



HIKVISION pStor  
User Manual

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## **User Manual**

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### **About this Manual**

This Manual is applicable to HIKVISION pStor.

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

# Chapter 1 Preface

## 1.1 Product Introduction

HIKVISION pStor is the storage access service software developed by Hangzhou Hikvision Digital Technology Co., Ltd. You can set the server local HDD to be the storage room, or set the logical HDD (standard iSCSI/CIFS) mounted by the server to be the storage room via the software. It provides efficient and compatible storage access management service for Hikvision video surveillance management platform.

HIKVISION pStor can be deployed flexibly, supporting centralized deployment with Hikvision surveillance platform and internal deployment in server independently. It provides basic video storage, picture storage, and system management.

## 1.2 Purpose

The purpose of the user manual is to guide you to install the software correctly and master the operation, avoiding unnecessary risks or property damage caused by misoperation.

The applicable targets of the user manual are the system maintenance personnel and daily operation personnel.

Before using the product, read the user manual carefully, and keep it properly for reference.

## 1.3 Notice

### 1.3.1 Personnel Quality Requirements

As the installation and maintenance personnel, you should have the qualification certificates or experiences of being engaged in video surveillance system installation and maintenance. Besides, you must master the following knowledge and skills.

- Basic knowledge and installation skills of video surveillance system and components.
- Basic network security skills and the capacity of understanding the user manual.

### 1.3.2 Notice

- The system may face network security risk after it is accessed to Internet. Strengthen your personal information and data security protection. When you find that the system may in the hidden danger of network security, contact us in time.

- You shall acknowledge that you have the responsibility to configure all the passwords, server security settings, and other security settings of the system reasonably, and keep your user name and password properly.

## 1.4 Software Preparation

Check if the hardware is working normally, if the operating system is installed, and the version information.

### 1.4.1 Operating System

The following operating systems are recommended:

- 64-bit Windows Server 2012R2
- 64-bit Windows Server 2008R2
- 64-bit Windows Server 2016
- 64-bit Win10
- 64-bit Win7

### 1.4.2 Product Version Description

The installation package is named as *Product Line-Product Series-Vx.x.x-buildyymmdd-R<n>*. The detailed description of the name is shown as below.

- **Product Line:** HikCentral
- **Product Series:** pStor
- **Vx.x.x:** Baseline version information
- **buildyymmdd:** Delivered date
- **R<n>:** R stands for the delivered system test version. n stands for the times of system test. E.g., *HIKVISION pStor-V1.1.0-build180118-R2.exe* means the product is delivered as V1.1.0 at January 18<sup>th</sup>, 2018, and has passed 2 cycles of system tests.

## 1.5 Environment Preparation

### 1.5.1 Network Environment

HIKVISION pStor product supports multiple NICs binding. If the video data for storage are too large, you need to bind multiple NICs of the storage device to increase network bandwidth.



If Intel NIC is used for the server, you need to configure NIC parameters to enhance NIC transmission performance.

## 1.5.2 Power Supply Environment

HIKVISION pStor product is strict in the stability of power supply. It is recommended to equip the machine room with two independent power lines to provide dual power supply, with independent UPS, and with generator.

## 1.5.3 Machine Room Environment

As the temperature, humidity, and dust have a great influence on the service life of disks and device, it is recommended to locate the machine room in a relatively closed environment and equip it with independent environment control device to guarantee all the devices are in the environment with constant temperature, constant humidity, and no dust.

## 1.5.4 Port

The following ports are used for the regular transmission of the signaling and data in pStor. You may need to forward these ports on routers for WAN access or allow them for firewalls according to your software deployment or network structure.

Port	Function and Description	Solution if Conflicted
6060	Used for Web management in HTTP protocol	Cannot be changed.
6021	VMS & pStor data exchange port.	Cannot be changed
6120	Restful images download port	Cannot be changed
6011	Restful images storage protocol port	Cannot be changed
6026	Streaming data port	Cannot be changed
6027	KMS & PSS images storage and download port	Cannot be changed
6022	VMS sending recording plan information port	Cannot be changed
6036	pStor SDK signal port	Cannot be changed
6037	pStor SDK data port	Cannot be changed
6038	Video data download and playback signal port	Cannot be changed
6039	Video data download and playback data port	Cannot be changed
6040	Restful images download protocol redirection port	Cannot be changed
6041	Restful images storage protocol redirection port	Cannot be changed

## 1.5.5 System Firewall

After HIKVISION pStor is installed successfully, Windows firewall will be enabled automatically, and port 2188, port 554, port 6120, port segment from 34000 to 36000, and port segment from 6021 to 6100 will be enabled.

## Chapter 2 Software Installation

Step 1 Double click *HIKVISION pStor-xxx.exe* to start installation, as shown in Figure 2-1.

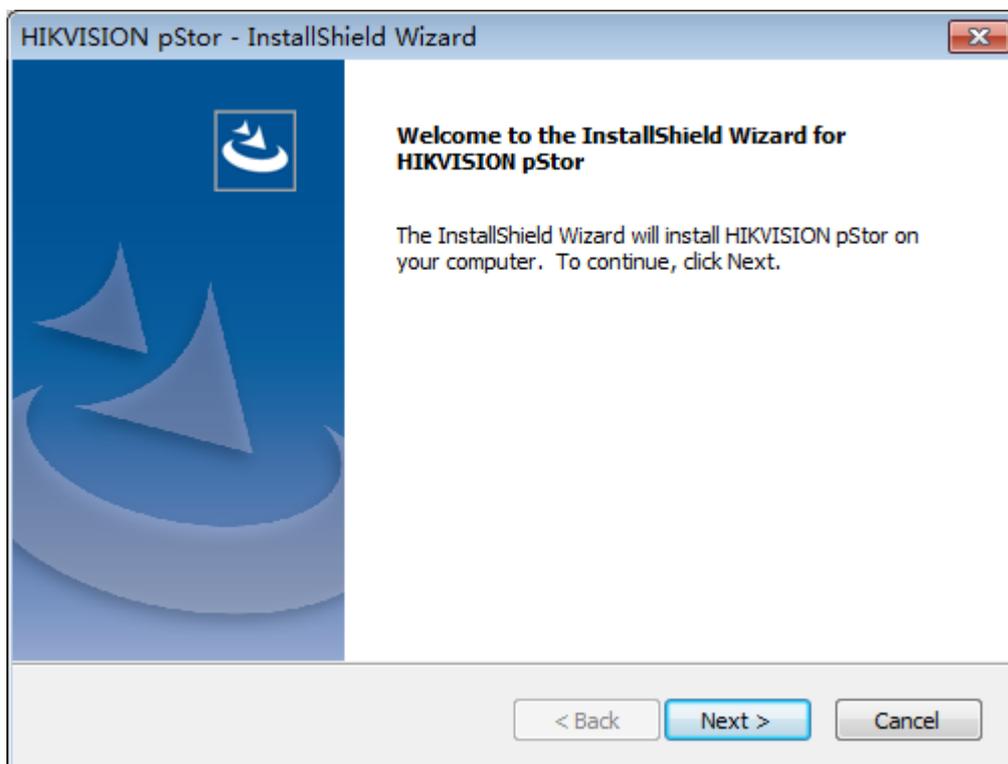


Figure 2-1 Start Installation

Step 2 Click **Next** to select the installation directory, as shown in Figure 2-2. You can click **Change Folder** to change the default directory.

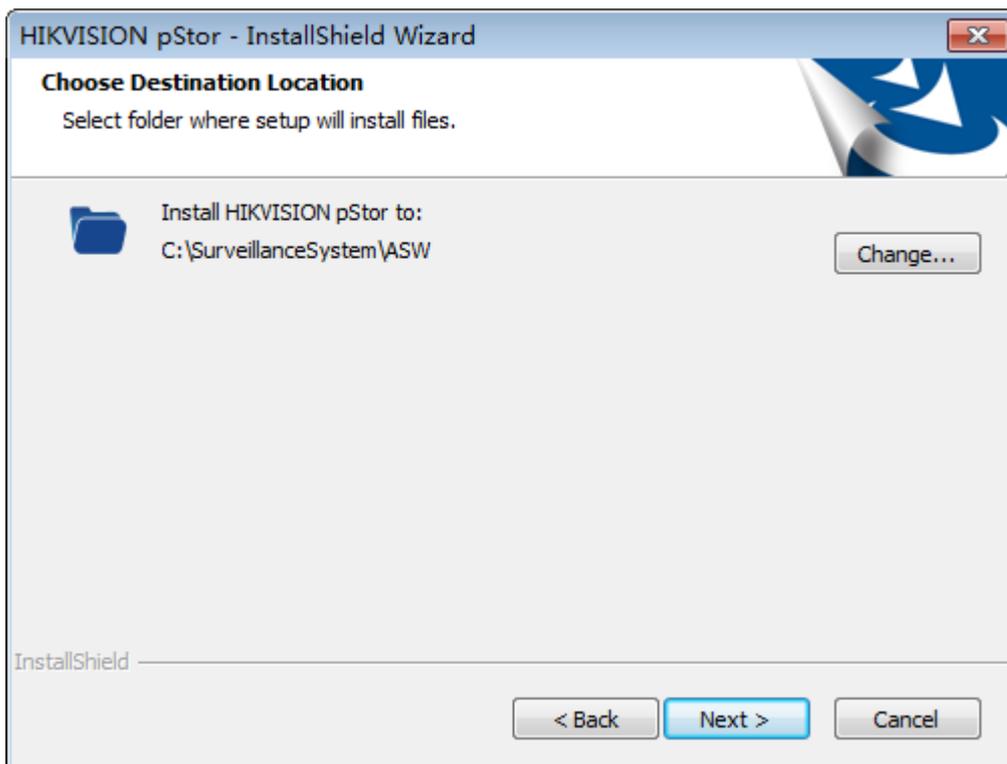


Figure 2-2 Select Installation Directory

Step 3 Click **Next** to enter the installation preparation interface, as shown in Figure 2-3.

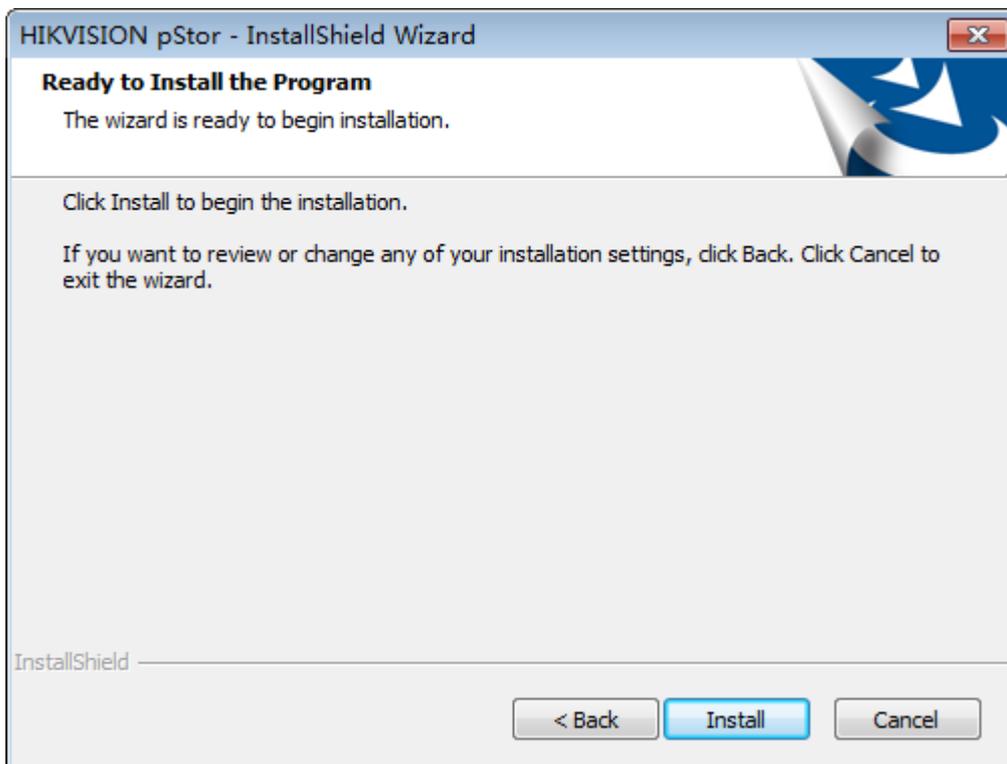


Figure 2-3 Prepare to Install

Step 4 Click **Install** to install the software as shown in Figure 2-4.

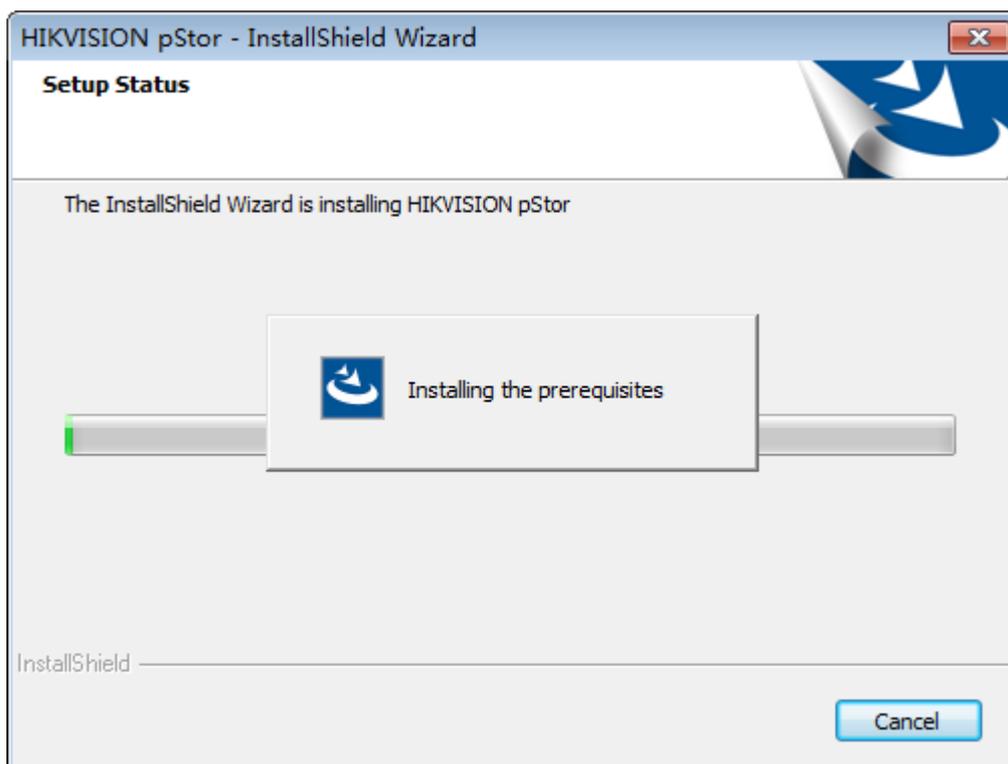


Figure 2-4 Install Software

Step 5 During the installation process, you may need to install JDK, JRE, and Microsoft Visual C++ 2013 Redistributable. Follow the wizard to install them. Then continue to install HIKVISION pStor.

