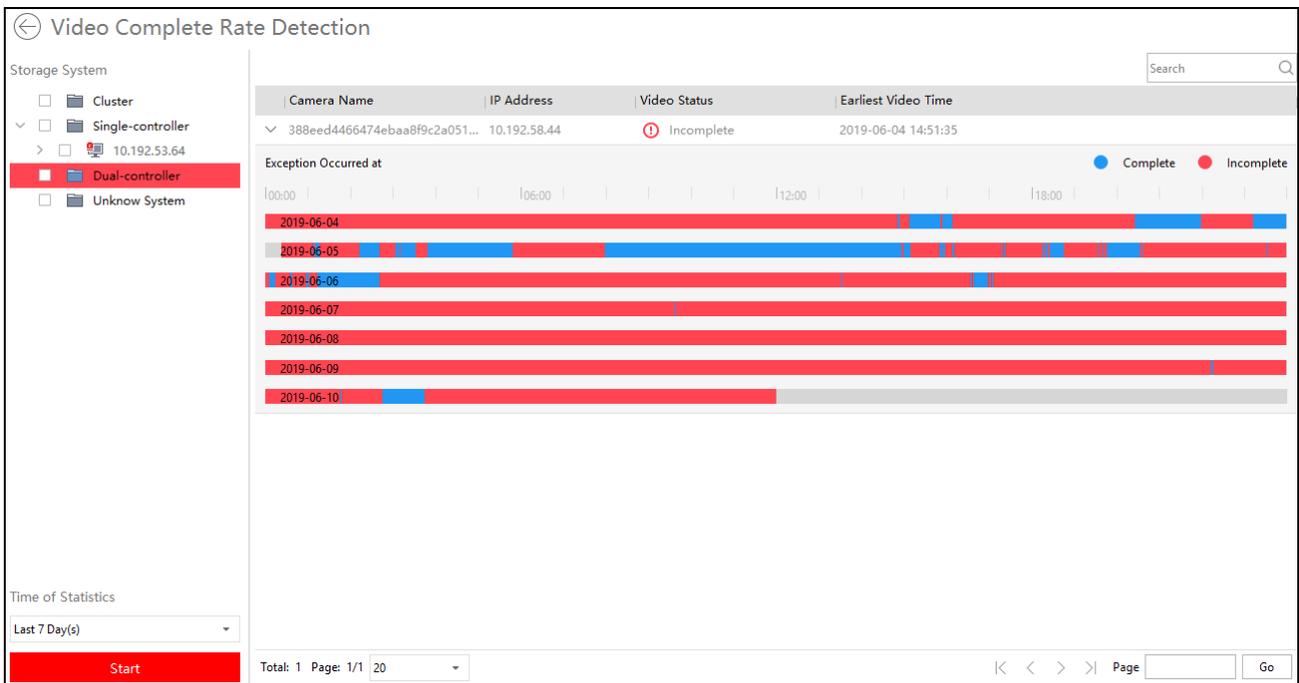


Figure 4-7 Detection Result

4.4 System Information

Click a storage system to enter system information interface.

- **Storage System Information:** It shows the IP address, version, available/total capacity, the number of available/total HDD, and the number of running/total node of the storage system. You can click  > to pop up 2004 login interface.
- **Node Information:** It shows node name, device name, network status, and devices status. If the device status is exception, click  to show details.

