IPSAN Series
Network Storage System
Quick Guide

V2.07

Contents

1 Introduction

IPSAN Series storage hosts include nine types of products: single controller with 12 disk slots, single control with 16 disk slots, single control with 24 disk slots, single control with 36 disk slots, single control with 48 disk slots, single control with 60 disk slots, dual control with 24 disk slots, dual control with 48 disk slots, and dual control with 60 disk slots.

The storage product supports six types of DEUs: single control DEUs with 24 disk slots, single control DEUs with 48 disk slots, single control DEUs with 60 disk slots, dual control DEUs with 24 disk slots, dual control DEUs with 48 disk slots, and dual control DEUs with 60 disk slots.

For details about the supported DEUs, see the table below.

Table 1-1 Different products support different DEUs

SCU disk slots	DEU disk slots
12 disk slots(single control)	24 disk slots(single control)
16 disk slots(single control)	
24 disk slots(single control)	
36 disk slots(single control)	
48 disk slots(single control)	24 disk slots and 48 disk slots(both single control)
60 disk slots(single control)	60 disk slots(single control)
24 disk slots(dual control)	24 disk slots(dual control)
48 disk slots(dual control)	48 disk slots(dual control)
60 disk slots(dual control)	60 disk slots(dual control)

NOTE!

- This manual takes the single control with 24 disk slots for example. For more details, see the Online Help which is released with the software. Method to check the Online Help: click Help button on the GUI.
- The following illustrations are only for your reference. The actual product and the latest version shall prevail in the actual situation.

2 Hardware Installation

2.1 Tool Reference

2.2 Environment Requirements

Temperature	Requirement
Operating temperature	0°C~40°C Recommended: 10°C~35°C
Storage temperature	Excluding battery modules: –20°C~+60°C Including battery modules: –15°C~+40°C (storage within 1 month) 10°C~35°C (storage over 1 month)
Humidity	**Requirement**
Operating humidity	20% to 80% (non-condensing)
Storage humidity	10% to 90% (non-condensing)

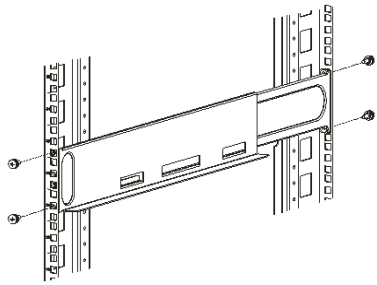
NOTE!

Corrosive gases and dust can cause damage to hard disks. For detailed requirements about the equipment room environment, please refer to Checking the Installation Environments section in Online Help shipped with the product.

2.3 Installation Steps

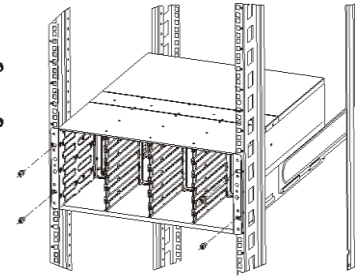
1. [Installing the guide rail on the cabinet](Optional)

   Place the guide rail between the front and rear mounting holes of the cabinet, align the screw holes with holes on the cabinet, and tighten the thumb screws.



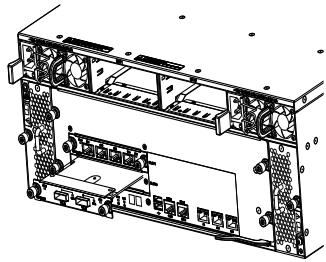
2. [Installing the chassis on the guide rail]

   Slowly push the main cabinet along the guide rail until the suspension loop is onto the front mounting hole, and use screws to secure the suspension loop to the front mounting bar.



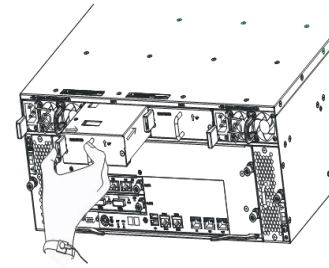
3. [Installing the expansion module]

   Face silkscreen of the expansion board forward, hold the middle of the expansion board, slowly insert the expansion board, and tighten the captive screws.



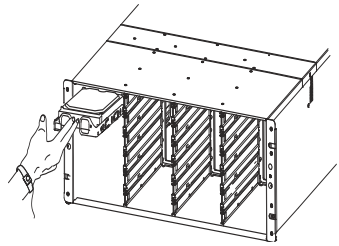
4. [Installing the battery module]

   Determine the direction of the battery case, insert the battery case slowly along the guide rail, until the lock spring piece is buckled.



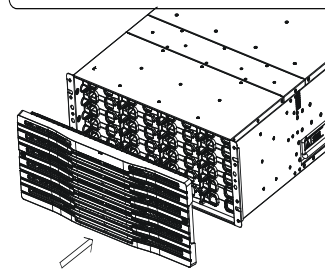
5. [Installing a disk]

   Hold the middle of the disk, but do not hold the handle bar. Slowly push the disk into the slot, until a clatter sound is heard, indicating that the disk is installed in position.



6. [Installing the front panels]

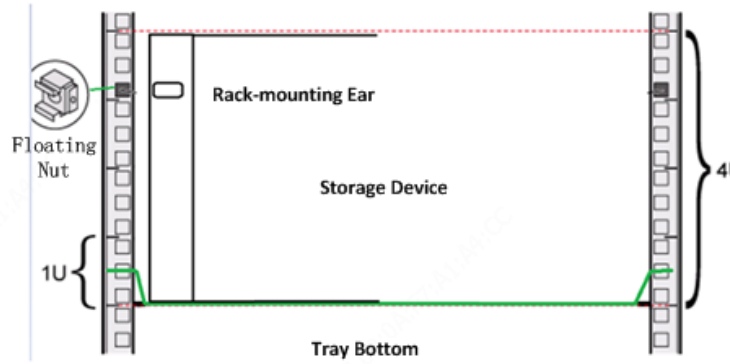
   Install the front panels of the storage controller and DEU, as shown in the following figure (DEU is used as an example).



CAUTION!

- When installing a device, ensure that the device and the mark line on the square hole strip on the cabinet are properly aligned in 1U. Otherwise, you are not allowed to install the rack-mounting ear screws.

Figure 2-1 Correct installation



- Besides, the depth of the equipment cabinet is generally greater than 0.8m, and it shall be selected according to different equipment.

WARNING!

- If the rack-mounting ear screws are forcibly installed without the aligning procedure, a gap exists between the device and the tray and the device is hanging over the square hole strip. Consequently, the device is unstable, thereby affecting stability of the hard disks. If the hard disks are running for a long time in such situation, many problems, such as a high read-and-write error rate and a high damage rate, will arise.
- Incorrect installation manner:

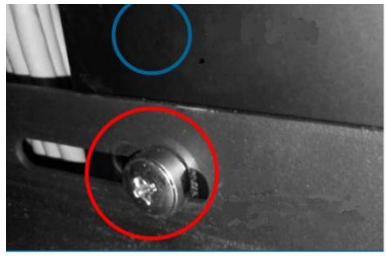


Figure 1

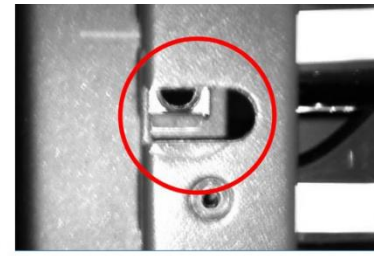


Figure 2

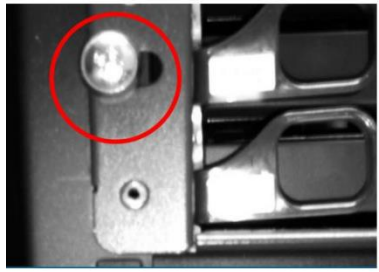


Figure 3

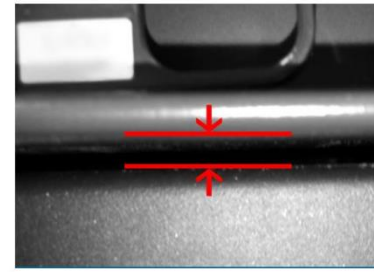


Figure 4

Figure 1: The tray is installed half-U downward.