Step 6 When PostgreSQL database installation starts, the interface pops up as shown in Figure 2-5. Create a password and confirm it.

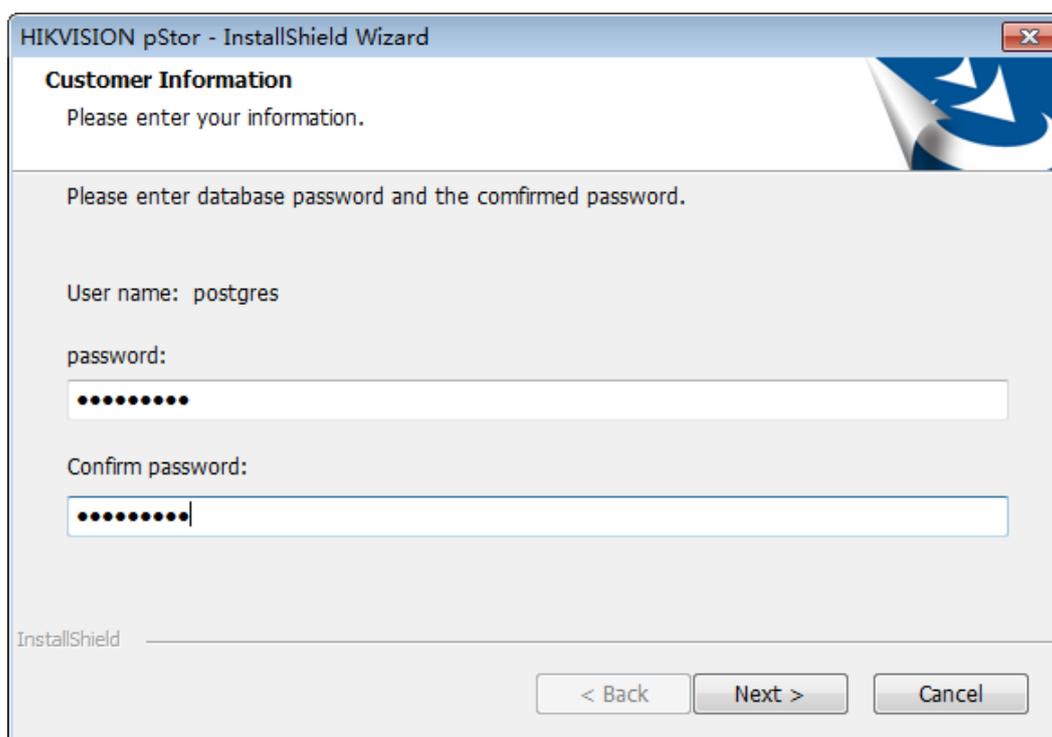


Figure 2-5 Create Password

Step 7 Click **Next** and the interface pops up as shown in Figure 2-6 when the installation finishes.

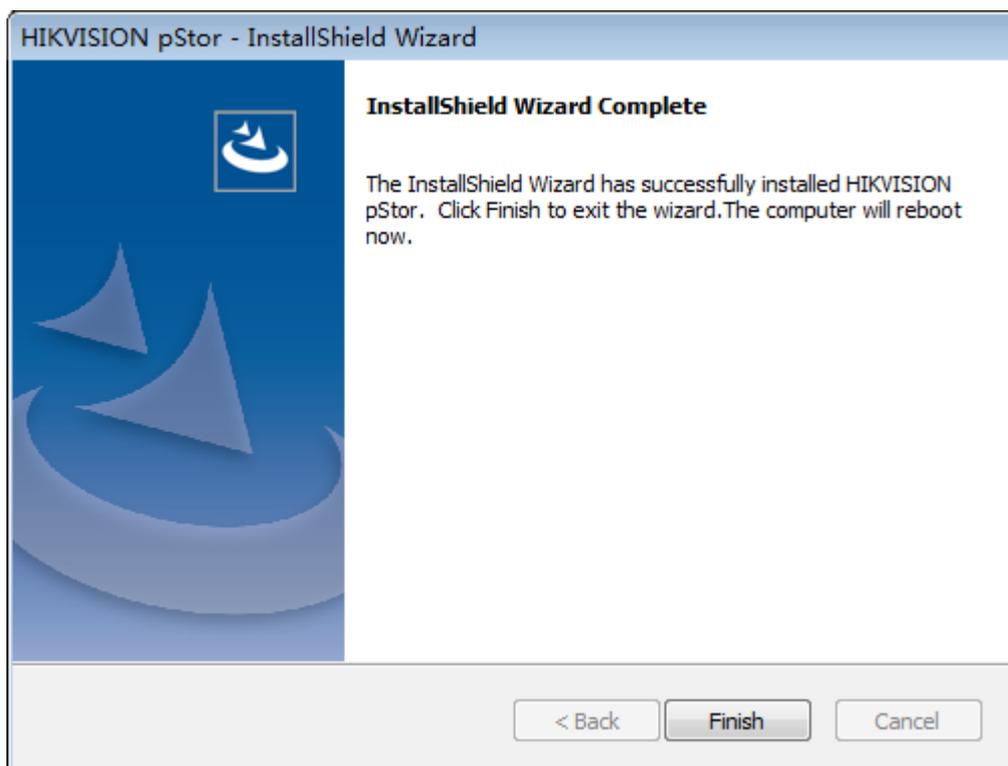


Figure 2-6 Finish Installation

Step 8 Click **Finish** to finish the software installation.

**Result:** The server will reboot automatically after the installation finishes.

## Chapter 3 Software Operation

### 3.1 Browser Requirement

You can configure the system via web browser. The supported web browsers include IE10, IE11, Firefox, and Chrome. The supported resolution includes 1280\*768, 1366\*768, 1440\*900, and 1920\*1080.

### 3.2 Login

Step 1 Open the supported web browser.

Step 2 Input the server IP address and port No. (6060) in the address bar. E.g., `https://***.***.***.***:6060`. Press Enter key to enter the login interface, as shown in Figure 3-1.

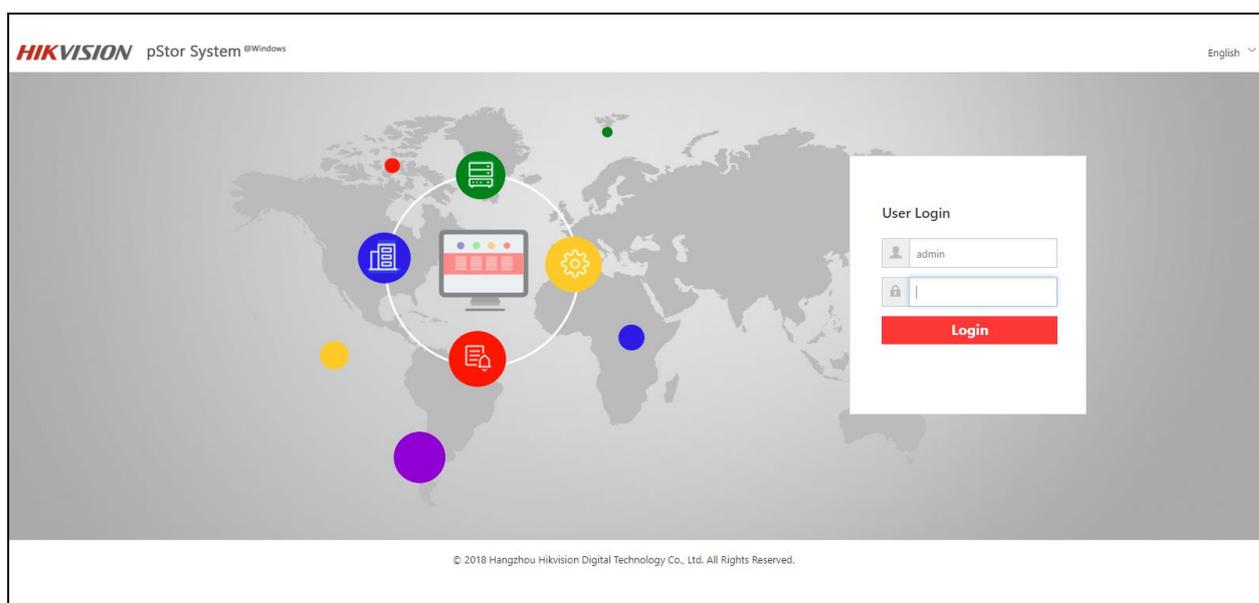


Figure 3-1 Login

Step 3 Input the user name and password.



The default user name is admin, and the default password is HIK88075998. You need to modify the password after login for the first time. Refer to *Chapter 3.2.1* for details.

Step 4 Click **Login**.

### 3.2.1 Modify Default Password

You need to modify the default password after login for the first time.

Step 1 On the Login interface, click **Login**, and the **Modify Password** message box pops up as shown in Figure 3-2.

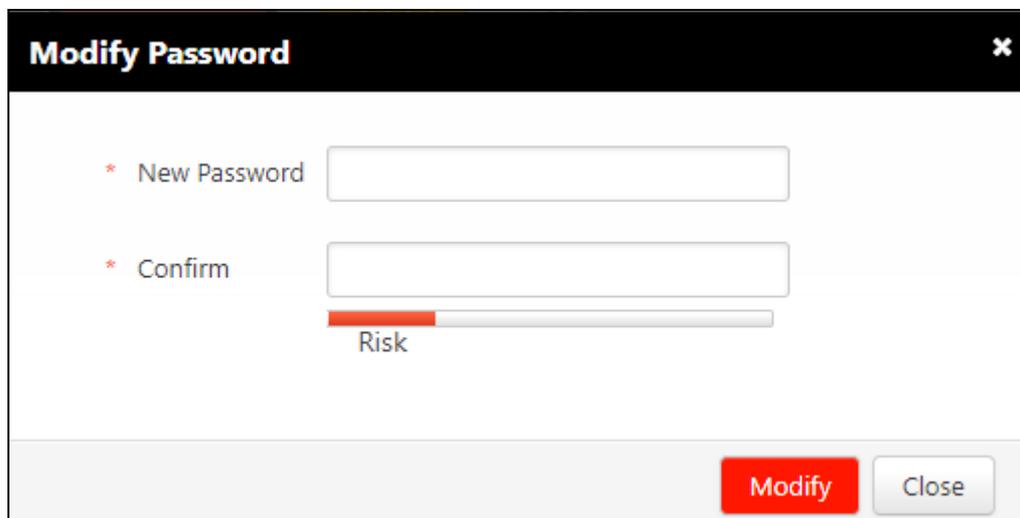


Figure 3-2 Modify Password

Step 2 Input **New Password** and confirm the password.

Step 3 Click **Modify**, and the message box pops up as shown in Figure 3-3.

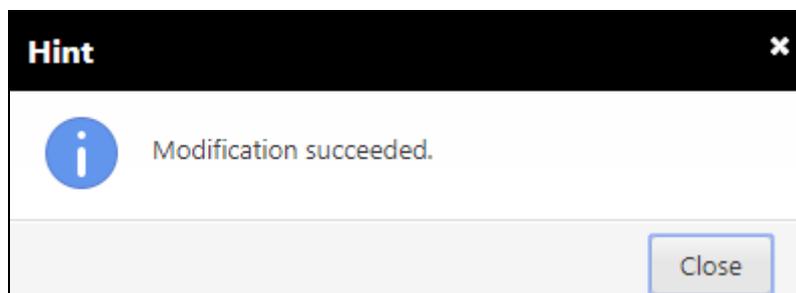


Figure 3-3 Successful Modification

Step 4 Click **Close** to finish the modification.

### 3.2.2 Login

After default password modification, input the server IP address and port No. (6060) in the address bar. Press Enter key to enter the login interface. Input the user name and modified password to log in to the system.

## 3.3 Home Page

After login, you enter the home page, on which you can view the system storage capacity, system time, recording schedule information, service status, etc., as shown in Figure 3-4.

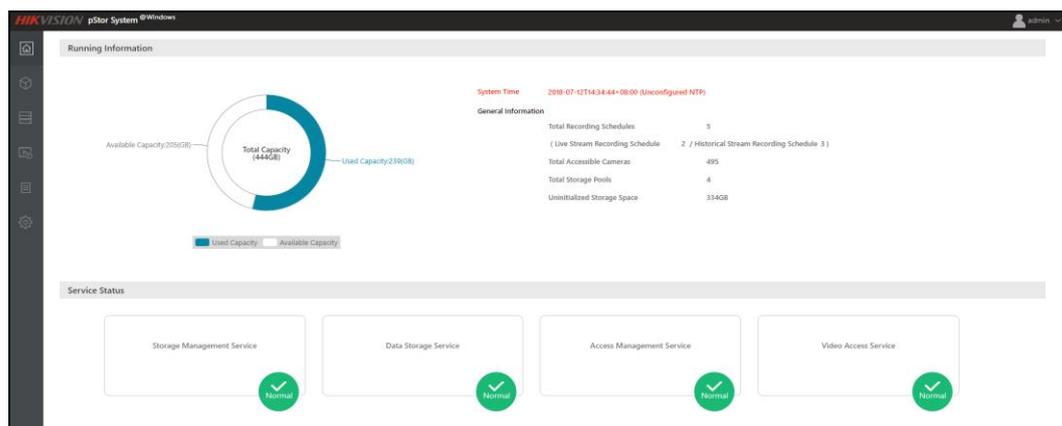
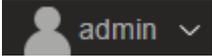


Figure 3-4 Home Page

- **Pie chart:** It shows storage total capacity, used capacity, and available capacity.
- **General information:** It shows total recording schedules, live stream recording schedule, historical stream recording schedule, total accessible cameras, total storage pools, and uninitialized storage space.
- **Service status:** It shows storage management service status, data storage service status, access management service storage, and video access service status.
- **System time:** It shows the current time of storage accessing to server, and the time is changing all the time.

## 3.3.1 Modify Admin Password

You can modify the admin password.

Step 1 Click  on the upper right corner of the home page, as shown in Figure 3-5.

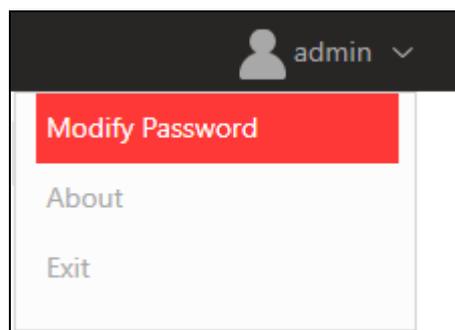


Figure 3-5 Menu

Step 2 Click **Modify Password** to enter the interface as shown in Figure 3-6.