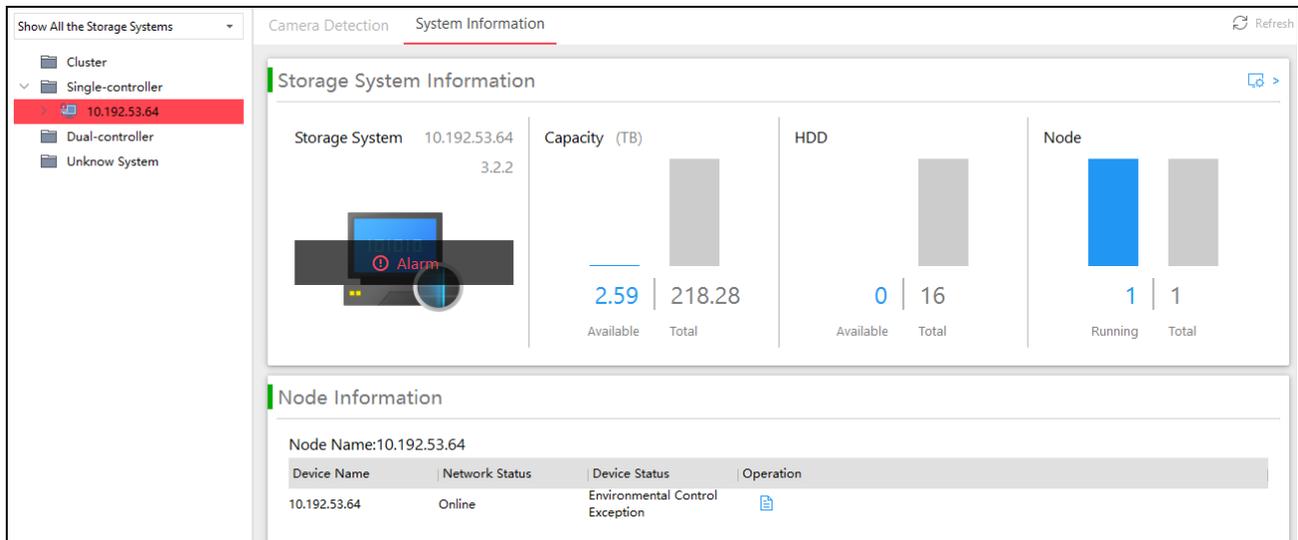


Figure 4-8 System Information

4.5 Parts Detection

Click a device under a storage system and click **Parts Detection**. The detection result of modules in the node will show. If a module is abnormal, you can position the cursor on the icon to show details.

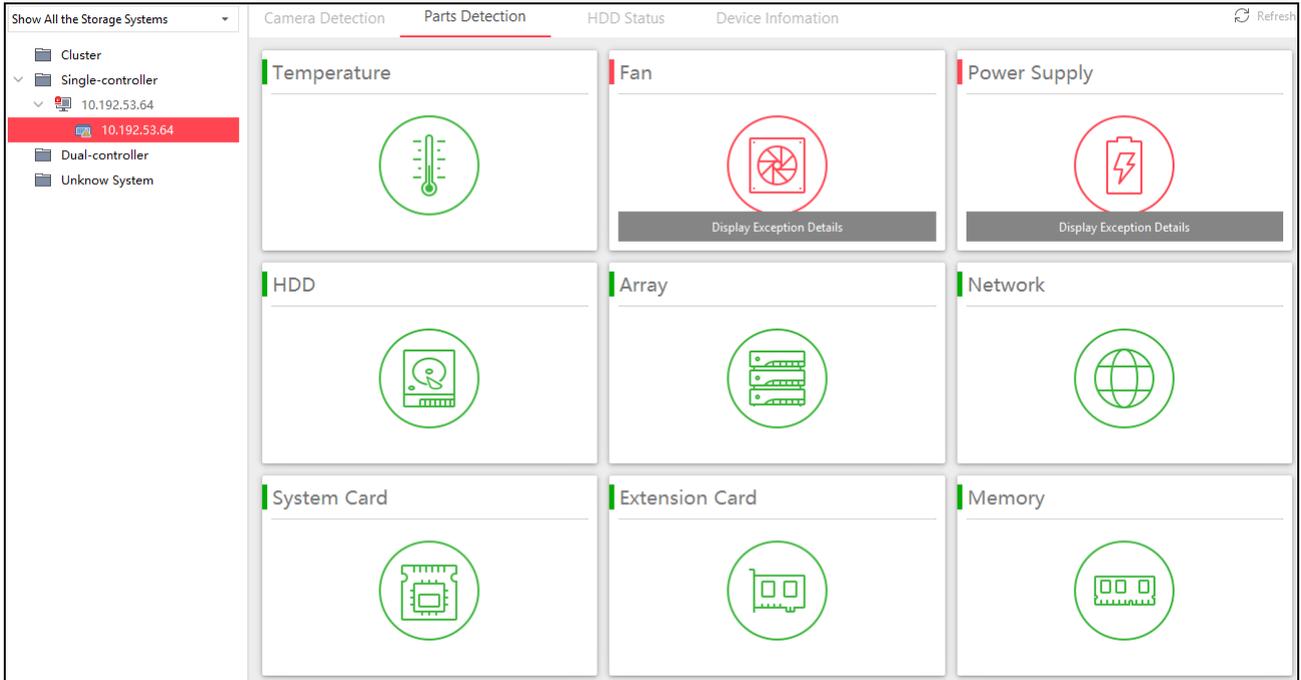


Figure 4-9 Parts Detection

4.6 HDD Status

Click a device under a storage system and click **HDD Status**. All the HDDs in the device will be listed. You can view their information.