Figure 2: The rack-mounting ear is not aligned properly.

Figure 3: The device is not aligned in one U and is hanging over the rack-mounting ear after the screws are installed.

Figure 4: A gap exists between the device and the tray.

2.4 Connect Cables And Perform Verification

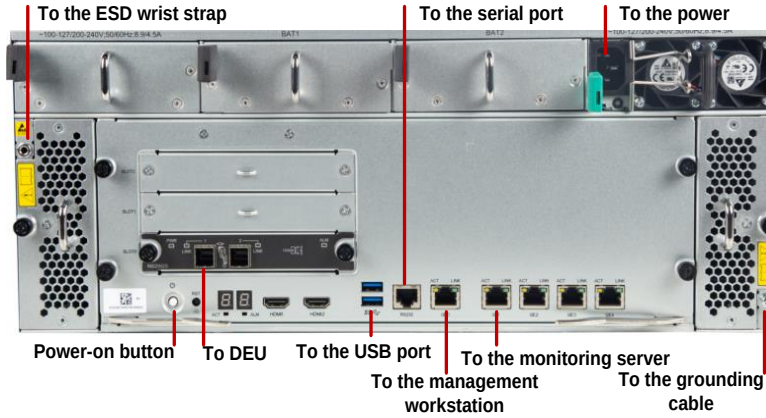
1 Cable Connection

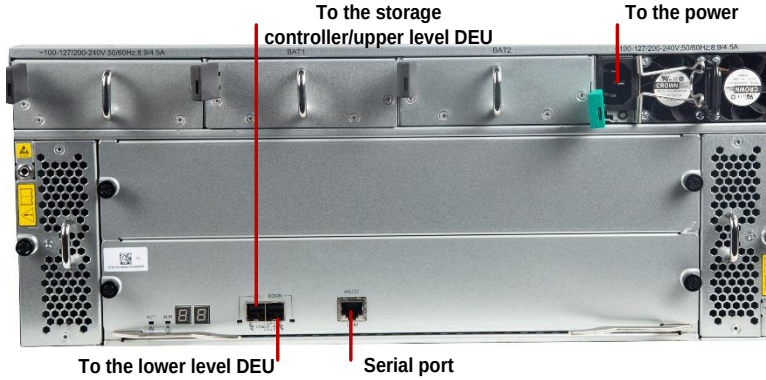
(1) Connect cables for the storage controller and DEU, as shown in the following figure.

(2) Power on the storage controller and DEU.

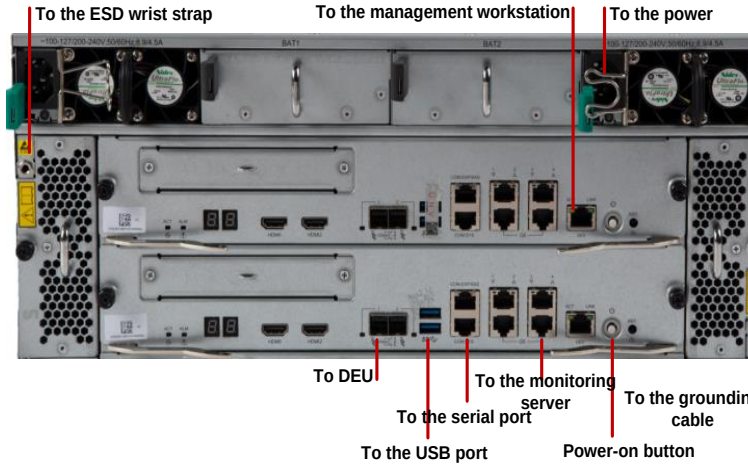
(3) Switch on the storage controller.

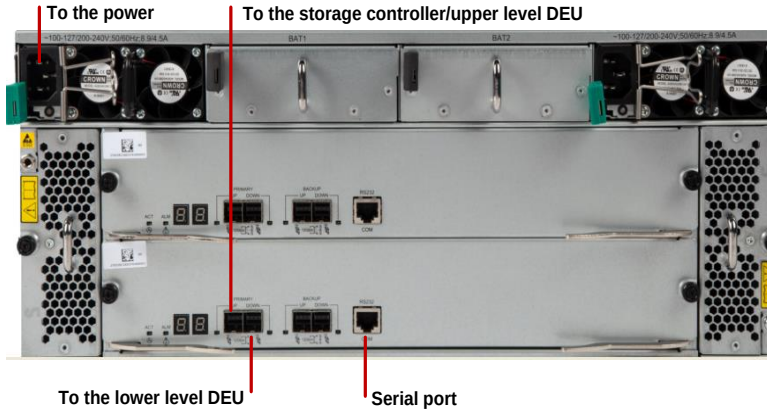
Single controller:





Double controller:





2 Check

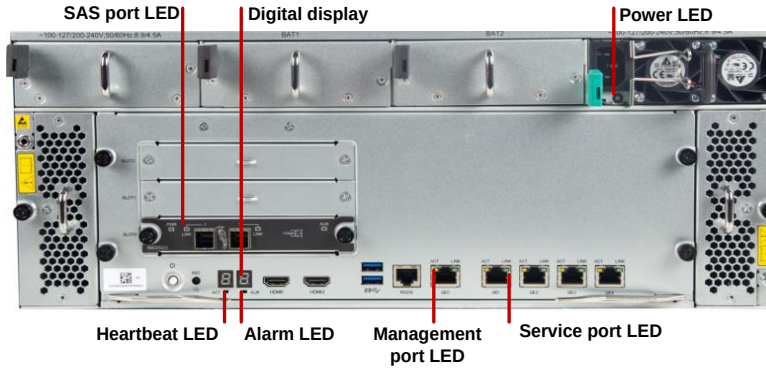
(1) Check the rear panel LED of the storage controller and DEU.

- Management port LED: green on and yellow on
- Service port LED: Green or yellow on
- Alarm LED: off; Other LEDs: green

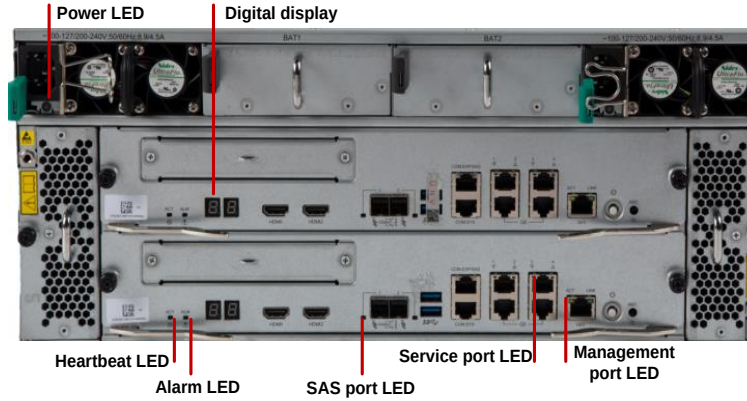
(2) Check the front panel LED of the storage controller and DEU(the illustration is omitted).

- Normally, the front panel LED is green.