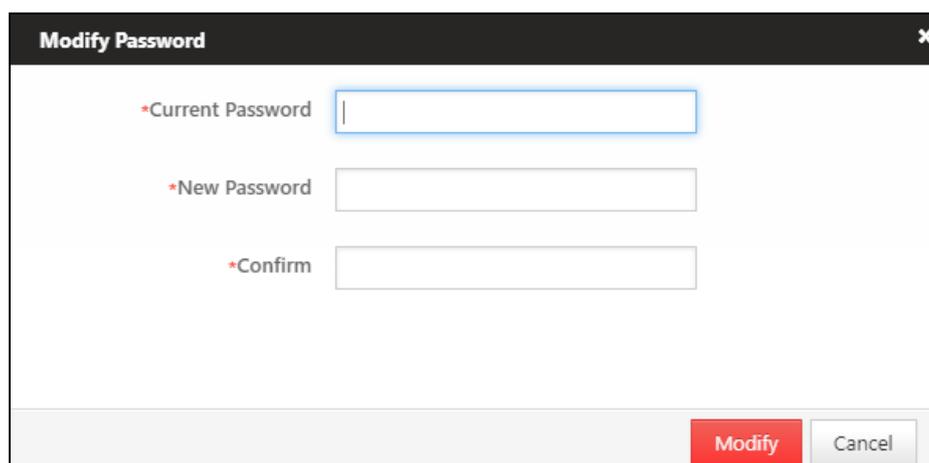


Figure 3-6 Modify Password

Step 3 Input **Current Password**, **New Password**, and **Confirm** the new password.

Step 4 Click **Modify**, and the message box pops up as shown in Figure 3-7. It hints if the password modification is successful or not.

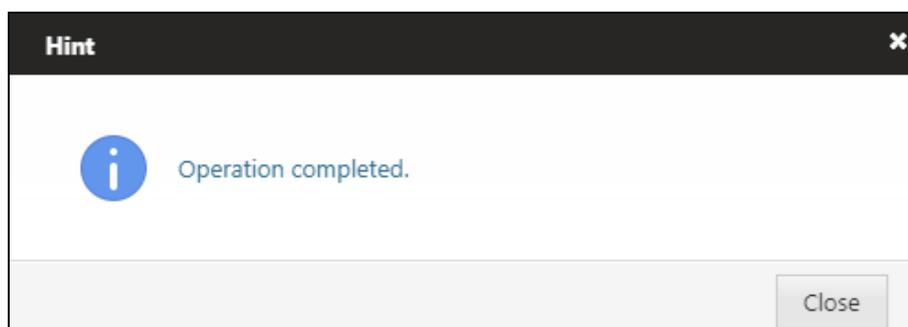


Figure 3-7 Successful Modification

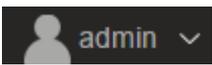
Step 5 Click **Close** to finish the modification.

 **NOTE**

After modifying the password, when you log out of the system and log in again, you need to input the new password.

### 3.3.2 About

You can view the version information of the system.

Step 1 Click  on the upper right corner of the home page, as shown in Figure 3-8.

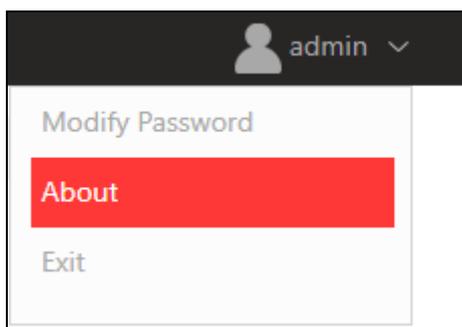


Figure 3-8 Menu

Step 2 Click **About**, and the interface pops up as shown in Figure 3-9.

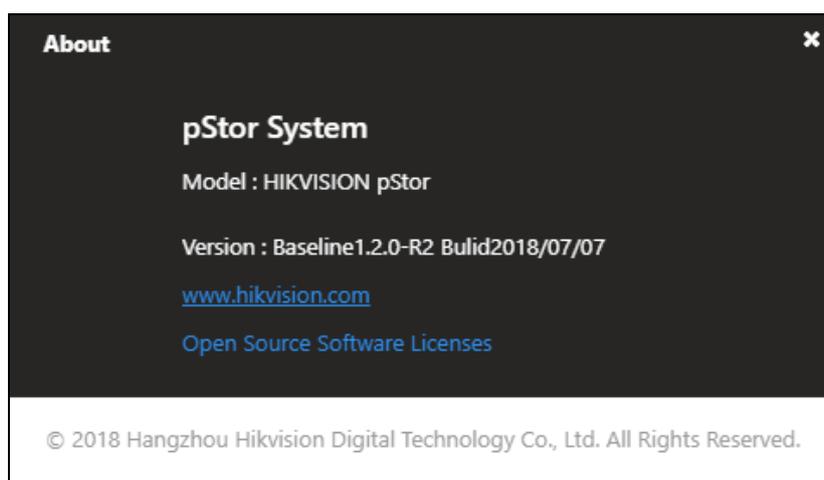
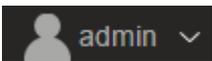


Figure 3-9 About

### 3.3.3 Logout

Step 1 Click  on the upper right corner of the home page, as shown in Figure 3-10.

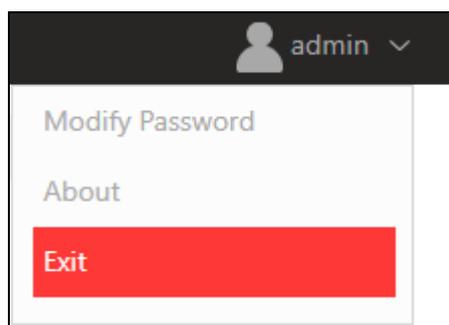


Figure 3-10 Menu

Step 2 Click **Exit** to log out of the system.

## 3.4 Wizard

You can follow the wizard to configure the main functions of the system quickly. Then you can use the system normally.

Click **Wizard** on the left menu to enter the wizard interface, which provides quick configuration, including server NIC settings, adding storage space, and adding resource pool, as shown in Figure 3-11.

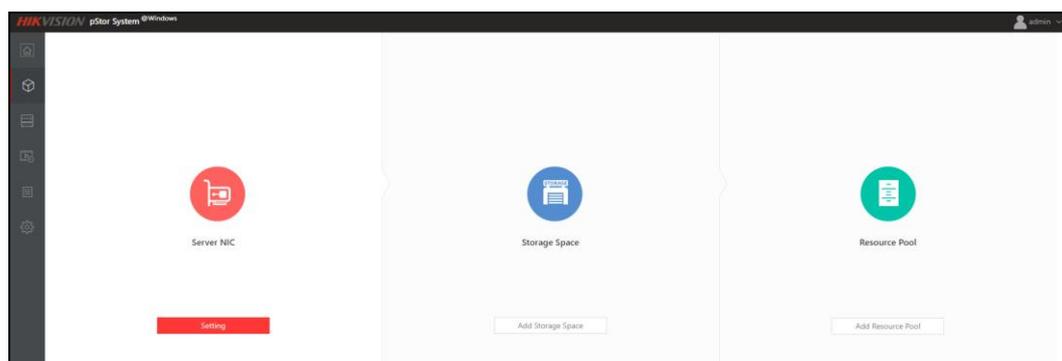


Figure 3-11 Wizard

### 3.4.1 Configure Server NIC

Step 1 On the wizard interface, click **Setting** of **Server NIC** to enter the interface as shown in Figure 3-12.

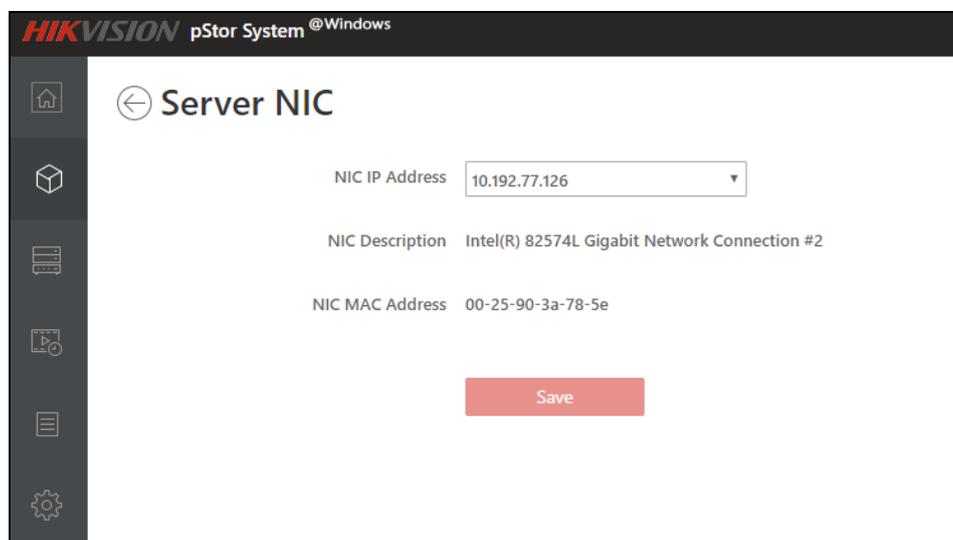


Figure 3-12 Server NIC Configuration

Step 2 Set server NIC. Refer to *Chapter 3.8.6* for details.

Step 3 Click  to return to wizard interface.

### 3.4.2 Add Storage Space

Step 1 On the wizard interface, click **Add Storage Space** of **Storage Space** to enter the interface as shown in Figure 3-13.

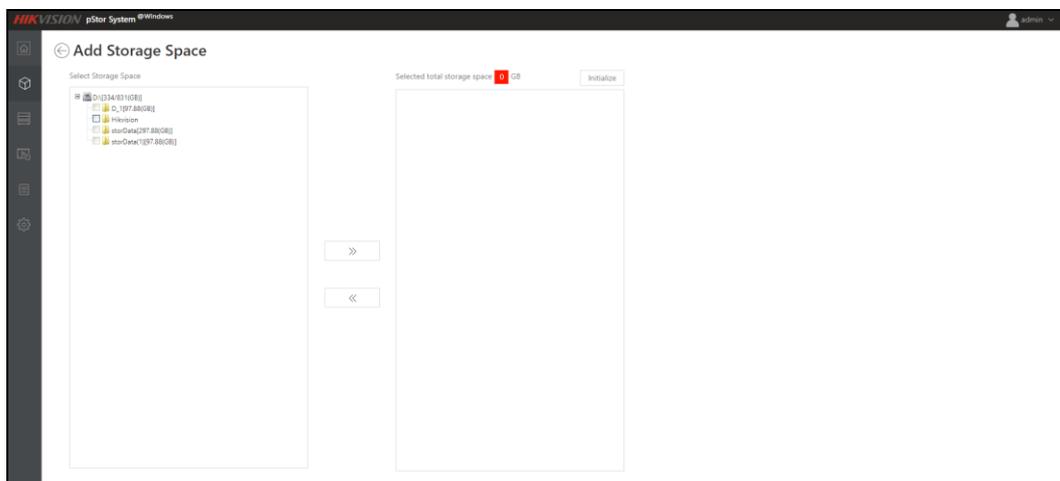


Figure 3-13 Add Storage Space

Step 2 Add storage space. Refer to *Chapter 3.5.1* for details.

Step 3 Click  to return to wizard interface.

### 3.4.3 Add Resource Pool

Step 1 On the wizard interface, click **Add Resource Pool** of **Resource Pool** to enter the interface as shown in Figure 3-14.

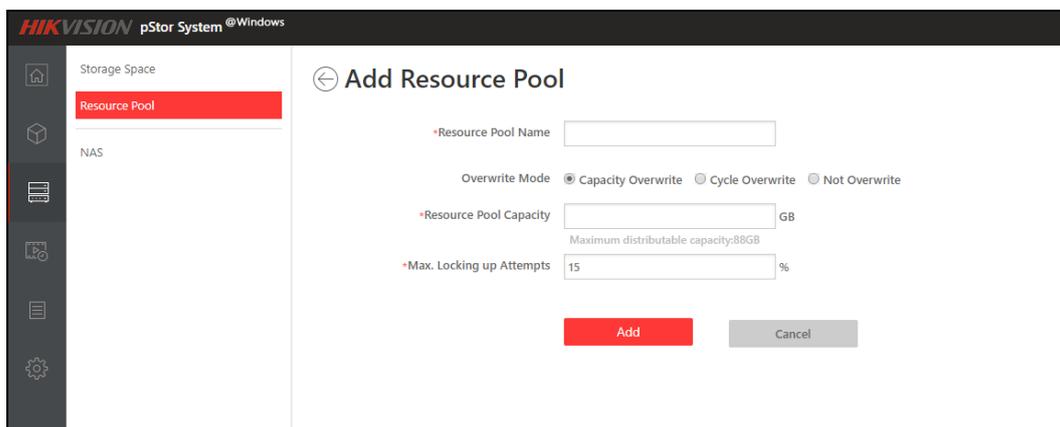


Figure 3-14 Add Resource Pool

Step 2 Add resource pool. Refer to *Chapter 3.5.2* for details.

Step 3 Click  to return to wizard interface.

## 3.5 Storage Management

### 3.5.1 Storage Space

The system supports local disk, iSCSI input device and RAID (RAID equipped in Windows or hardware RAID card). The disk installed in storage device must be formatted to NTFS file system.

Storage Space mainly manages file folders in storage device, and includes information such as Saving Path, Device Type, Status, Progress, Space Usage, and Remaining/Total Space. You can add, delete, initialize, and restore storage space, as shown in Figure 3-15.

	Saving Path	Device Type	Status	Progress	Space Usage	Remaining/Total Space (GB)	Operation
1	D:\D_1	DISK	Normal	100%	61.12%	38.06 / 97.88	[Add] [Refresh] [Close]
2	D:\storData	DISK	Normal	100%	61.35%	115.13 / 297.88	[Add] [Refresh] [Close]
3	D:\storData(1)	DISK	Normal	100%	3.77%	94.19 / 97.88	[Add] [Refresh] [Close]

Figure 3-15 Storage Space

### Add Storage Space

Click **+ Add** to go to Add Storage Space page, as shown in Figure 3-16.