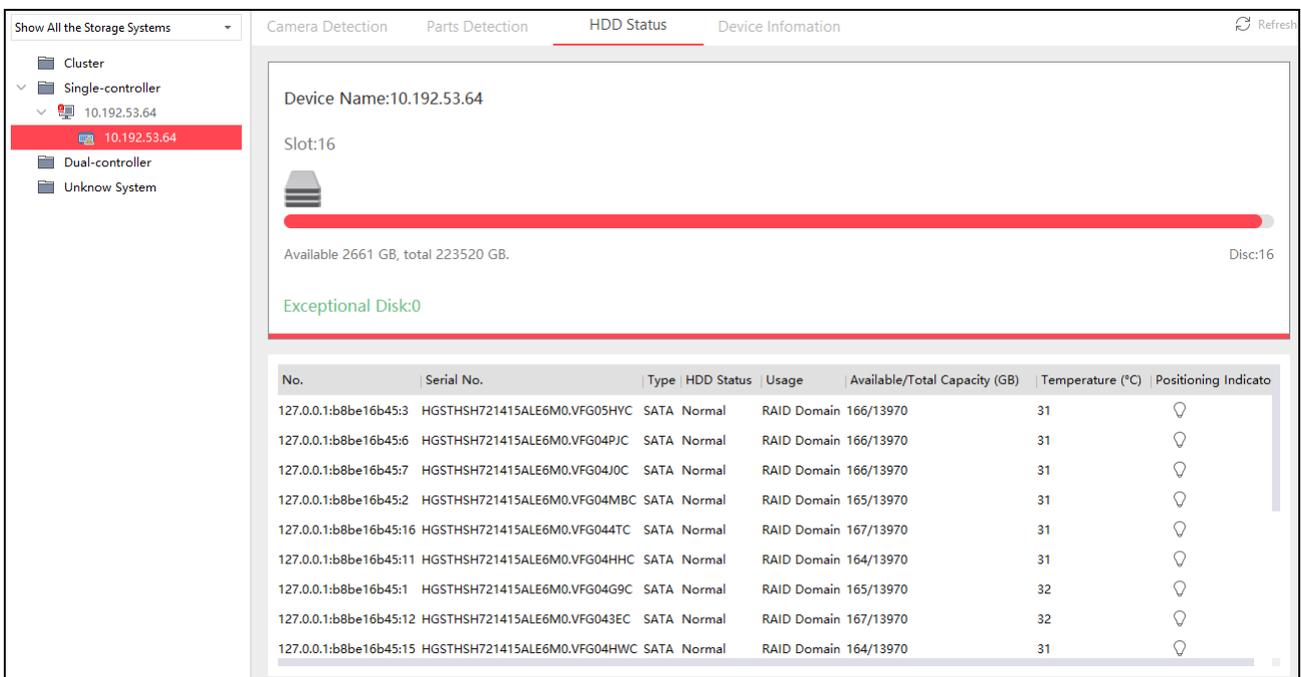


Figure 4-10 HDD Status

If you click the positioning indicator icon of an HDD, the HDD positioning indicator at the device will be light up for 600 seconds.

Serial No.	Type	HDD Status	Usage	Available/Total Capacity (GB)	Temperature (°C)	Positioning Indicator
*.0.0.1:b8be16b45:3	HGSTHSH721415ALE6M0.VFG05HYC	SATA	Normal	RAID Domain 166/13970	31	🔦 597s
*.0.0.1:b8be16b45:6	HGSTHSH721415ALE6M0.VFG04PJC	SATA	Normal	RAID Domain 166/13970	31	💡
*.0.0.1:b8be16b45:7	HGSTHSH721415ALE6M0.VFG04J0C	SATA	Normal	RAID Domain 166/13970	31	💡
*.0.0.1:b8be16b45:2	HGSTHSH721415ALE6M0.VFG04MBC	SATA	Normal	RAID Domain 165/13970	31	💡

Figure 4-11 Positioning Indicator

4.7 Device Information

Click a device under a storage system and click **Device Information**. For storage enclosure, storage enclosure information will show. For storage system, device information and environmental control information will show. For dual-controller storage system, both the two controllers information will show and the main control will be marked as .