Single controller:



Double controller:



3 Software Configuration

3.1 Basic Concepts

Basic Concept	Description
Console	Indicates the Graphical User Port (GUI) used in configuration and management.
Server	Indicates IPSAN series in the console.
Management workstation	Indicates the PC where the console is installed.
VMS	VMS(Video Management Server)
RAID Group	Indicates a logical entity consists of multiple physical hard disks. In addition, the logical entity possesses RAID level features. RAID indicates redundant array of independent disks. The logical entity is used to form the RAID of a specified level and provide physical resources for RAID Logical Unit Numbers (LUNs).
RAID LUN	Compared with a LUN, a RAID LUN indicates a smaller logical entity created in a RAID group. After a RAID LUN is created in a RAID group, the RAID LUN directly inherits the RAID level of the RAID group.

Logical resource	Indicates a logical entity that is created on a RAID LUN for direct access from a client. A client can access a logical resource after it is created on basis of a RAID LUN and assigned to a target.
Initiator	Indicates an entity that initiates an Internet Small Computer System Port (iSCSI) request.
Target	Indicates an entity that responds to an iSCSI request. An initiator can initiate a request to a target only after it is associated with the target.
Management network port	Configures and administrates devices, 1000 Mbit/s.
Service port	Transfers data, 1000 Mbit/s.

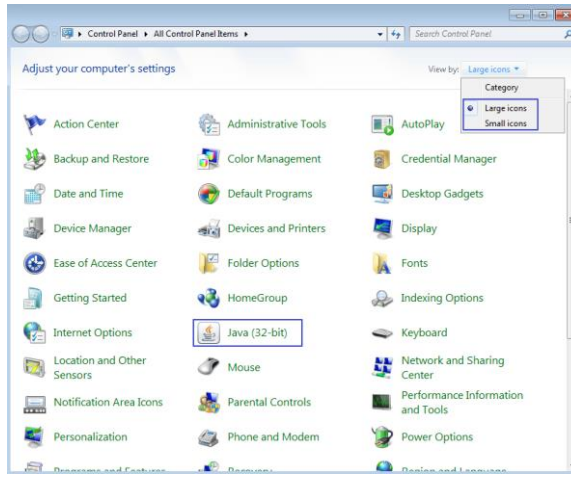
3.2 Configuration Workflow

To complete most basic configurations, perform the following operations on the storage software GUI:

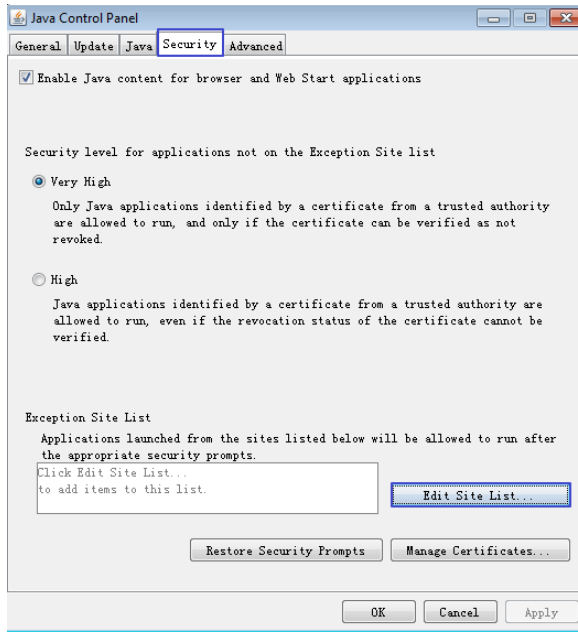
1. Log in to the device through the management network port.
2. Set the IP address of the service port.
3. Create a RAID group.
4. Create a RAID LUN.
5. Create logical resources.
6. Create a target and add an initiator.
7. Assign Storage Area Network (SAN) resources.
8. Configure the initiator (with Windows client as an example).
9. View disks assigned (with Windows XP as an example).

3.3 Device Login via Management Network Port

1. Add the device's IP address to the Java exception site list on the management workstation.
   (1) Open Control Panel on the management workstation, select Large icons or Small icons from the View by drop-down list, and then click Java.



(2) In the **Java Control Panel** dialog box, select **Security** and click **Edit Site list**.

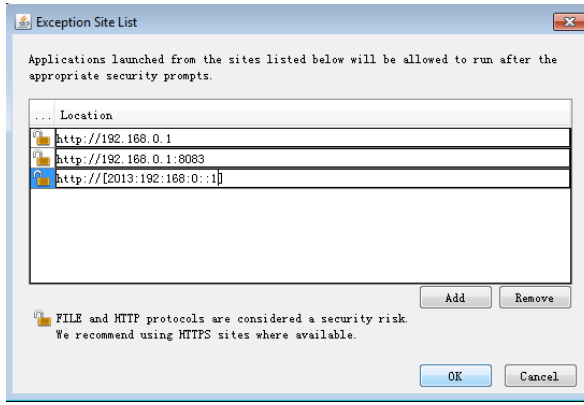


(3) Click **Add**.

If no VMS is installed, enter **http://IP**;

If VMS is installed, enter **http://IP:8083**;

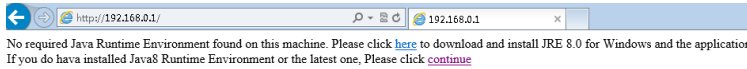
If the IP address is IPV6, enter **http://[IPV6]**.



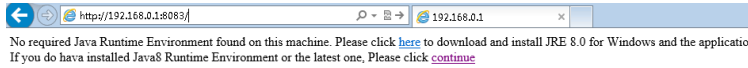
(4) Click **OK**.

2. Open your browser, enter the device's IP in the address bar to download the storage console.

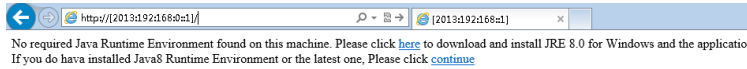
(1) If no VMS is installed, enter **http://IP**in the address bar.



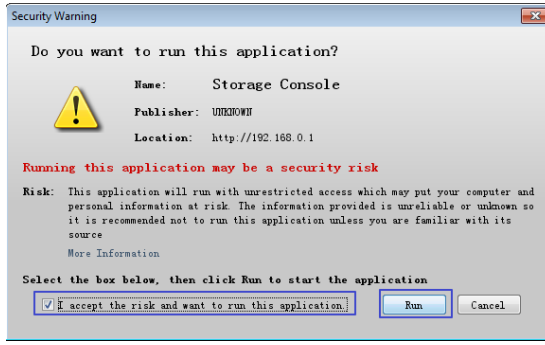
(2) If VMS is installed, enter **http://IP:8083** in the address bar. You will be directed to the VMS platform if you enter **http://IP**.



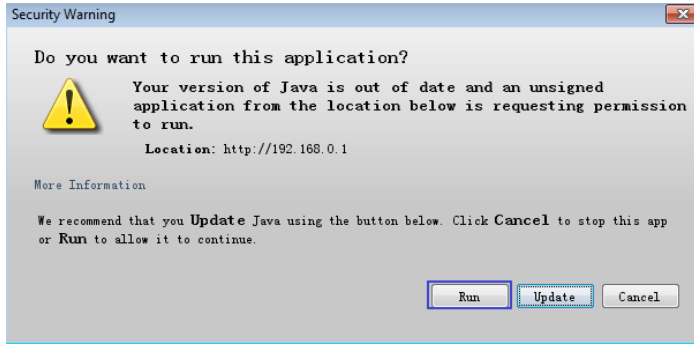
(3) If the IP address is IPV6, enter **http://[IPV6]**in the address bar.



3. Click **Continue**, a safety warning window pops up, select the "**I accept the risk...**" check box and click **Run**.



If be reminded that the Java version is out of date, click **Run** again to download the console.