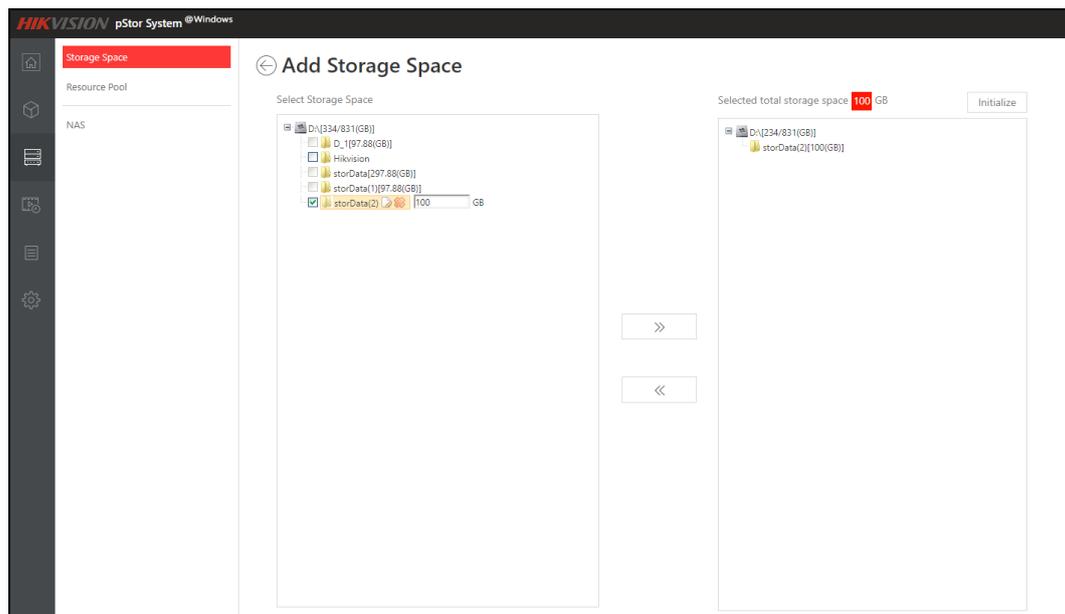


Figure 3-16 Add Storage Space

- Existed folders: When you go to Add Storage Space page, the system will read all the information of folders, except for folders in C drive (C drive is the system drive, not for data storage).
- Add folders: Go to Add Storage Space page, move to the parent folder **E:\[1755/2047(GB)]** , and click **+** to creat a new child folder **storData(1)** . The new folder will be created on the server at the same time.

- Rename folders: Move to or click the child folder, click  to rename the folder. The folder will be renamed on the server at the same time.
- Delete folders: Move to or click the child folder, click  to delete the folder. The folder will be deleted on the server at the same time.
- Select folders:  before folders means these folders can not be selected, because they have already been initialized to storage space.  before folders means the folders can be selected.
- Configure storage space (GB): When the child folder is selected, a text box such as  storData(1)   GB will appear at the end of the folder. You can configure appropriate storage space according to your need (at least 5GB).
- Move to the right: Select folders and configure their storage spaces, and then click . All the selected folders in the left and their configured storage spaces will be copied to the right.
- Move to the left: Select one or more folders with Shift key pressed and held down, and then click . All the selected folders in the right will be removed. You can also double click one folder to remove it.
- Total storage space: The system can automatically calculate the total storage space of the selected folders in the right.
- Initialize: Click  to initialize all the folders in the right at the same time. The page will jump to Storage Space when the operation finished.

## Initialize Storage Space

On the Storage Space page, choose the storage space you want to initialize, and click  in the same line, and then a confirmation message box pops up as shown in Figure 3-17.

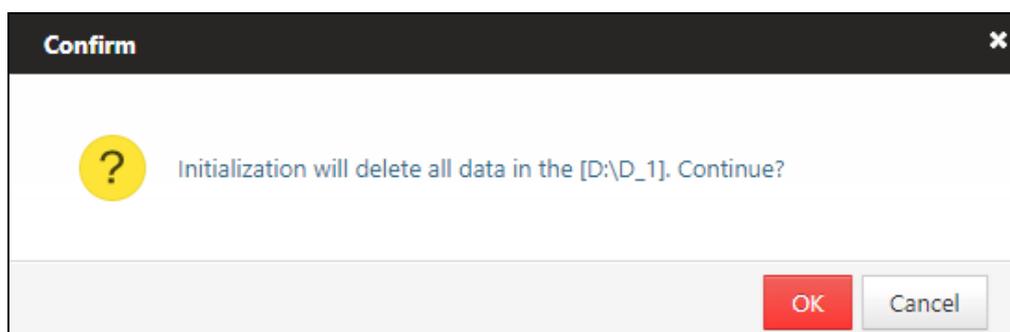


Figure 3-17 Initialize Storage Space

### WARNING

Initialization will delete all the data in the select saving path. Please be careful.

## Delete Storage Space

On the Storage Space page, choose the storage space you want to delete, and click  in the same line, and then a confirmation message box pops up as shown in Figure 3-18.

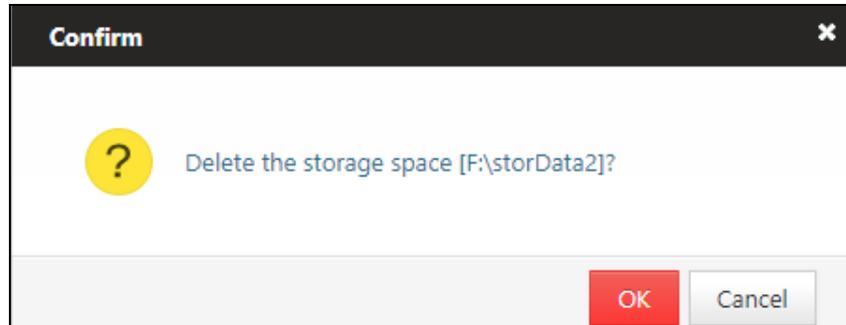


Figure 3-18 Delete Storage Space

### WARNING

As deletion is dangerous, you can only delete the storage space in Lost status.

## Restore Storage Space

After reinstalling HIKVISION pStor software, you can see the previous storage space on the Storage Space page, as shown in Figure 3-19.

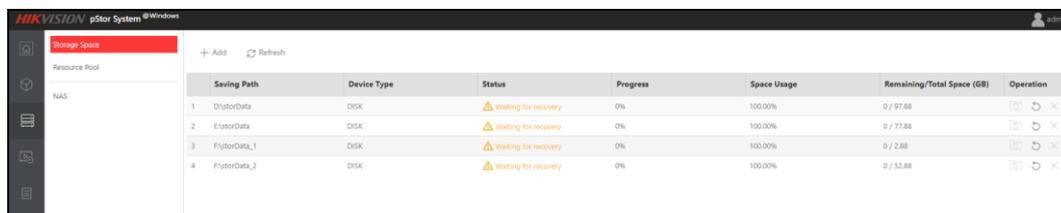


Figure 3-19 Restore Storage Space

Click  to restore the storage space (invalid in the trial version), and a confirmation message box pops up as shown in Figure 3-20.

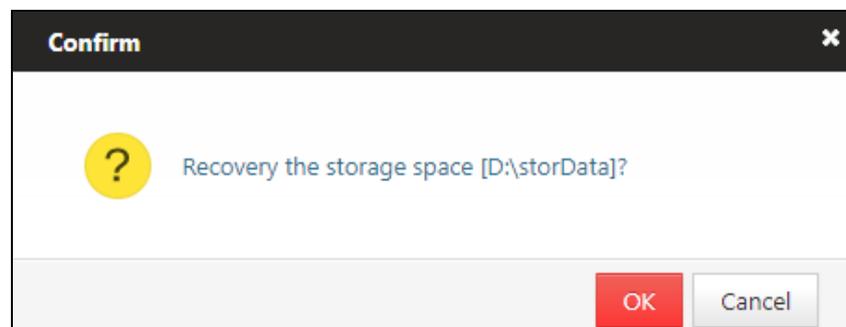


Figure 3-20 Restore Storage Space

Click **OK** and the recovery results will show in the Status column, as shown in Figure 3-21.

Saving Path	Device Type	Status	Progress	Space Usage	Remaining/Total Space (GB)	Operation
1 D:\storData	DISK	Normal	100%	2.88%	95.06 / 97.88	[Refresh] [Close]
2 E:\storData	DISK	Restoring	0%	100.00%	0 / 77.88	[Refresh] [Close]
3 F:\storData_1	DISK	Waiting for recovery	0%	100.00%	0 / 2.88	[Refresh] [Close]
4 F:\storData_2	DISK	Waiting for recovery	0%	100.00%	0 / 52.88	[Refresh] [Close]

Figure 3-21 Restore Storage Space—Restoring

The status changes from **Restoring** to **Scanning**, and you can see the progress to know how much has been done. When the status turns to **Normal**, the recovery is finished, as shown in Figure 3-22.

Saving Path	Device Type	Status	Progress	Space Usage	Remaining/Total Space (GB)	Operation
1 D:\storData	DISK	Normal	100%	2.88%	95.06 / 97.88	[Refresh] [Close]
2 E:\storData	DISK	Normal	100%	3.62%	75.06 / 77.88	[Refresh] [Close]
3 F:\storData_1	DISK	Normal	100%	11.11%	3.56 / 2.88	[Refresh] [Close]
4 F:\storData_2	DISK	Normal	100%	5.33%	50.06 / 52.88	[Refresh] [Close]

Figure 3-22 Restore Storage Space - Recovery Finished

### 3.5.2 Resource Pool

The resource pool is a basic unit of system data storage. With enough storage space, you can create up to 20 resource pools. After created, resource pool ID need to be configured on Hikvision platform. When configuring recording schedule, you need to link resource pool ID to recording pool ID, and the corresponding recording data will be saved into the configured resource pool.

Choose Storage Management → Resource Pool, and go to the resource pool management page. The resource list mainly includes: ID, Name, Overwrite Strategy, Cycle (days), Status, Max. Locking up Attempts (%), Free Space/Total Capacity (GB), Transcoding Type, Original Data Cycle(days), etc., as shown in Figure 3-23.

ID	Name	Overwrite Strategy	Cycle (days)	Status	Max. Locking up Attempts(%)	Free Space/Total Capacity (GB)	Transcoding Type	Original Data Cycle(days)	Operate
1 801395611	pool1	Capacity Overwrite	-	Normal	15	141.38/150.00	-	-	[Refresh] [Close]
2 975281105	pool2	Cycle Overwrite	30	Normal	2	93.09/53.00	Unterscoded	-	[Refresh] [Close]

Figure 3-23 Resource Pool

 **NOTE**

- You can add, delete, edit and view resource pools.
- You can create up to 20 resource pools.

When configuring recording, you need to choose resource pool ID to get linked. After configuration, you can view recording schedule in Live Stream Recording Schedule. The recording schedule contains resource pool ID information, and the recording data will be saved into the corresponding resource pool.

## Add Resource Pool

Click  **Add** to go to Add Resource Pool page, as shown in Figure 3-24.

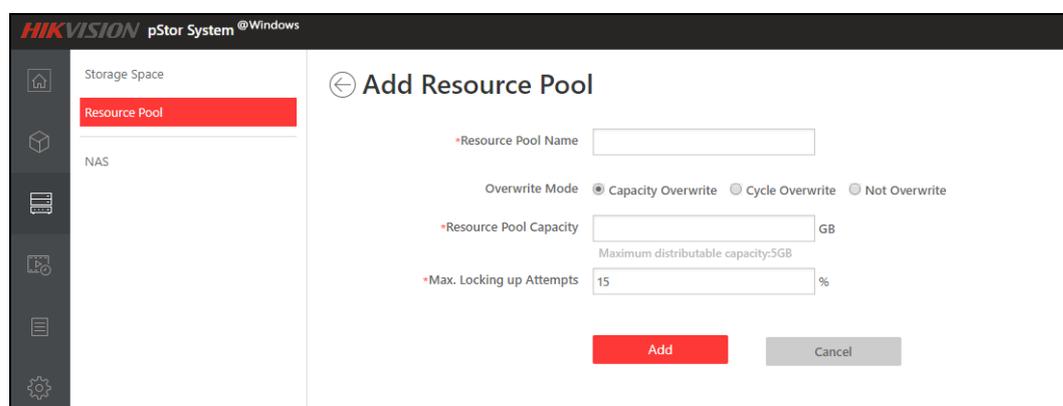


Figure 3-24 Add Resource Pool

Enter needed information, and click  **Add** to finish adding resource pool.

 **NOTE**

In order to guarantee the performance and safety for data storage, the capacity for single resource pool is recommend that Not less than 40GB.

## Edit Resource Pool

On the Resource Pool page, choose the resource pool you want to modify, and click  in the same line to go to Edit Resource Pool page, as shown in Figure 3-25.

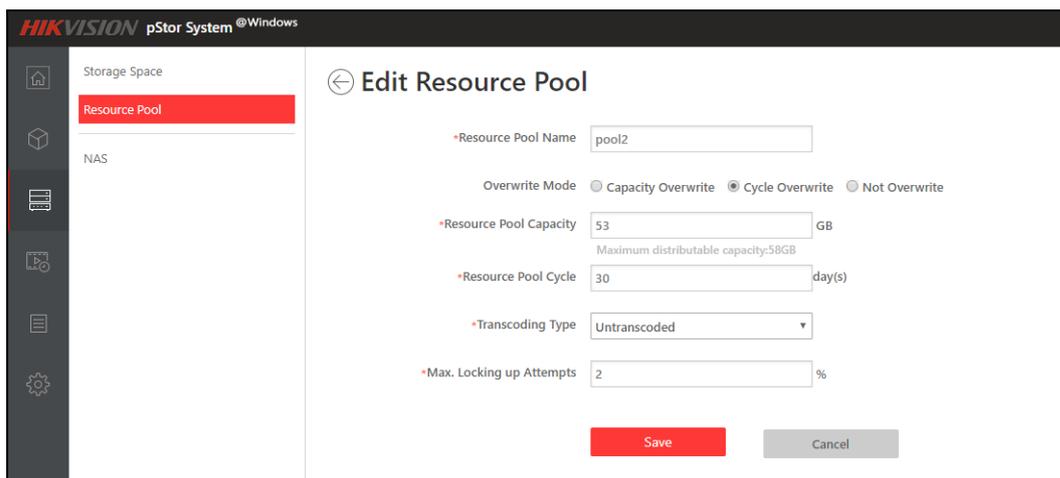


Figure 3-25 Edit Resource Pool

Enter needed information, and click **Save** to finish editing resource pool.

### Delete Resource Pool

On the Resource Pool page, choose the resource pool you want to delete, and click  in the same line, and then a confirmation message box pops up as shown in Figure 3-26.