- **Device Information** shows device IP, product model, startup time, production version, number of CPUs, device serial No., total memory, and network speed. The bar charts show the real time status of CPU, memory, incoming network, outgoing network, and IOPS.
- **Environmental Control Information** shows the information of temperate, fan, and power supply. A green bar represents normal status and a red bar represents abnormal status.

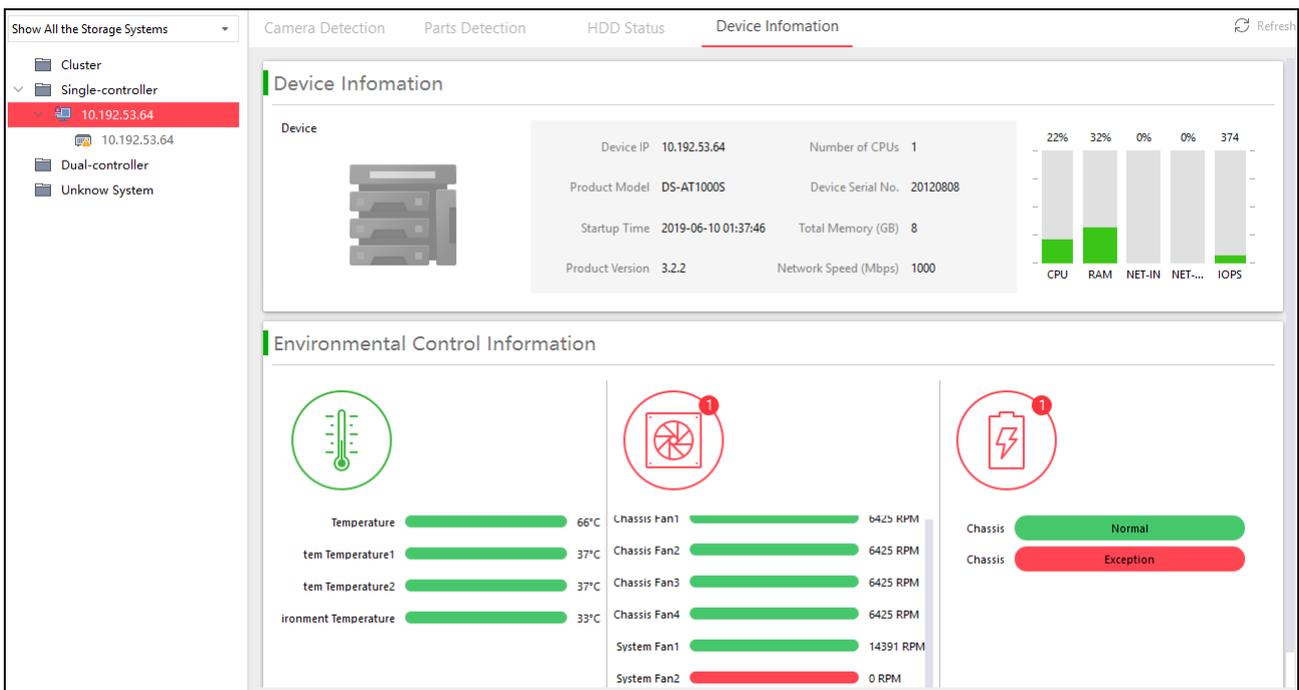


Figure 4-12 Device Information

Chapter 5 Alarm

Alarm module shows the storage system, event, and alarm information.