4. Enter the default username and password (**admin/123456**) to log in to the console.

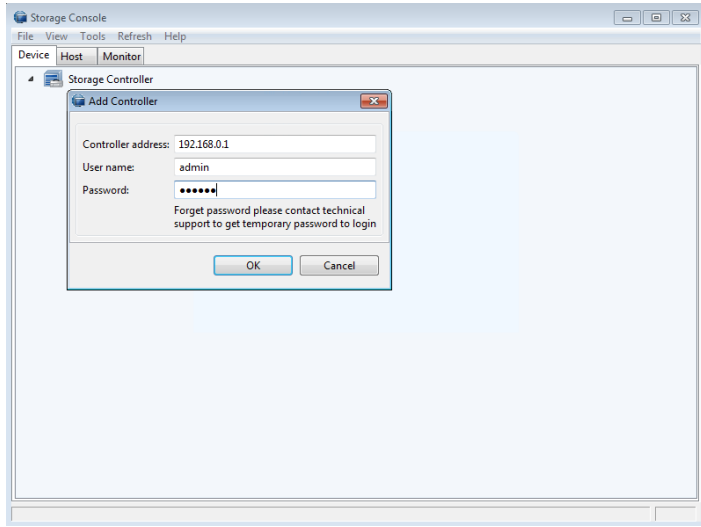
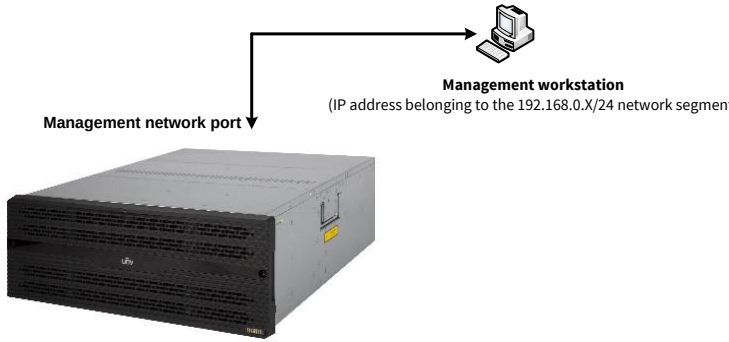


Figure 3-1 Login via Management Network Port



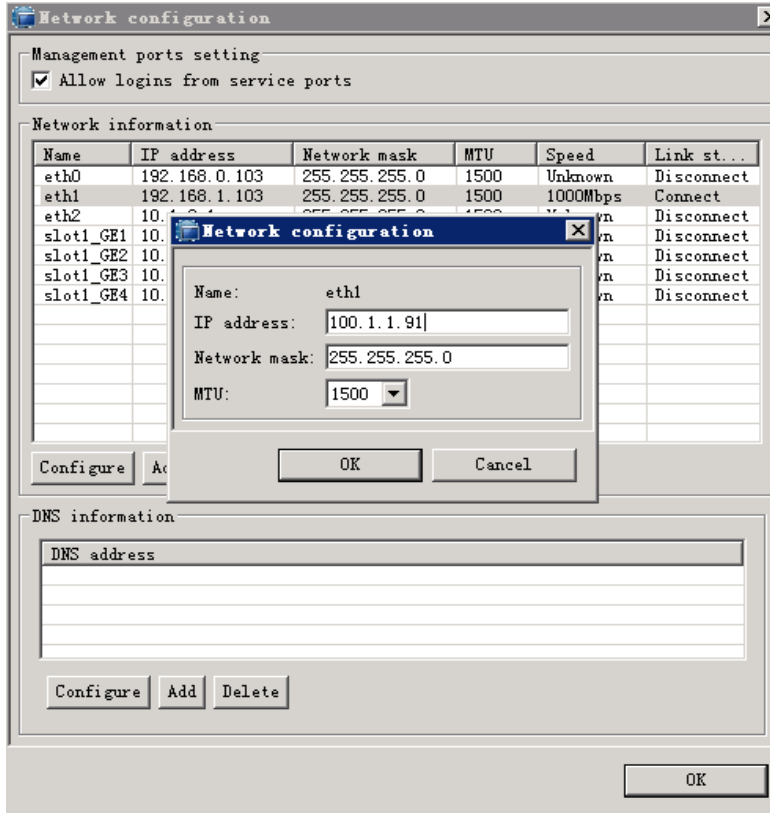
3.4 Set the IP address of the service port

1. Choose Server Maintenance > Configure Network.
2. Change the IP address of the service port.

NOTE!

- The default IP addresses of the service ports are empty.
- If expansion boards are inserted, the corresponding default IP addresses are empty too.

Figure 3-2 Change the IP address



3. Click OK.

3.5 Create a RAID group

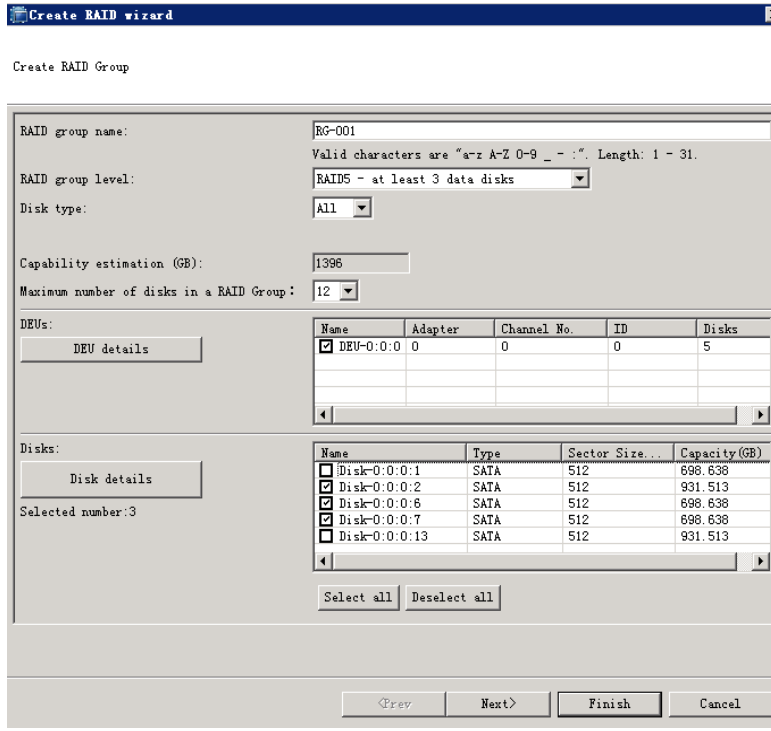
1. Choose RAID Group Resources > Local RAID Group > Create.
2. Create a RAID group.
3. Check whether the number of disks under "Physical Resources" is consistent with the actual number.

Recommend number of disks:

11 (RAID5) + 1 (hot standby) + 11 (RAID5) + 1 (hot standby)

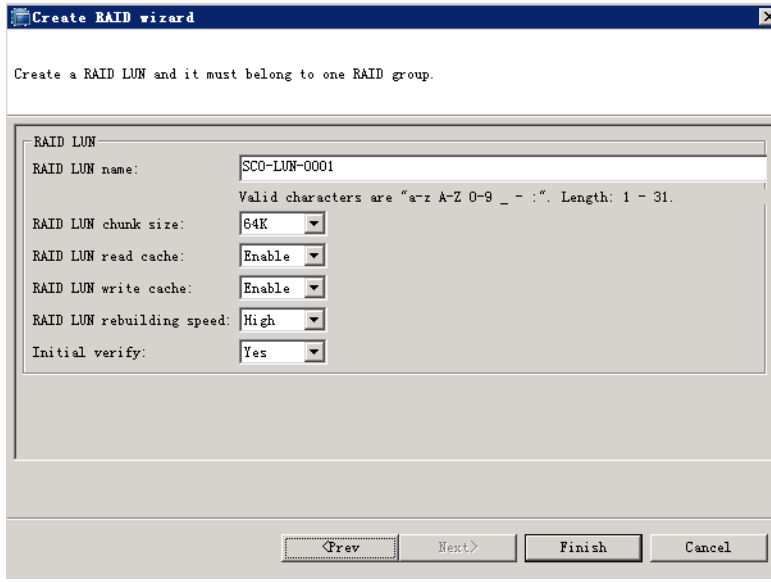
11 (RAID5) + 12 (RAID5) + 1 (hot standby)
7 (RAID5) + 8 (RAID5) +1 (hot standby)

Figure 3-3 Create a RAID Group



4. (Optional) Click Next.Confirm the information of the RAID LUN.