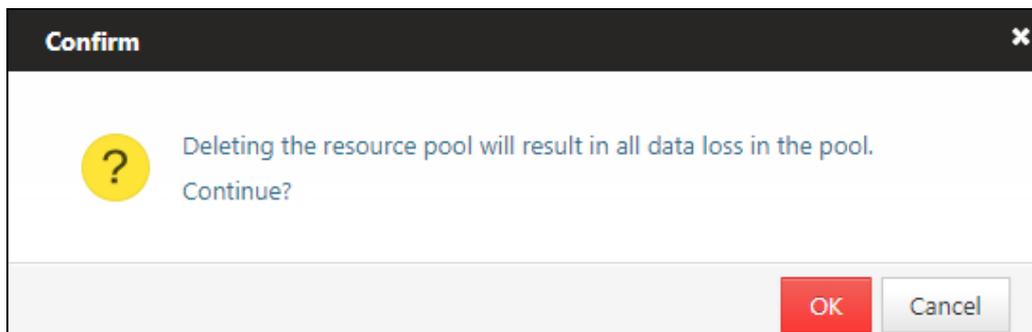


Figure 3-26 Delete Resource Pool

Click **OK** to delete the resource pool.

### View Resource Pool

On the Resource Pool page, choose the resource pool you want to view, and click corresponding ID in the same line, such as 

	ID
1	801395611

, to see details, as shown in

Figure 3-27.

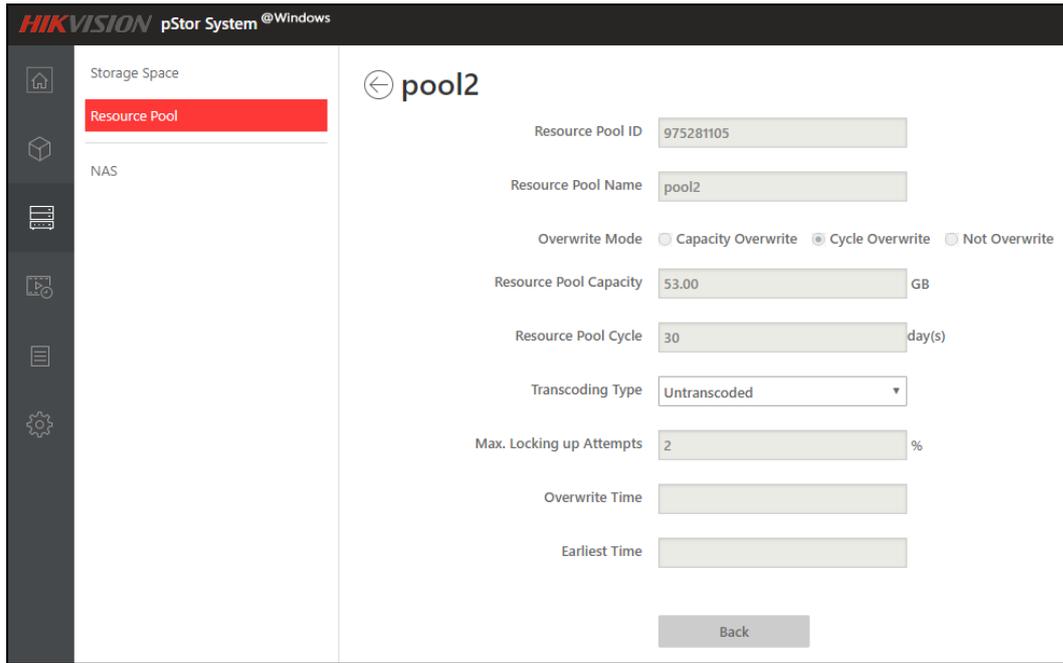


Figure 3-27 Detailed Information of Resource Pool

### 3.5.3 NAS

Network-attached storage (NAS) is a file-level computer data storage server connected to a computer network providing data access clients. The system supports to add NAS device, and after added, it can be used in Add Storage Space page.

 **NOTE**

At present, window server 2012 and window server 2016 support NAS, while window server 2016 does not. Other operation systems have not been verified.

### Add NAS

Click **+ Add** to go to Add NAS page, as shown in Figure 3-28.

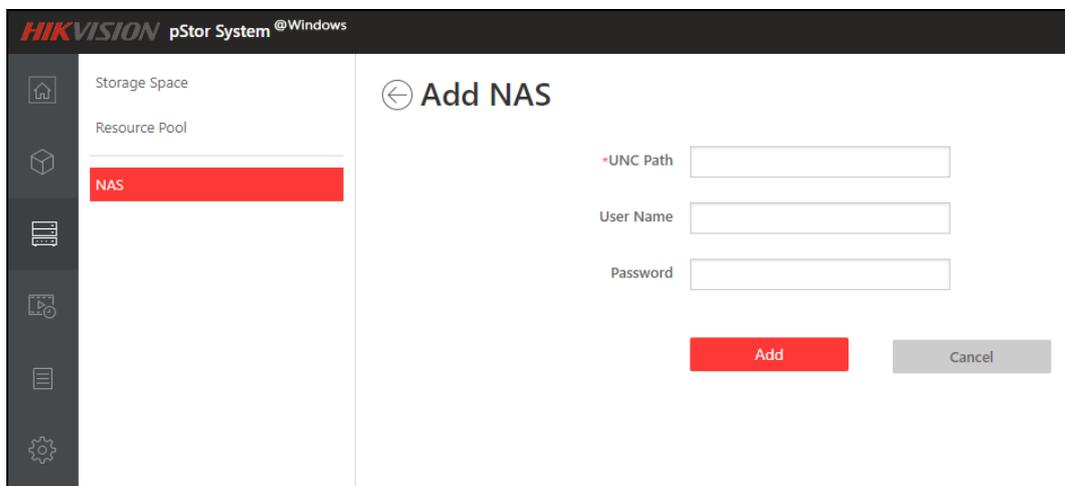


Figure 3-28 Add NAS

Enter UNC Path, User Name, Password, and then click **Add**. After addition, you can check NAS information including UNC Path, User Name, Status, Mapping Driver, etc., as shown in Figure 3-29.



Figure 3-29 NAS Information

## Delete NAS

Click **X** on NAS page, and a confirmation message box pops up as shown in Figure 3-30.

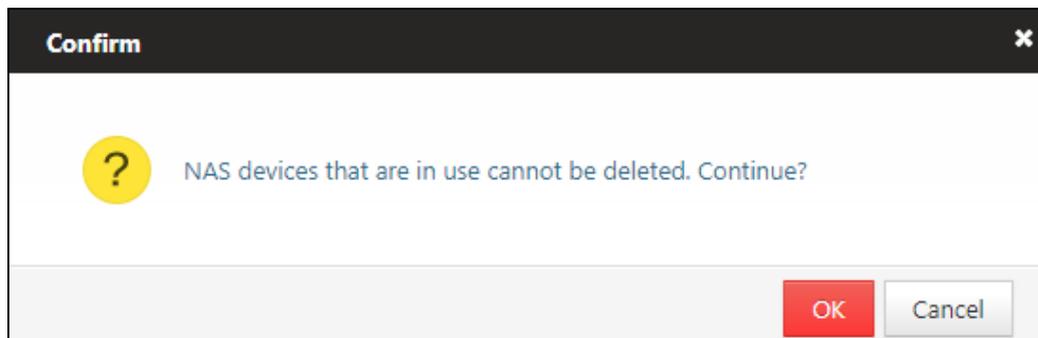


Figure 3-30 Delete NAS

## 3.6 Recording Schedule

The system supports to view recording schedules and recording status, meanwhile inspect videos, but does not support to add, edit or delete recording schedules. Recording status includes normal, streaming error, and recording error.

### 3.6.1 Live Stream Recording Schedule

Live Stream Recording Schedule mainly includes Camera ID, Camera Name, IP Address, Port No, Device Type, Channel No, Resource Pool ID, Recording, Stream, Pre-Recording Duration (s), Post-record (s), Recording Status, Arming Status.

You can search the recording schedule according to camera name or camera IP address, as shown in Figure 3-31.

Camera ID	Camera Name	IP Address	Port No	Device Type	Channel No	Resource Pool ID	Recording	Stream	Pre-Recording Duration (s)	Post-record (s)	Recording Status	
1	101926818001	101926818001	10.192.68.180	8000	HIKVISION	1	172533998	Yes	Main Stream	25	35	<span style="color: green;">✔</span> Normal
2	10192841001	10192841001	10.192.84.10	8000	HIKVISION	1	172533998	Yes	Main Stream	25	35	<span style="color: green;">✔</span> Normal

Figure 3-31 Live Stream Recording Schedule

## View Recording Schedule

Click  to view recording schedule, as shown in Figure 3-32.

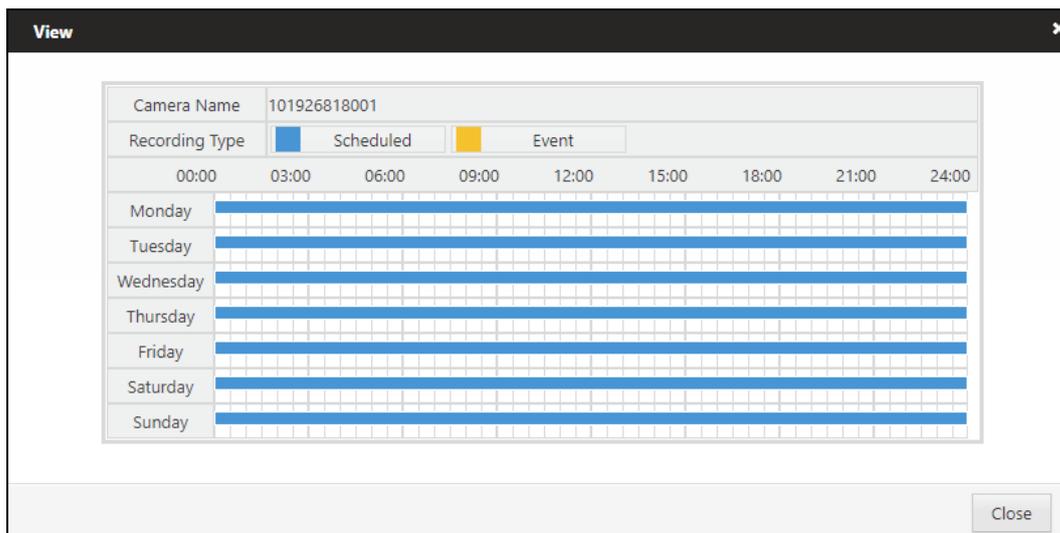


Figure 3-32 View Recording Schedule

## 3.6.2 Historical Stream Recording Schedule

Historical Stream Recording Schedule mainly includes Camera ID, Camera Name, IP Address, Port No, Device Type, Channel No, Post-record Start Date, Resource Pool ID, Connection Status, Video Type, Upload Speed (KB/s), Stream Type.

You can search the recording schedule according to camera name or camera IP address, as shown in Figure 3-33.

Camera ID	Camera Name	IP Address	Port No	Device Type	Channel No	Post-record Start Date	Resource Pool ID	Connection Status	Video Type	Upload Speed (KB/s)	Stream Type
1	101926818001	101926818001	10.192.68.180	8000	HIKVISION	20180710	172533998	Connected	Scheduled	5120	Main Stream
2	1019271610101	1019271610101	10.192.71.61	8000	HIKVISION	20180712	172533998	Connected	Scheduled	512	Main Stream
3	10192841001	10192841001	10.192.84.10	8000	HIKVISION	20180712	172533998	Connected	Scheduled	512	Main Stream

Figure 3-33 Historical Stream Recording Schedule

## View Recording Time

Click  to view recording time, as shown in Figure 3-34.

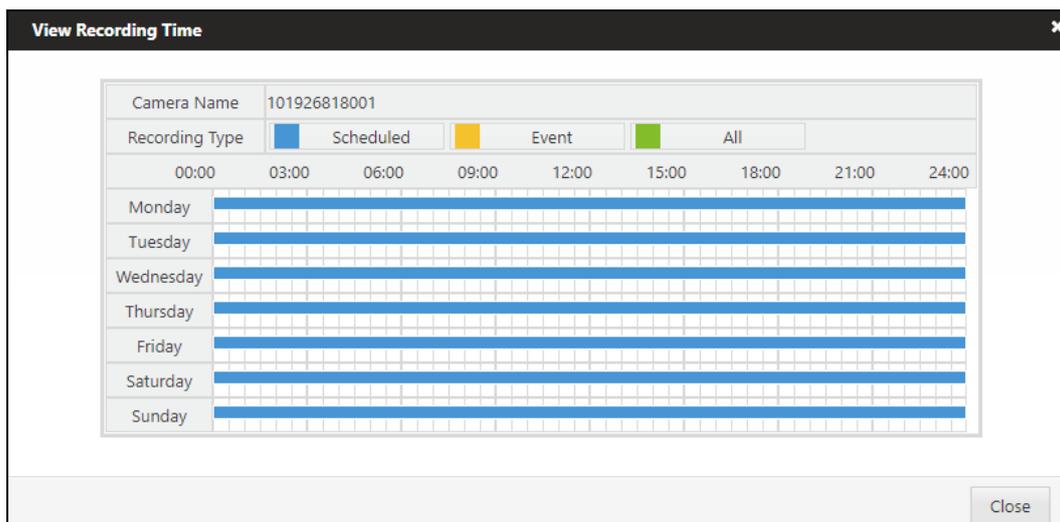


Figure 3-34 View Recording Time

### View Execution Time

Click  to view execution time, as shown in Figure 3-35.

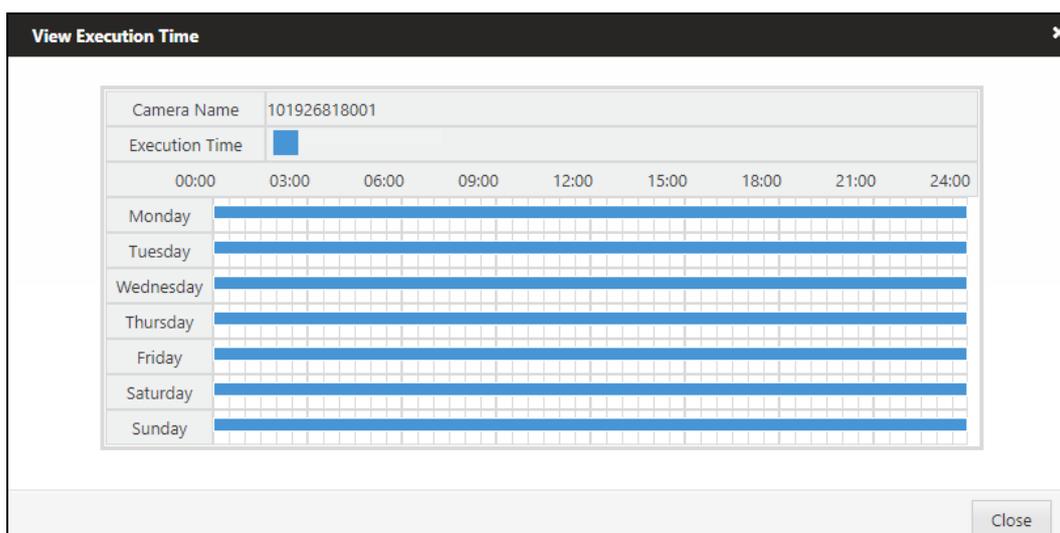


Figure 3-35 View Execution Time

### 3.6.3 Video Inspection

For live stream recording schedule, you can use video inspection to analyze all the recording data in schedule.