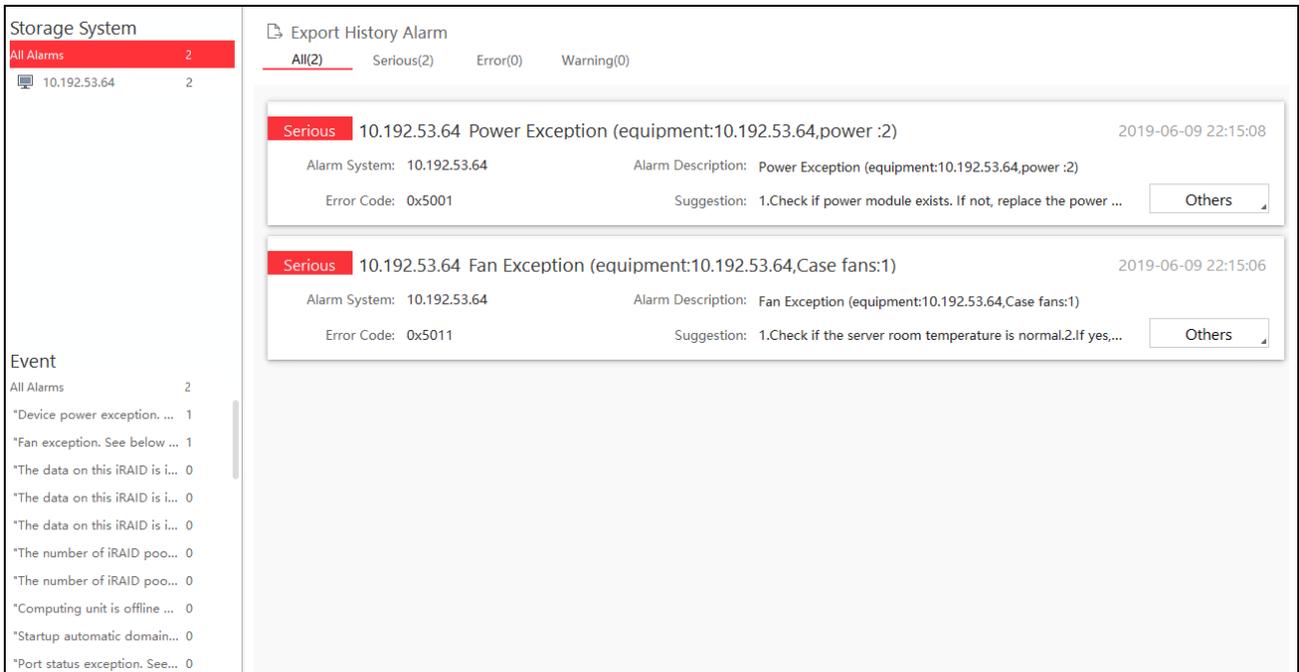


Figure 5-1 Alarm

5.1 Storage System

Count the number of alarms for each storage system. Select a storage system, then the corresponding alarms will be shown in the right list.

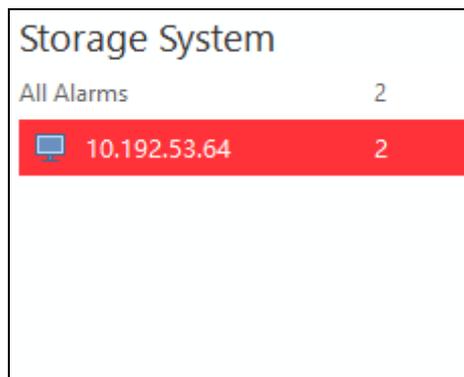


Figure 5-2 Storage System

5.2 Event

Event list displays alarms by event type and display events in descending order of the number of alarms. Select an event, then the corresponding alarms will be shown in the right list.

Event	
All Alarms	2
"Device power exception. ...	1
"Fan exception. See below ...	1
"The data on this iRAID is i...	0
"The data on this iRAID is i...	0
"The data on this iRAID is i...	0
"The number of iRAID poo...	0
"The number of iRAID poo...	0
"Computing unit is offline ...	0
"Startup automatic domain...	0
"Port status exception. See...	0

Figure 5-3 Event

5.3 Alarm Information

Alarm information is classified into three levels: **Serious**, **Error**, and **Warning**.

Export History Alarm			
All(2)	Serious(2)	Error(0)	Warning(0)
Serious	10.192.53.64	Power Exception (equipment:10.192.53.64,power :2)	2019-06-09 22:15:08
Alarm System: 10.192.53.64		Alarm Description: Power Exception (equipment:10.192.53.64,power :2)	
Error Code: 0x5001		Suggestion: 1.Check if power module exists. If not, replace the power ...	
<input type="button" value="Others"/>			
Serious	10.192.53.64	Fan Exception (equipment:10.192.53.64,Case fans:1)	2019-06-09 22:15:06
Alarm System: 10.192.53.64		Alarm Description: Fan Exception (equipment:10.192.53.64,Case fans:1)	
Error Code: 0x5011		Suggestion: 1.Check if the server room temperature is normal.2.If yes,...	
<input type="button" value="Others"/>			

Figure 5-4 Alarms

The listed alarm information includes alarm type, alarm system IP address, alarm time, error code, alarm description, and suggestion of solution. You can position the cursor in the suggestion to show complete suggestions on the alarm.