Figure 3-4 The information of the RAID LUN



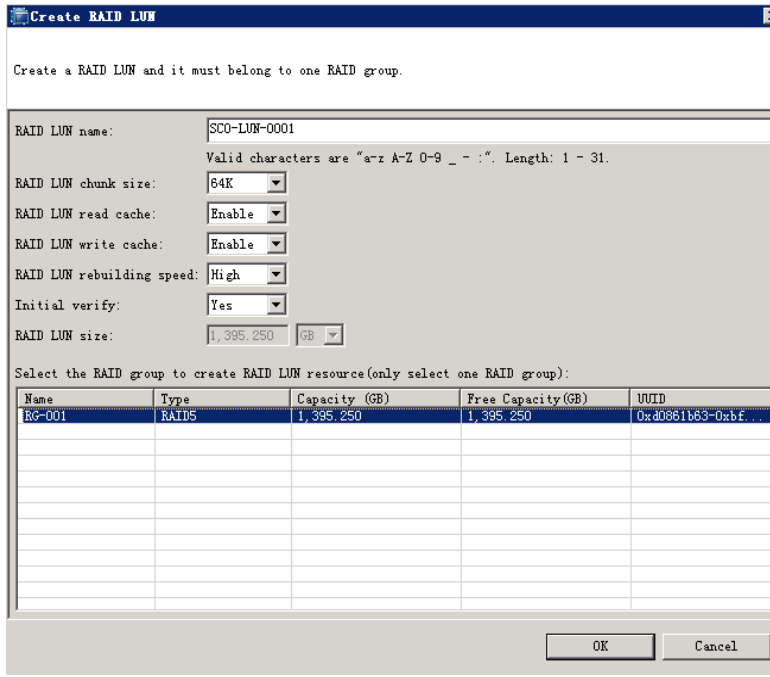
5. Click Finish.

3.6 Create a RAID LUN

If no RAID LUN has been created when you start to create a RAID Group, follow these steps to create one.

1. Choose RAID LUN Resources > Local RAID LUNs > Create.
2. Enter the name. Select the corresponding RAID group. Size of RAID LUN is displayed automatically.

Figure 3-5 Create a RAID LUN

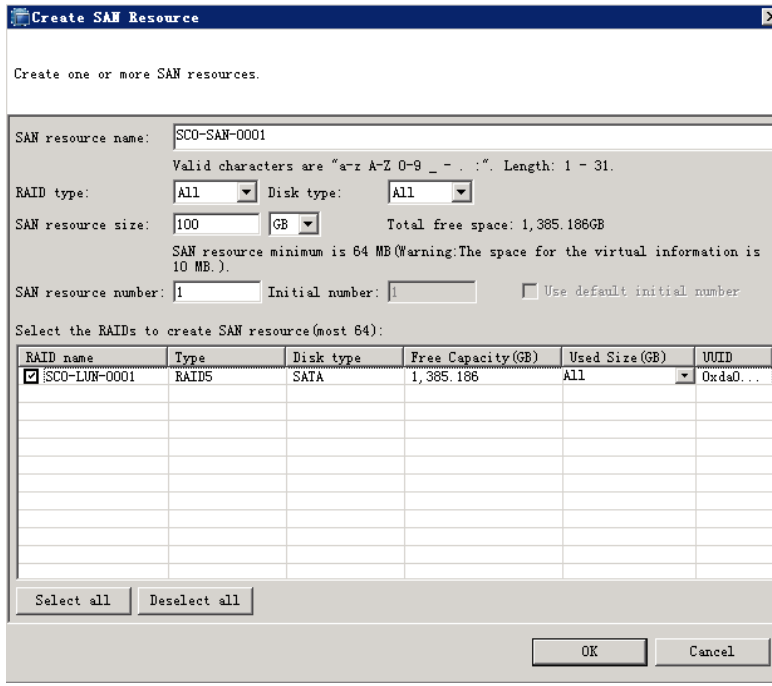


3. Click **OK**.

3.7 Create logical resources

1. Choose **Logical Resources > SAN Resources > Create**.
2. Set the SAN resource name and size, and select its RAID LUN.

Figure 3-6 Create the SAN Resource

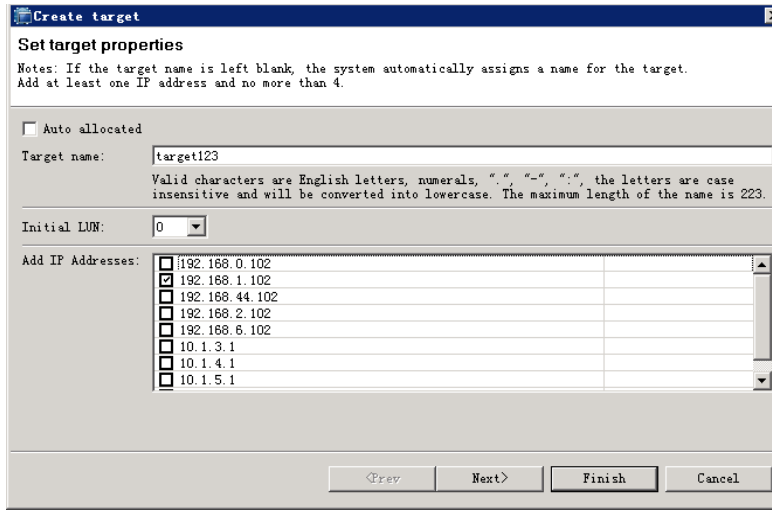


3. Click **OK**.

3.8 Create a target and add an initiator

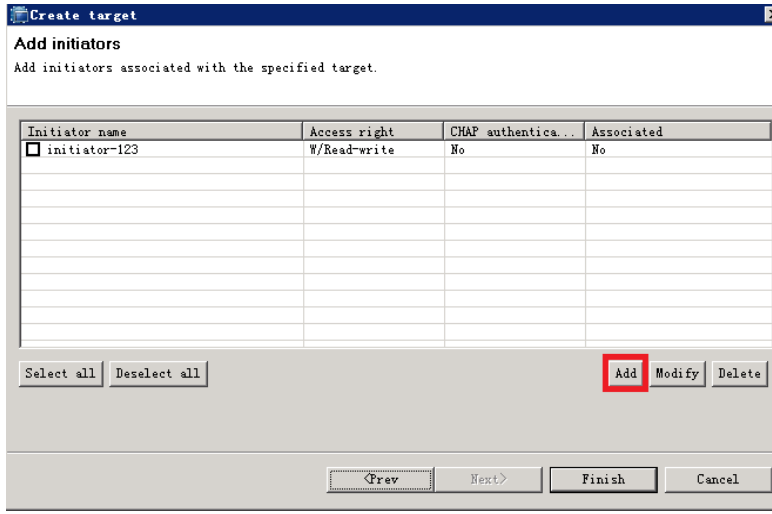
1. Choose **Target Manager > ISCSI Target > Create**.
2. Deselect Auto Allocated, and customize the name. Select the IP address of the target, then click **Next**.