#### Check Videos by Day

Choose the date you want to check in **Time:** , and then click **Search**. You can check camera ID\name\IP, channel No, exception hour(s) and recording status of the whole day, as shown in Figure 3-36.

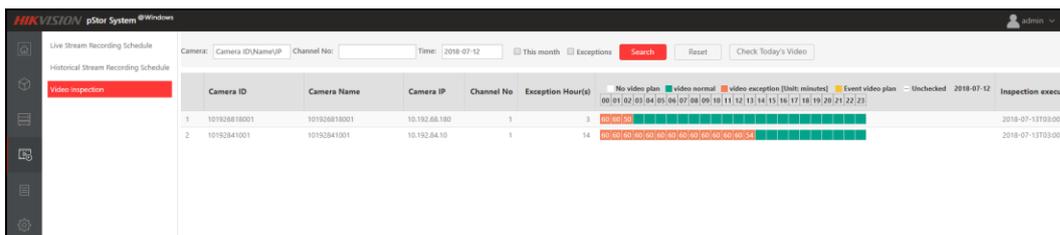


Figure 3-36 Check Videos by Day

You can filter the videos by camera ID\name\IP or channel No to check what you want to view.

Click the red block, such as **50**, to check the recording status in this one hour, as shown in Figure 3-37.

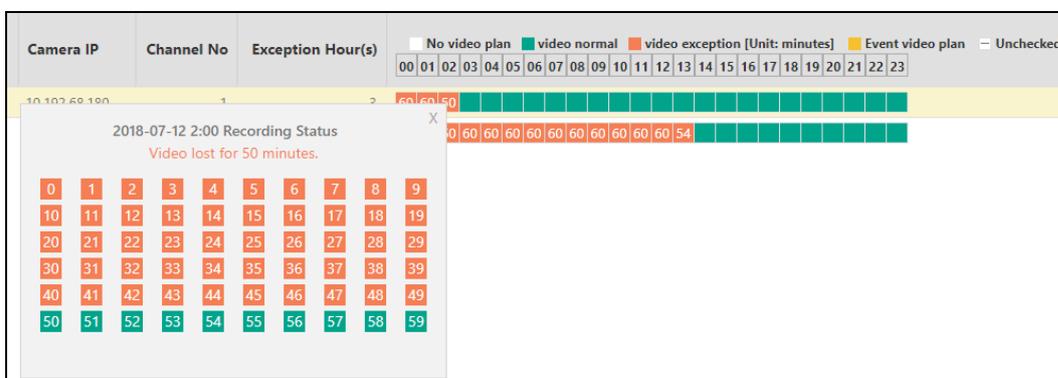


Figure 3-37 Detailed Information of Video Exception

## NOTE

You cannot inspect today's video and only the videos of the day before today can be inspected.

## Check Videos by Month

Select **This month**, and click **Search** to check recording status by month. You can check Camera ID\Name\IP, Channel No, Exception Hour(s), and Recording Status, as shown in Figure 3-38.

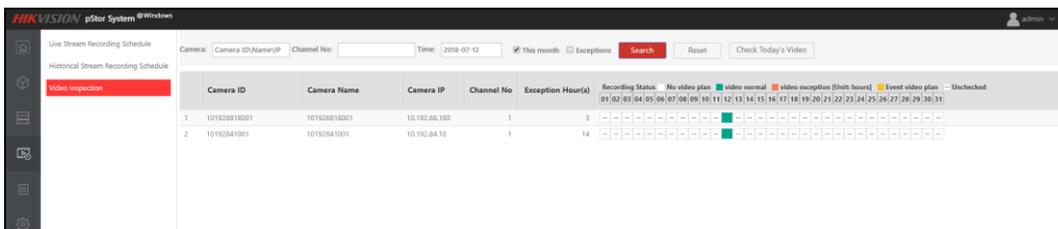


Figure 3-38 Check Videos by Month

Click **2** or to check the recording status in this one hour, as shown in Figure 3-39.

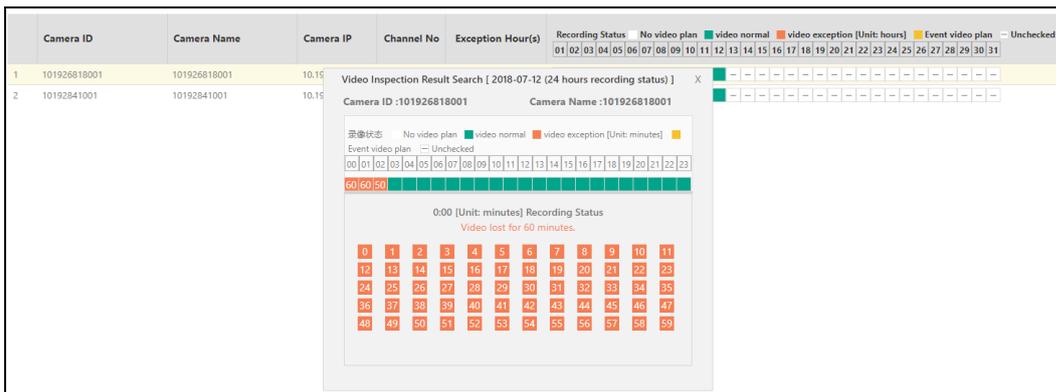


Figure 3-39 Detailed Information of Video Inspection

## Check Today's Video

Click [Check Today's Video](#) at the top right corner to check today's video, as shown in Figure 3-40.

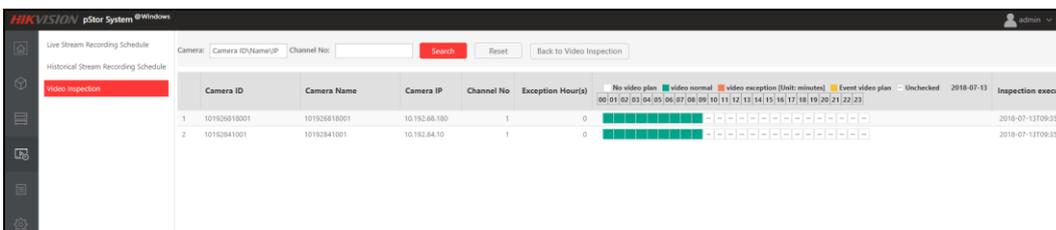


Figure 3-40 Check Today's Video

You can filter the videos by camera ID\name\IP or channel No to check what you want to view. Click [\[Filter\]](#) to check the recording status in this one hour, as shown in Figure 3-41.

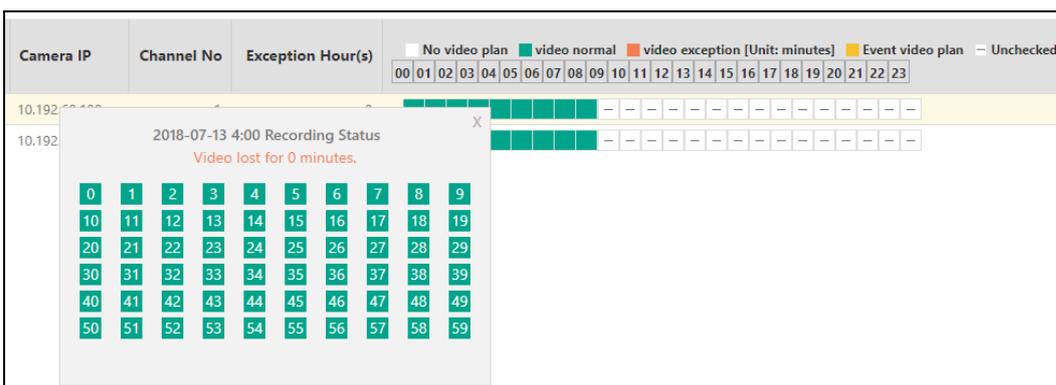


Figure 3-41 Detailed Information of Video Inspection

## 3.7 Log

### 3.7.1 Display Log

Log displays IP, time, level, content, etc.

Select the number of log displayed per page in the lower left corner, as shown in Figure 3-42.

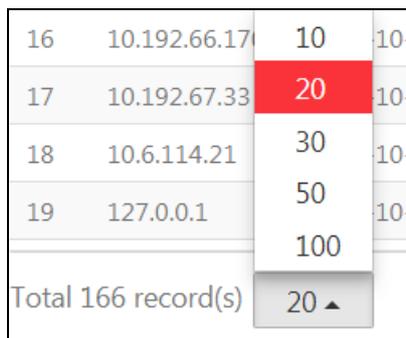


Figure 3-42 Log

In the lower right corner, it displays the current page and total page number.

Click < or > to switch to the previous or next page.

Click << or >> you can jump to the first or last page.

Enter number in  2 / 290, click GO to the specific page, as shown in Figure 3-43.

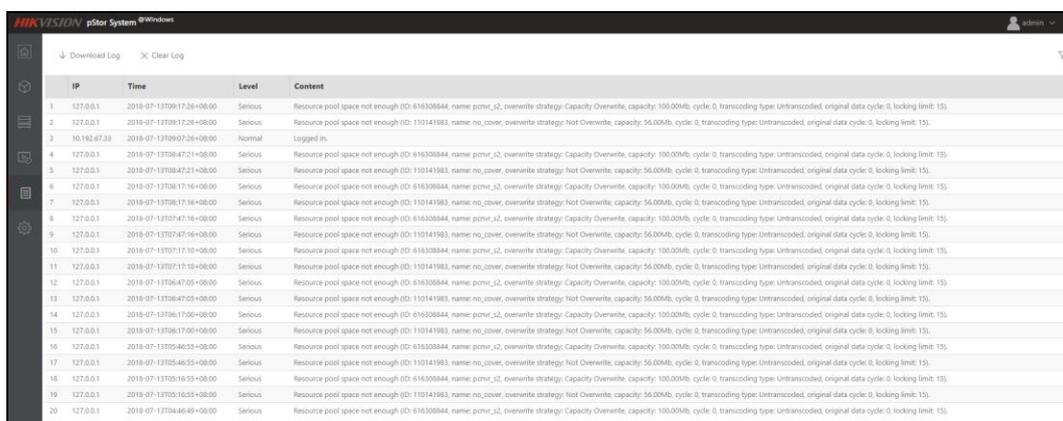


Figure 3-43 Log

## 3.7.2 Download Log

Click in the upper left to download log to local.



Up to 1 million log entries can be downloaded.

## 3.7.3 Clear Log

Step 1 Click in the upper left.

Step 2 Click **OK** to confirm the operation, as shown in Figure 3-44.

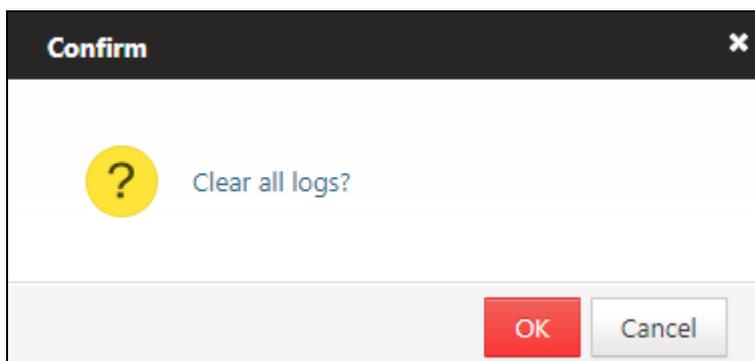


Figure 3-44 Clear Log

### 3.7.4 Search Log

Click  in the upper right, and search log according to type, time, level, IP or content, as shown in Figure 3-45.



Figure 3-45 Search Log

## 3.8 System Management

### 3.8.1 Configure NTP

Set the time sever for linked storage service system.

Step 1 Click  > **NTP Settings** to enter the NTP settings interface as shown in Figure 3-46.

Time sync is OFF by default.

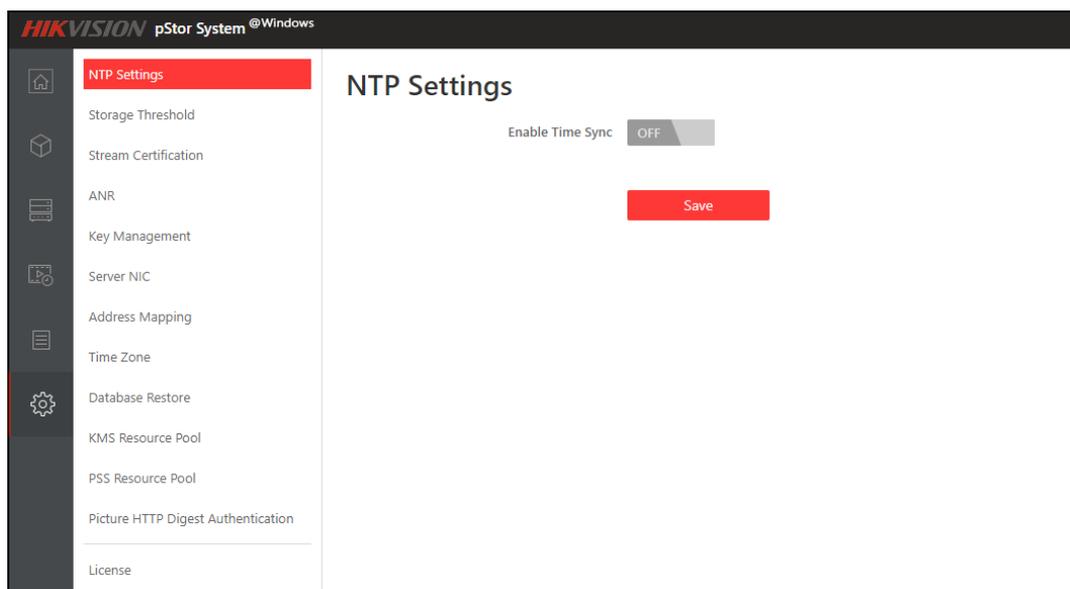


Figure 3-46 Time Sync Switch

Step 2 Click  to turn on time sync function, as shown in Figure 3-47.