Click **Other** to show alarm time and alarm device.

Chapter 6 Configuration

Configuration module includes storage system management, general configuration, alarm notification settings, and help.

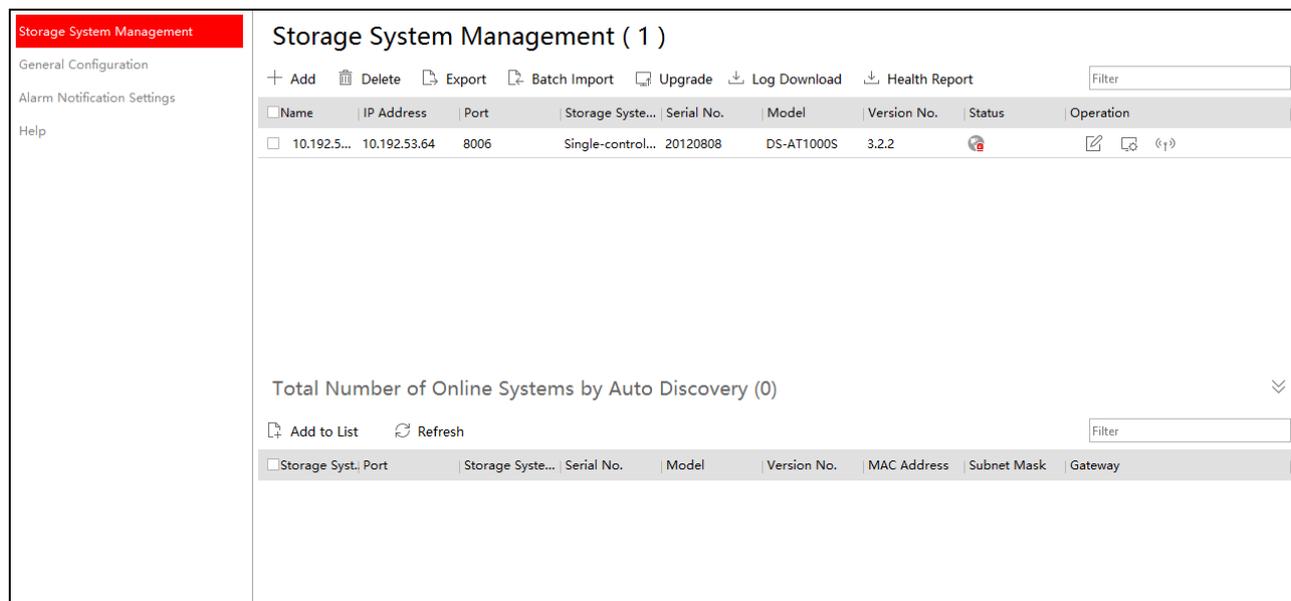


Figure 6-1 Configuration

6.1 Storage System Management

6.1.1 Add a Storage System

Step 1 Go to **Configuration > Storage System Management**.

Step 2 Click **Add**.

Figure 6-2 Add a Storage System

Step 3 Enter the storage system information, including **IP Address**, **Port**, **Storage System Name**, **User Name**, and **Password**.

- **IP Address:** The IP address of the storage system you want to add. You can click Connection Test to test the network connection between your computer and the storage system.
- **Port:** Default port of storage system is 8006.
- **Storage System Name:** Default name is the same with IP address. You can customize it.
- **User Name:** Admin.
- **Password:** The password of the storage system.

Step 4 Click **Add**.

The added storage system will be listed. You can view its information including name, IP address, port, storage system mode (single-controller, dual-controller, or cluster), serial No., model, version No., and status.

Storage System Management (1)									
+ Add 🗑 Delete 📄 Export 📁 Batch Import 🔄 Upgrade 📄 Log Download 📄 Health Report <input type="text" value="Filter"/>									
<input type="checkbox"/>	Name	IP Address	Port	Storage Syste...	Serial No.	Model	Version No.	Status	Operation
<input type="checkbox"/>	10.192.5...	10.192.53.64	8006	Single-control...	20120808	DS-AT1000S	3.2.2		

Figure 6-3 Storage System List

6.1.2 Delete a Storage System

Step 1 Check storage systems to delete and click **Delete**.

Step 2 Click **OK**.