Figure 3-7 Create a target



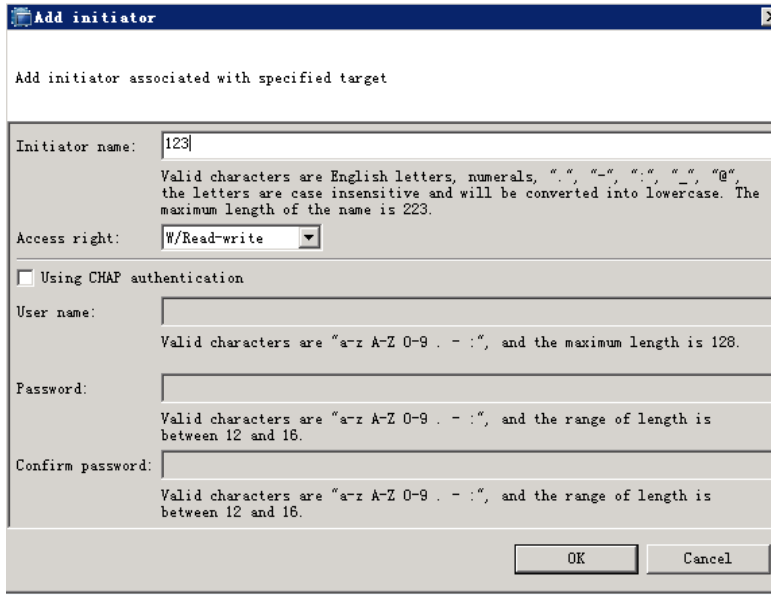
3. Click **Add** to add an initiator.

Figure 3-8 Add an initiator



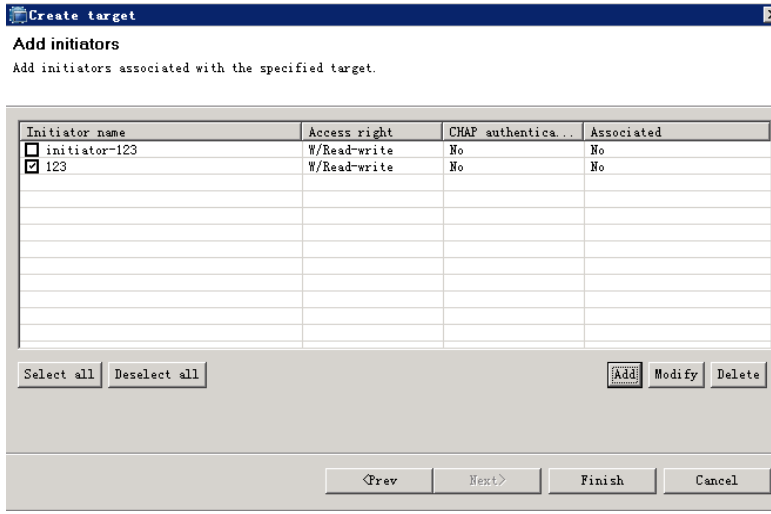
4. Set the name of the initiator, then click **OK**.

Figure 3-9 Set the name of the initiator



5. Confirm the result, then click **Finish**.

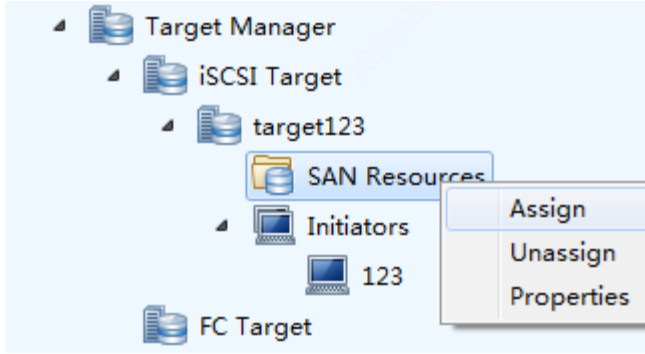
Figure 3-10 Confirm



3.9 Assign SAN resources

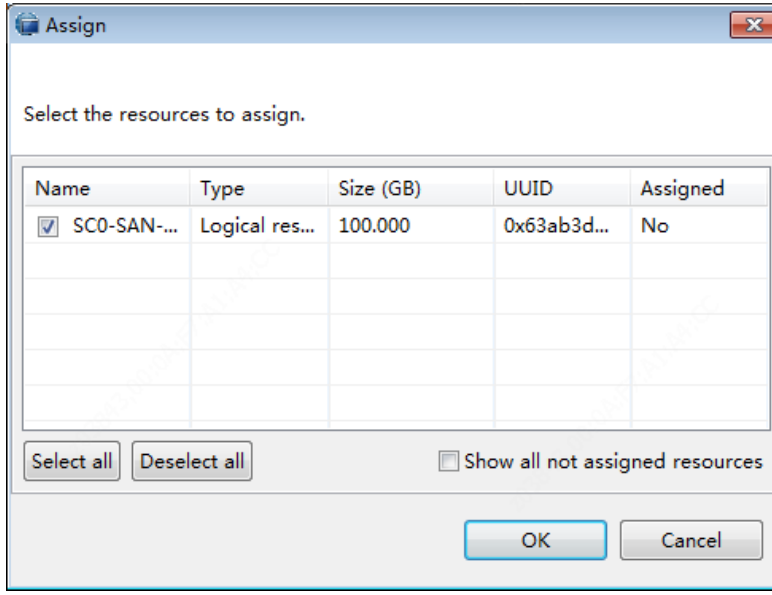
1. Choose **Target Manager > ISCSI Target > target123 > SAN Resources > Assign**.