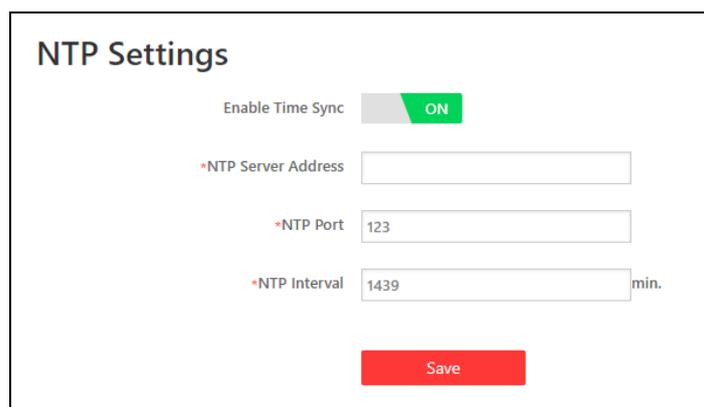


Figure 3-47 NTP Settings

Step 3 Enter the parameters accordingly, and click **Save**.

 **NOTE**

The default NTP port is 123; the default NTP interval is 1439.

The storage access service management system will make the first correction, and the result can be viewed through the home page. The storage access service management system will regularly update the time according to the set interval.

### 3.8.2 Storage Threshold

Step 1 Click  > **Storage Threshold** to enter the storage threshold settings interface to set the threshold value for the storage access service, as shown in Figure 3-48.

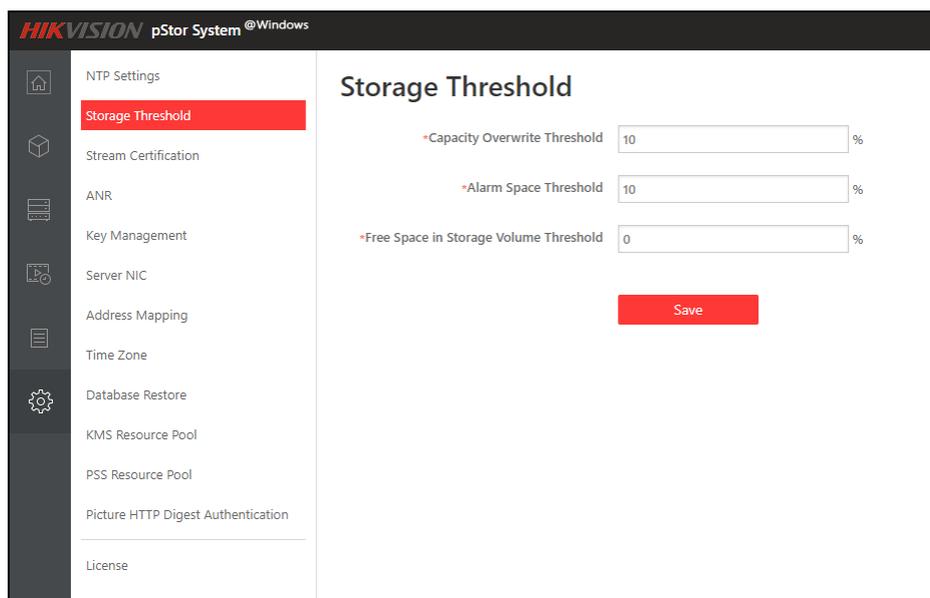


Figure 3-48 Storage Threshold Settings

Step 2 Enter the value accordingly and click **Save**.

### NOTE

- The default capacity overwrite threshold is 10%;
- The default alarm space threshold is 10%;
- The default free space in storage volume threshold is 0%.

## 3.8.3 Configure Stream Certification

Step 1 Click  > **Stream Certification** to enter the stream certification settings interface as shown in Figure 3-49.

Step 2 Click  to enable the function.

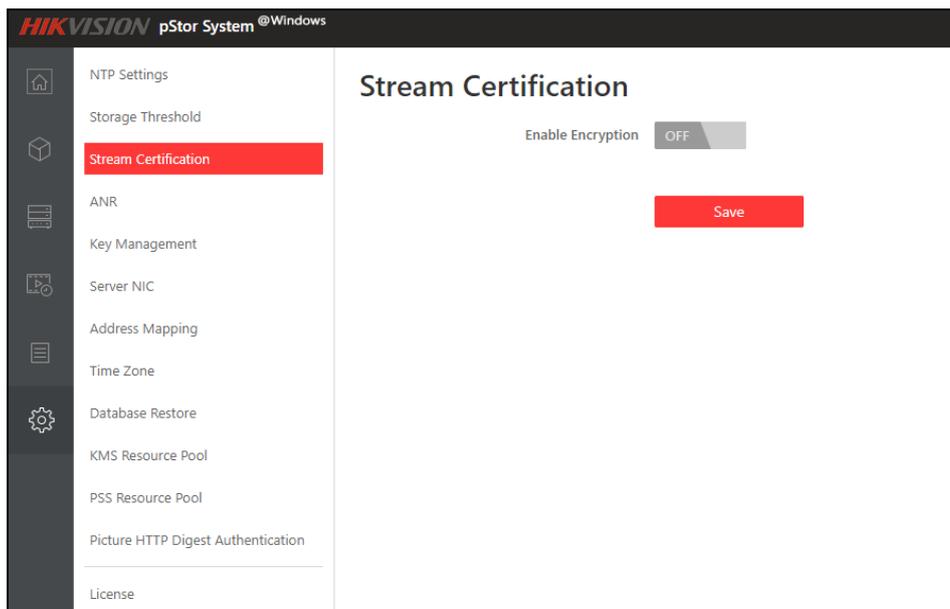


Figure 3-49 Enable Stream Certification

Step 3 Enter the parameter value accordingly, and click **Save**, as shown in Figure 3-50.

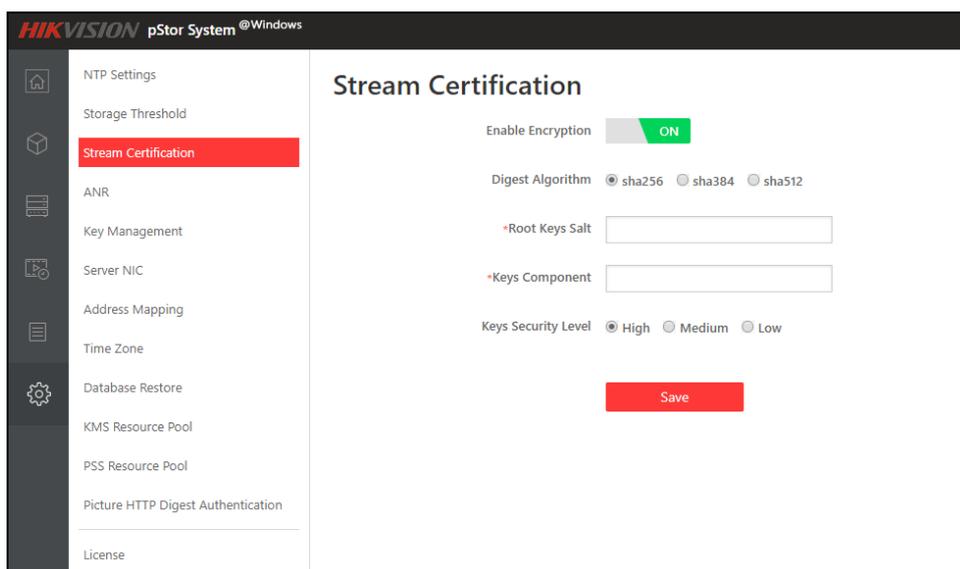


Figure 3-50 Stream Certification Settings

### 3.8.4 Configure ANR

Step 1 Click  > **ANR** to enter the ANR settings interface as shown in Figure 3-51.

Step 2 Click  to enable the function.

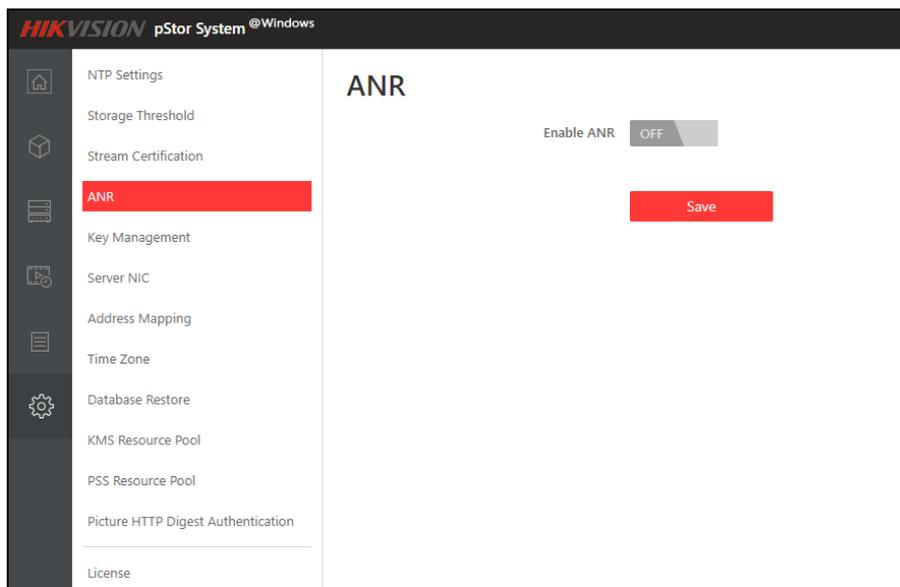


Figure 3-51 ANR Settings

Once configured, the storage access service takes the real-time flow from the camera for storage. When streaming is interrupted, the storage access service generates the recording task for the interrupted time period to make up the missing video data from the camera.

## 3.8.5 Manage Key

The system provides access key and encryption key, which are mainly used in Restful image storage protocols.

- Step 1 Click  > **Key Management** to enter the key management settings interface as shown in Figure 3-52.

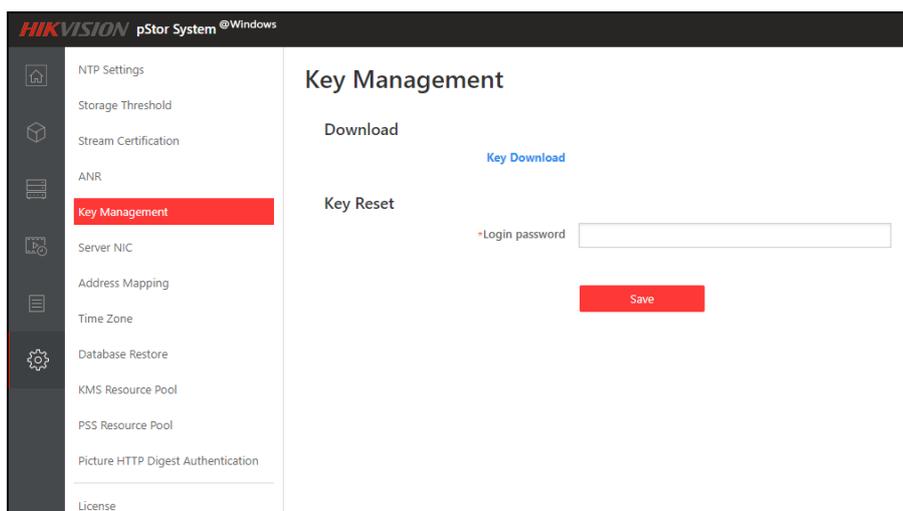


Figure 3-52 Key Management Settings

- Step 2 Click [Key Download](#) to download and save the key files.

(Optional) Enter login password to reset the password, click **Save**.

### 3.8.6 Configure Sever NIC

NIC settings is mainly applied in multi-network cards storage server environment.

Click  > **Server NIC** to enter the server NIC settings interface as shown in Figure 3-53.

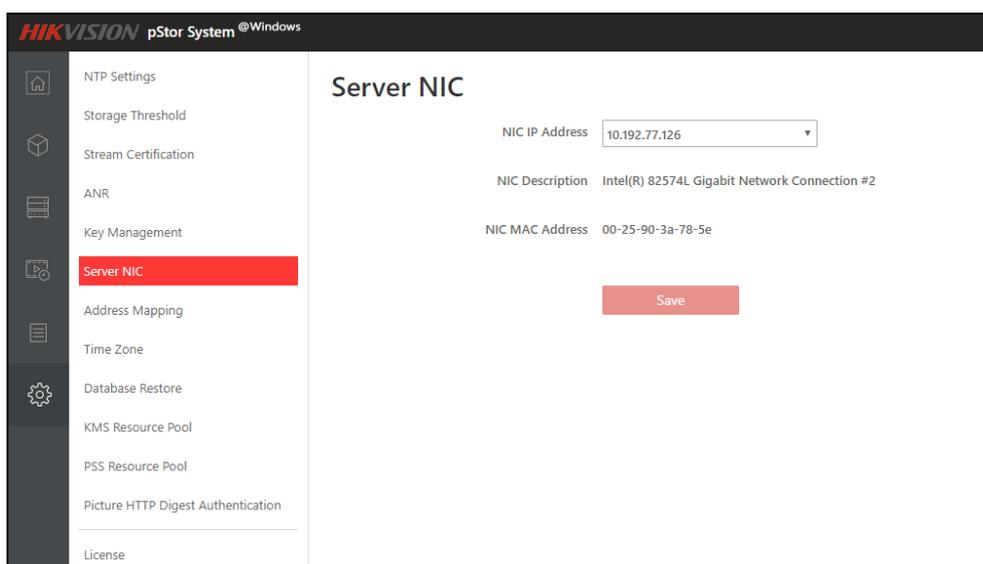


Figure 3-53 Server NIC Settings

When there are multiple network cards available, m and the storage access service will default the first network card as the current setting network card. If you need modify the NIC Settings, select a network card from the drop down box.

Click **Save**, and the page will prompt "The NIC has been changed. Restart the computer to take effect.", and restart the server.

#### NOTE

If the NIC IP is not modified, you can't click **Save**.

### 3.8.7 Configure Address Mapping

Address mapping function is mainly applied in multi-domain scenario, that is, pStor system and platform are in different network environments.

Address mapping includes address mapping information and client authorization IP segment configuration.

Step 1 Click  > **Address Mapping** to enter the address mapping settings interface.

Step 2 Click  to enable the function. Enter the LAN IP Address, WAN IP Address and external network port and click Add to pop up the client authorization IP segment window, as shown in Figure 3-54.