6.1.3 Export Configuration File

Follow the steps to export the configuration file of the client to local path.

Step 1 Check storage systems and click **Export**.

Step 2 Select a local path, enter file name, and click **OK**



NOTE

Passwords of storage systems will not be exported. If needed, you can manually add the passwords to the exported configuration file.

6.1.4 Import Configuration File

When you are running a new maintenance client, you can add the storage systems in the previous client by importing the configuration file.

Before you start

Export the configuration file of the previous client. For detailed steps, refer to *6.1.3 Export Configuration File*.

Step 1 Click **Batch Import**.

Step 2 Select the configuration file and click **Open**.

The storage systems in the configuration file will be added to the new client.

6.1.5 Upgrade

Step 1 Check one or more storage systems and click **Upgrade**.

Step 2 Select the upgrade file and click **Upgrade**.

6.1.6 Download Logs

Follow the steps to download system logs to a local path.

Step 1 Check one or more storage systems and click **Log Download**.

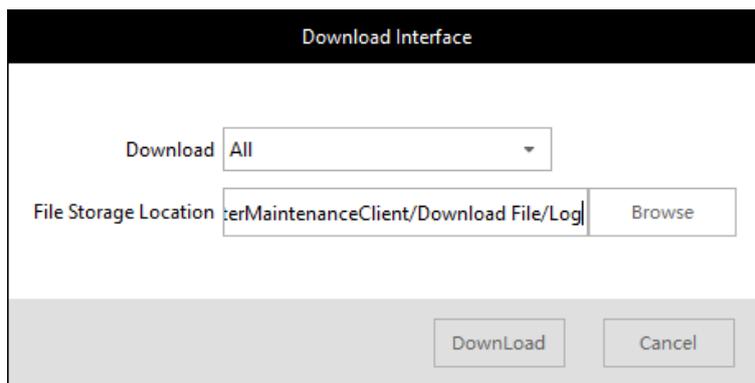


Figure 6-4 Download Logs

Step 2 Select log type as **All**, **Default**, or **Simplify**.

Step 3 Select **File Storage Location**.

Step 4 Click **Download**.