Figure 3-11 Assign



2. Select resources to be assigned to a target. Click **OK**.

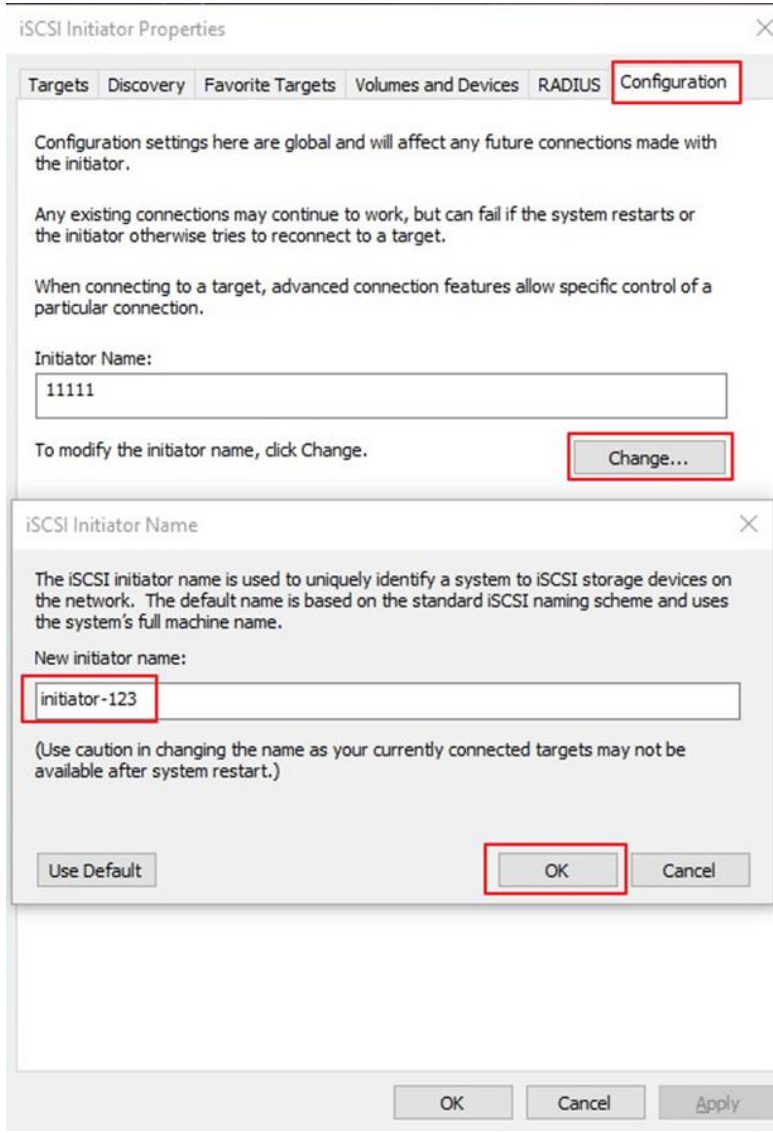
Figure 3-12 Assign a resource



3.10 Configure the initiator (with Windows client as an example)

1. Choose **Configuration** > **Change…**, enter the initiator name, and then click **OK**.

Figure 3-13 Change the Initiator Name

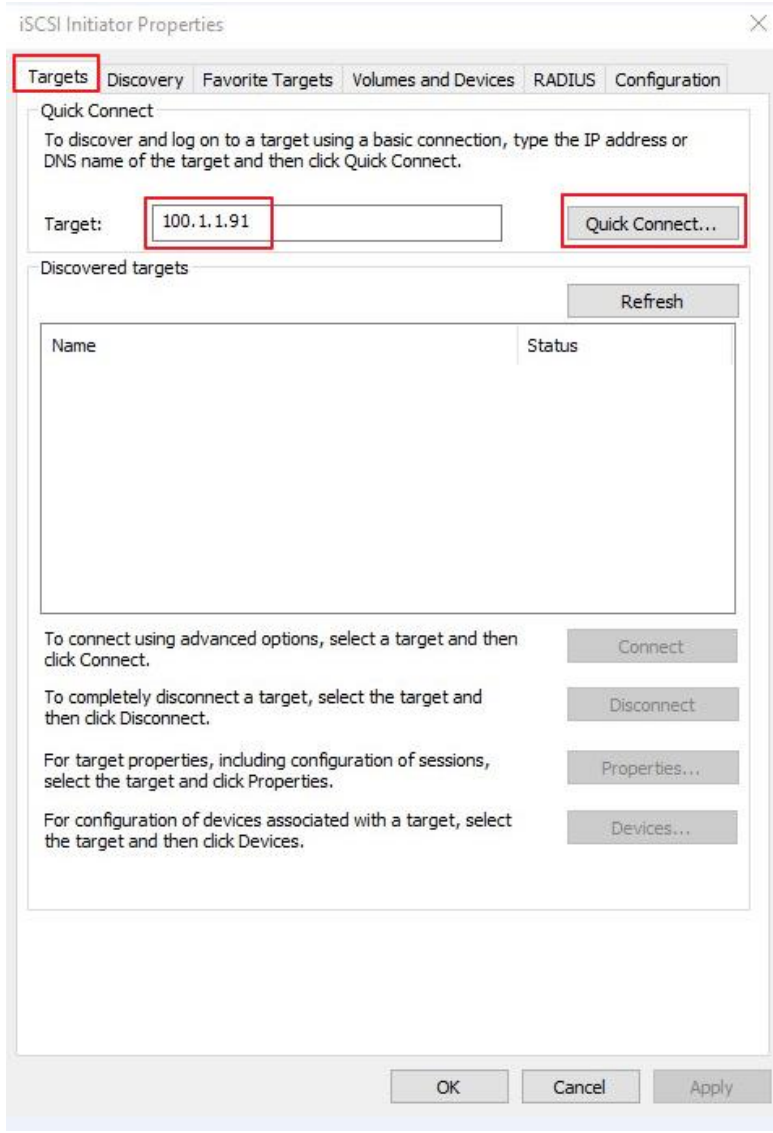


NOTE!

- The New initiator name configured on the windows client must be the same as that configured on the storage.

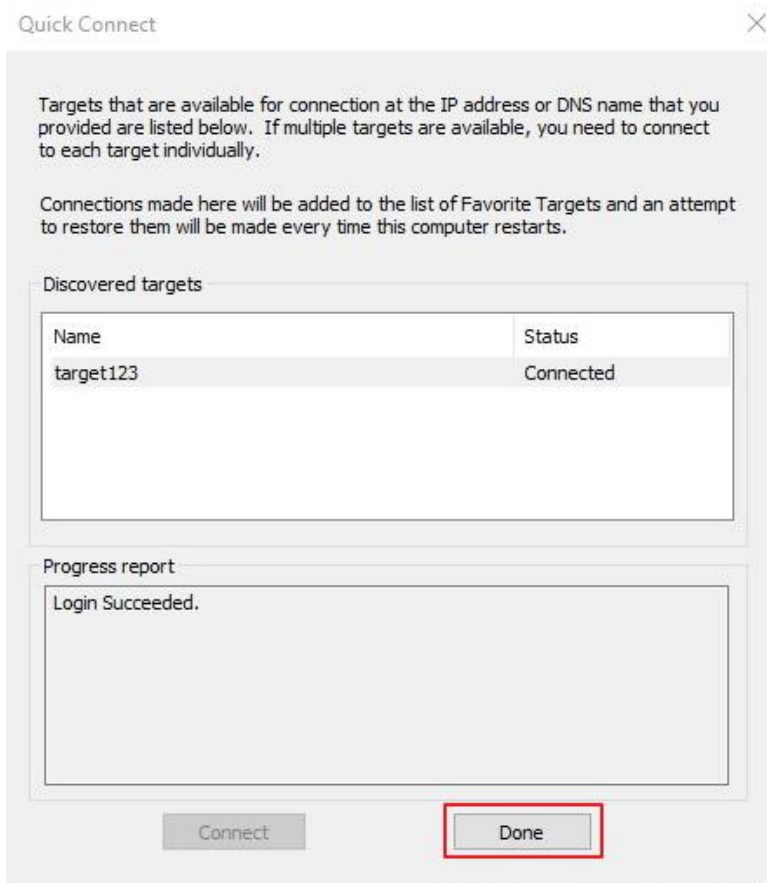
2. Select Targets, enter the IP address, then click Quick Connect….