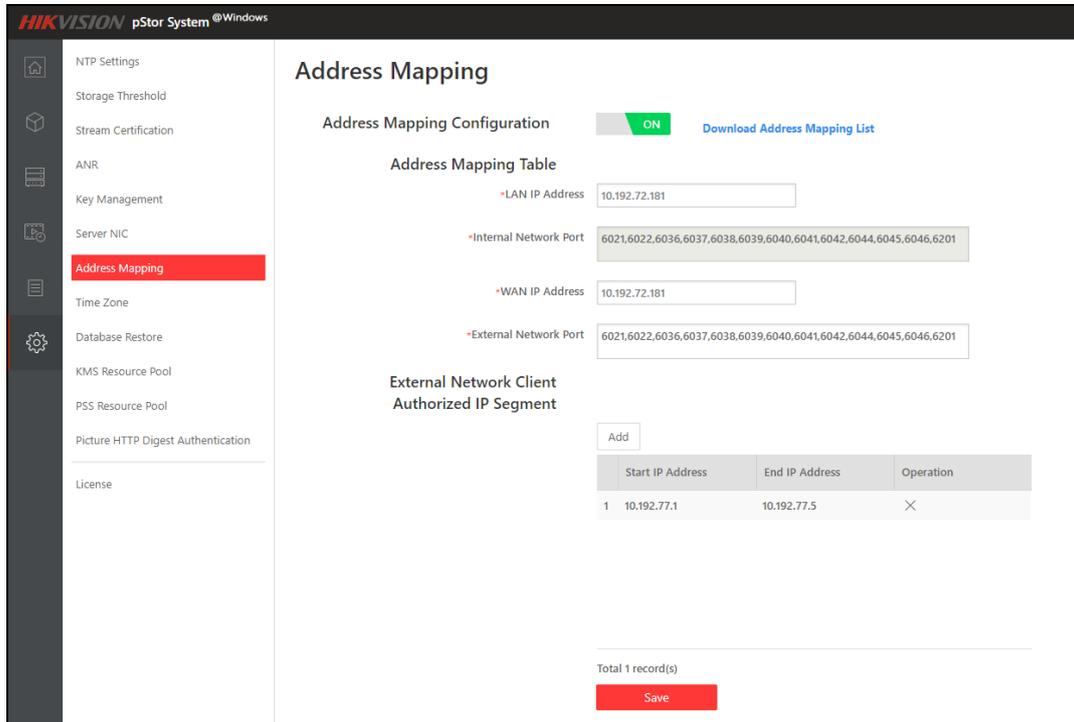


Figure 3-54 Address Mapping (Enabled)

Step 3 Enter the start and end IP address, and click **Save**, as shown in Figure 3-55.

Start IP and End IP should belong to the same IP segment.

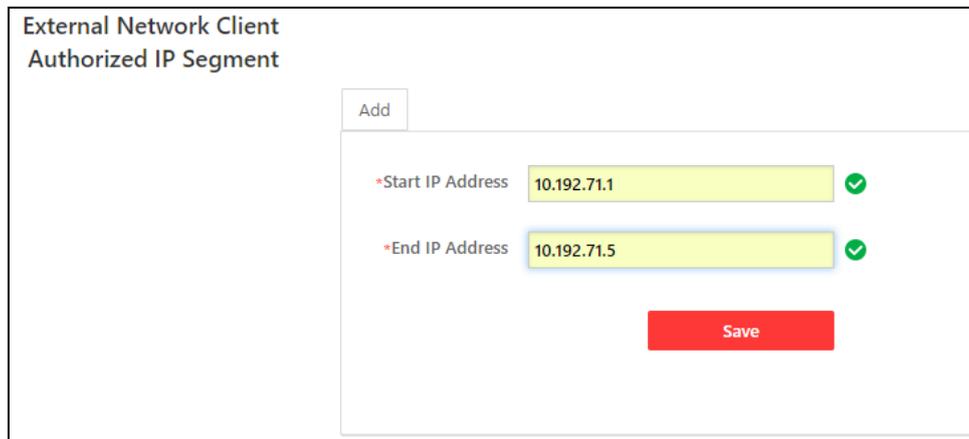


Figure 3-55 IP Segment Interface

Step 4 Click [Download Address Mapping List](#) to download the address mapping table. The content shows as Figure 3-56.

```

10.192.66.103:6021-10.192.67.98:6021
10.192.66.103:6022-10.192.67.98:6022
10.192.66.103:6029-10.192.67.98:6029
10.192.66.103:6036-10.192.67.98:6036
10.192.66.103:6037-10.192.67.98:6037
10.192.66.103:6040-10.192.67.98:6040
10.192.66.103:6046-10.192.67.98:6046
10.192.66.103:6038-10.192.67.98:6038
10.192.66.103:6039-10.192.67.98:6039
10.192.66.103:6042-10.192.67.98:6042
10.192.66.103:6044-10.192.67.98:6044
10.192.66.103:6045-10.192.67.98:6045
    
```

Figure 3-56 IP Mapping Content

### 3.8.8 Configure Time Zone

Step 1 Click  > **Time Zone** to enter the time zone settings interface as shown in Figure 3-57.

Step 2 Click  to enable the function.

Step 3 Select time zone, saving time period, and time offset accordingly.

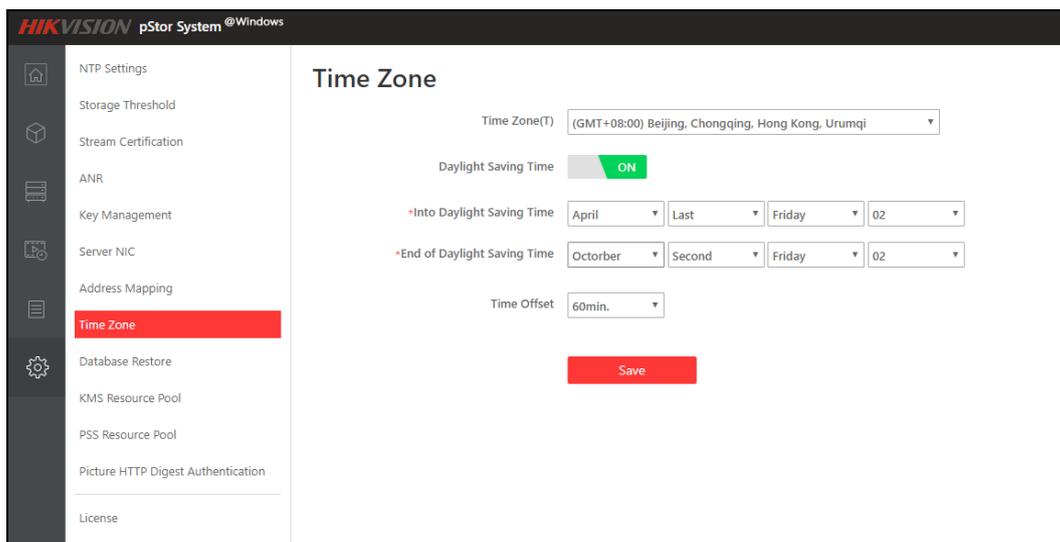


Figure 3-57 Time Zone Settings

Step 4 Click **Save**.

### 3.8.9 Restore Database

System supports database automatic backup. System will backups important data information automatically and regularly. When the system encounters an unrecoverable failure, the original system can be restored by reinstalling the system and by restoring the backup database. Due to the delay of database backup, the

backup data may have some error.

Step 1 Click  > **Restore Database** to enter the restore database interface.

Step 2 Click **Restore** to start restoring the database, and the message box pops up as shown in Figure 3-58.

Users should be careful when performing database restoration to avoid data loss.

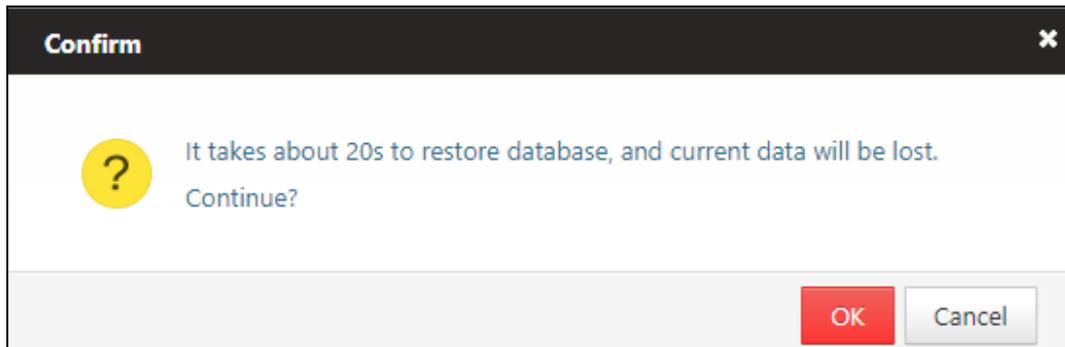


Figure 3-58 Confirm to Restore the Database

Step 3 Click **OK** to continue.

After the system runs for a period of time, if the user reloads the system, a prompt box will pop up when the user enters the web page for the first time. It indicates whether to restore the database to the state of saved by the system before reloading, as shown in Figure 3-59.

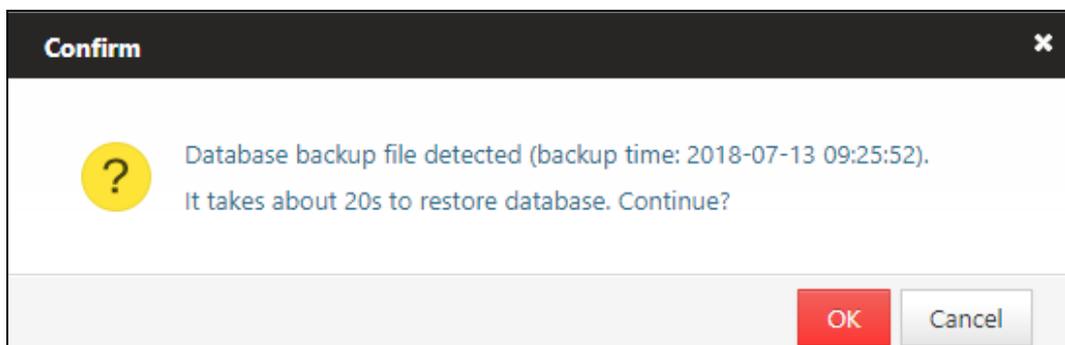


Figure 3-59 Restore the Database Prompt Window

### 3.8.10 Configure Picture http Digest Authentication

Step 1 Click  > **Picture http Digest Authentication** to enter the settings interface as shown in Figure 3-62.

Step 2 Click the switch to enable/disable the function, click **Save**.

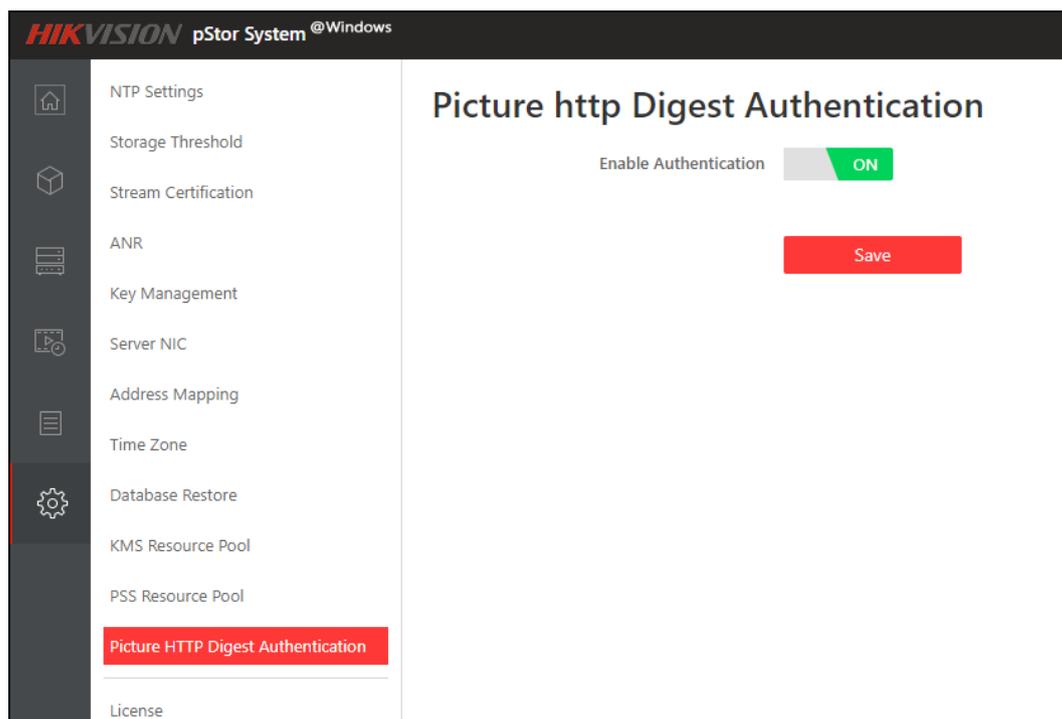


Figure 3-60 Picture http Digest Authentication Settings

 **NOTE**

Picture http Digest Authentication is enabled by default. It needs authentication when downloading picture via Restful. If you turned off the function, no authentication is needed when downloading picture via Restful. You can check the picture via web browser.

### 3.8.11 Configure License

You can check the system authorization information and import authorization files through the license interface.

For non-authorized users, the system can be used for 1 month by default and supports up to 10 channels of video recording. When exceeding 1 month, please contact us to obtain authorization documents.

Click  > **License** to enter the license settings interface as shown in Figure 3-63. You can check the license related information.

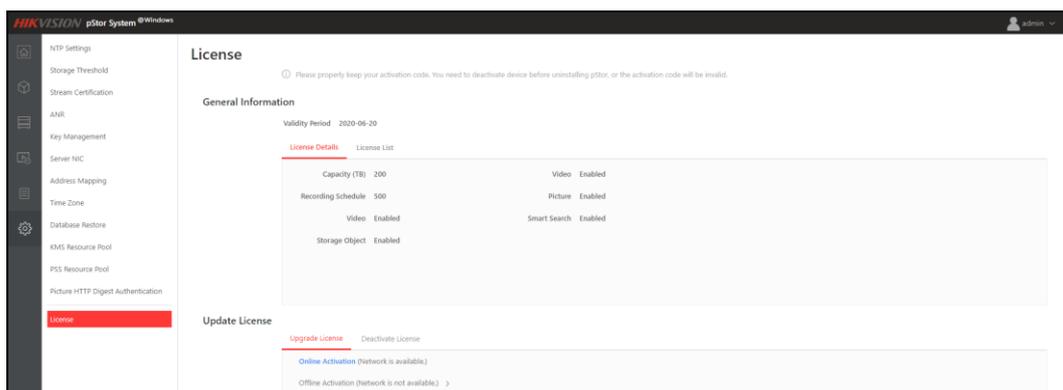


Figure 3-61 License Settings

To update the license, do as below:

Step 1 Click [Export License Request File](#), and submit the exported license application documents to relevant personnel for obtaining new license documents.

Step 2 Click , select the license file in the pop-up window, and click .



See Far, Go Further