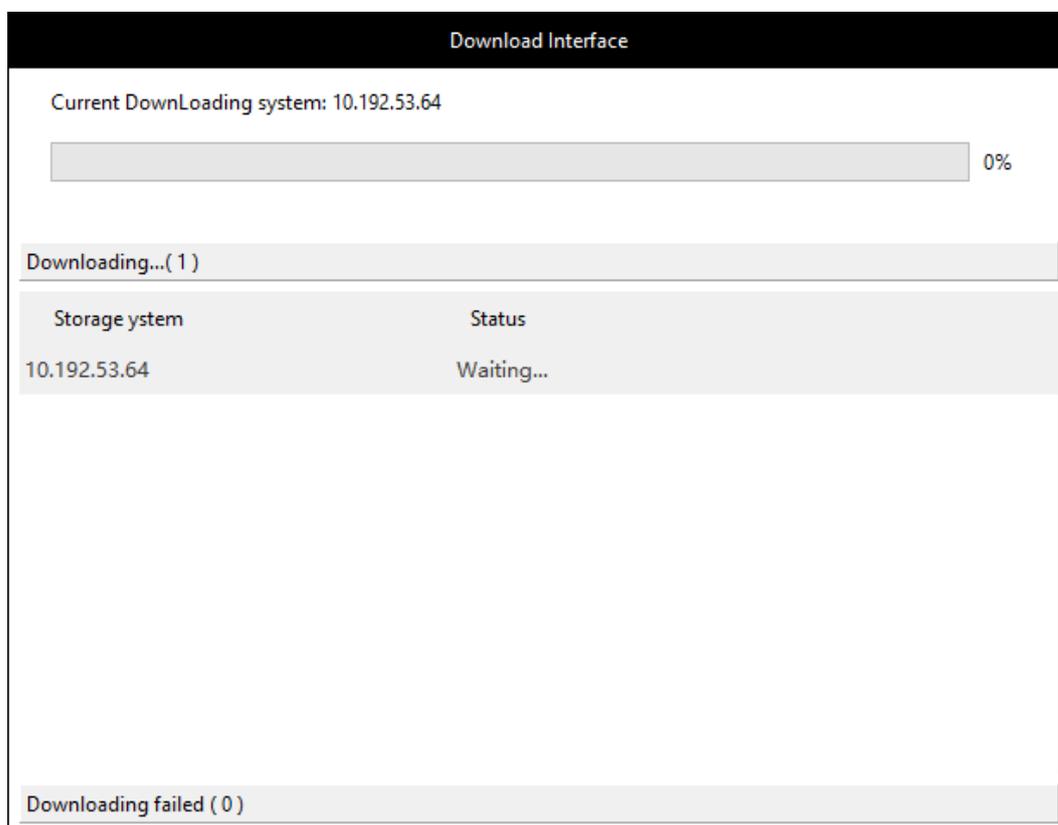


Figure 6-5 Download Progress

6.1.7 Automatically Search Online Storage System

Step 1 Connect the server where the maintenance client is installed to a network switch and click **Refresh**.

The online storage systems will be listed. You can view their information including IP address, port, storage system mode (single-controller, dual-controller, or cluster), serial No., model, version No., MAC address, subnet mask, and gateway.

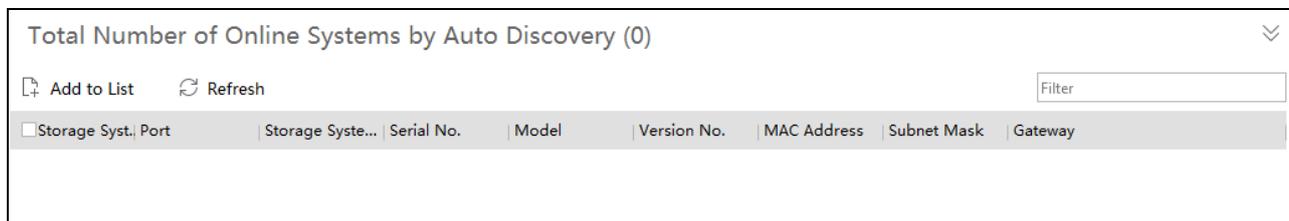


Figure 6-6 Total Number of Online Systems

Step 2 Check storage systems to add and click **Add to List**.

Step 3 Enter user name and password to add.

6.2 General Configuration

You can adjust the client resolution, default file saving path, and default settings of log and health report downloading.

Step 1 Check **Log** and **Health Report**.

Step 2 Select **Download Cycle** and **Storage Quantity**.

Storage Quantity: The maximum logs that each system can save.

Step 3 Click **Save**.

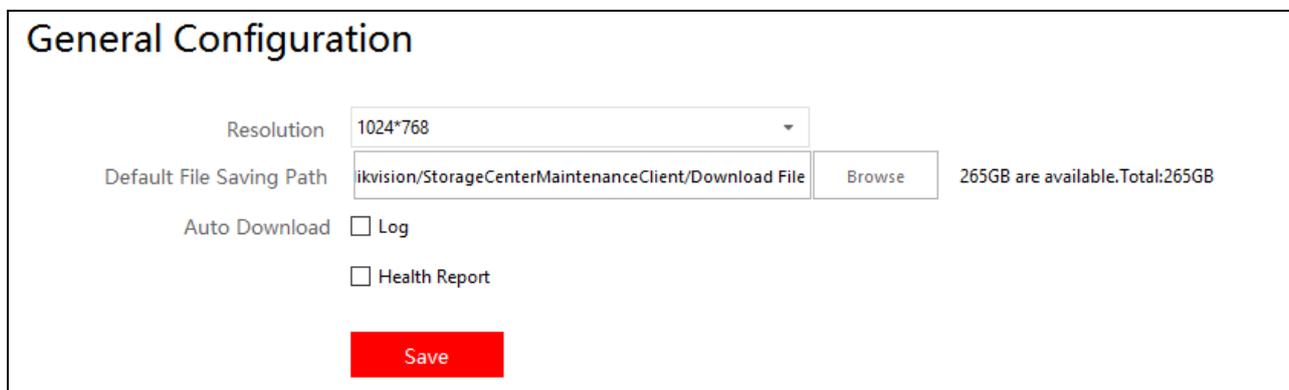


Figure 6-7 General Configuration

6.3 Alarm Notification Settings

You can set the client auto refresh interval, audible waring, and pop-up window triggering.

Alarm Notification Settings

Client Auto Refresh Interval s

Audible Warning OFF

Trigger Pop-up Window OFF

Figure 6-8 Alarm Notification Settings



See Far, Go Further