Figure 3-14 Quick Connect to the Target



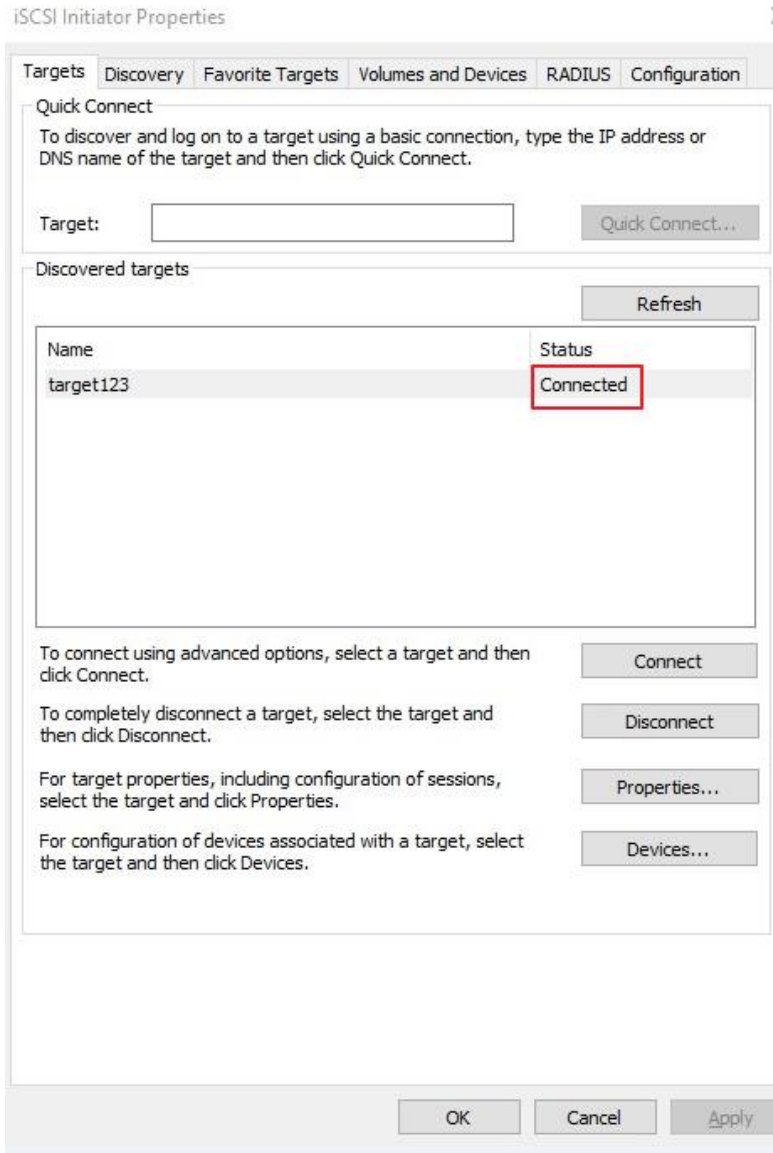
3. Click **Done**.

Figure 3-15 Finish Quick Connect



4. You can see that the target is connected.

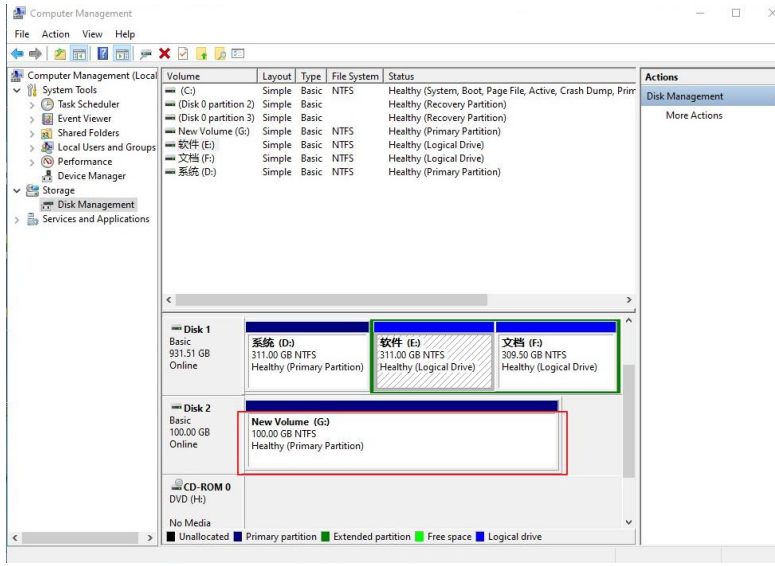
Figure 3-16 Check the Status



3.11 View disks assigned (with Windows XP as an example)

1. Right-click **My Computer**.
2. Choose **Computer Management**.
3. Check the added disk space.

Figure 3-17 Check the added disk space



4 (Optional) Video Management Server Configuration Description

4.1 Product Introduction

The Video Management Serve is a smart integrated surveillance platform with video input, storage, transfer and device management functions designed specifically for digital surveillance applications. The Unicorn has adopted audio/video compression and decompression, embedded system, storage, network, and smart technologies and it is suitable for security surveillance scenarios such as residential areas, buildings, campus, hotels, and shopping malls etc.

NOTE!

- SCU (Storage Control Unit)
- This manual takes the single control with 24 disk slots for example. For more details, see the Online Help which is released with the software. Method to check the Online Help: click Help button on the GUI.
- The following illustrations are only for your reference. The latest version shall prevail in the actual situation.

4.2 Basic Concepts

Basic Concept	Description
Management workstation	Indicates the PC where the console is installed.
Management network port	Configures and administrates devices, 1000 Mbit/s.
Service port	Transfers data, 1000Mbit/s.

4.3 Configuration Workflow

To complete most basic configurations, perform the following operations on the software GUI:

1. Log in to the device through the management network port.
2. Set the IP address.
3. Create and Format RAIDs.
4. Primary/Replica Switch.
5. Add IPC and Recording Schedule (Primary).
6. Recording Status and Playback (Primary).

4.4 Log in to the VMS GUI

1. Enter http://192.168.0.1 in the browser address bar of the management workstation.
2. By default, the user name is admin, the password is 123456, and log in.(only for first login and should be changed to a strong one with at least nine characters including uppercase and lowercase letters, digits and special characters of at least three.)

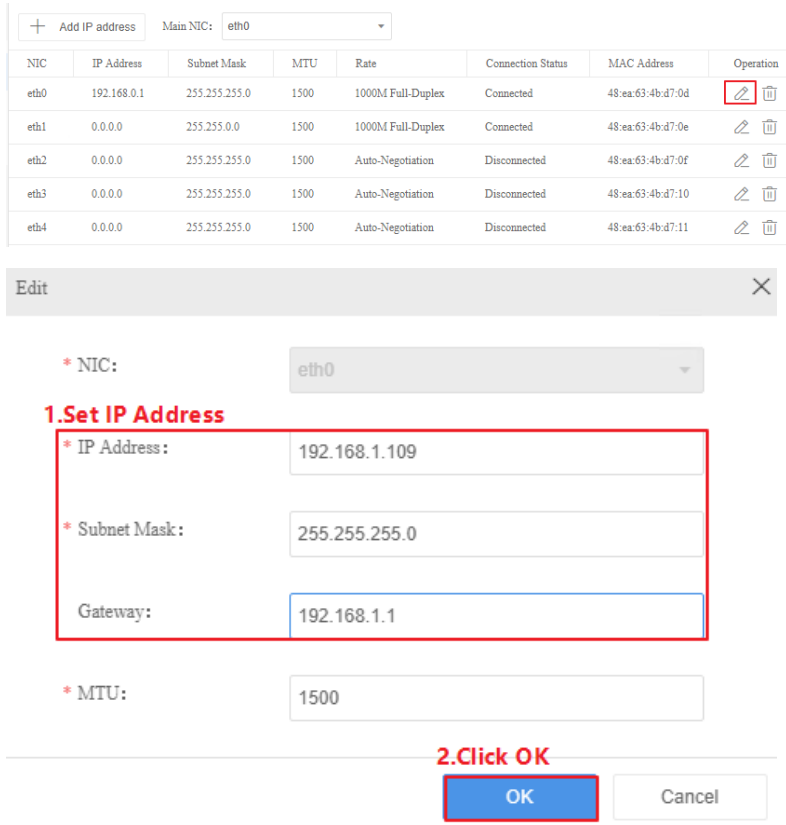
NOTE!

- Compatible browser versions: Edge 79 or higher, Chrome 60 or higher, Firefox 60 or higher.
- The website http://IP:8083/ is used to download professional storage management CS client. The website http://IP:80 is a simple web management client.

4.5 Set the IP address

1. Choose System > Network >TCP/IP > Network.
2. Click Operation to change the IP address of the service port.

Figure 4-1 Change IP Address



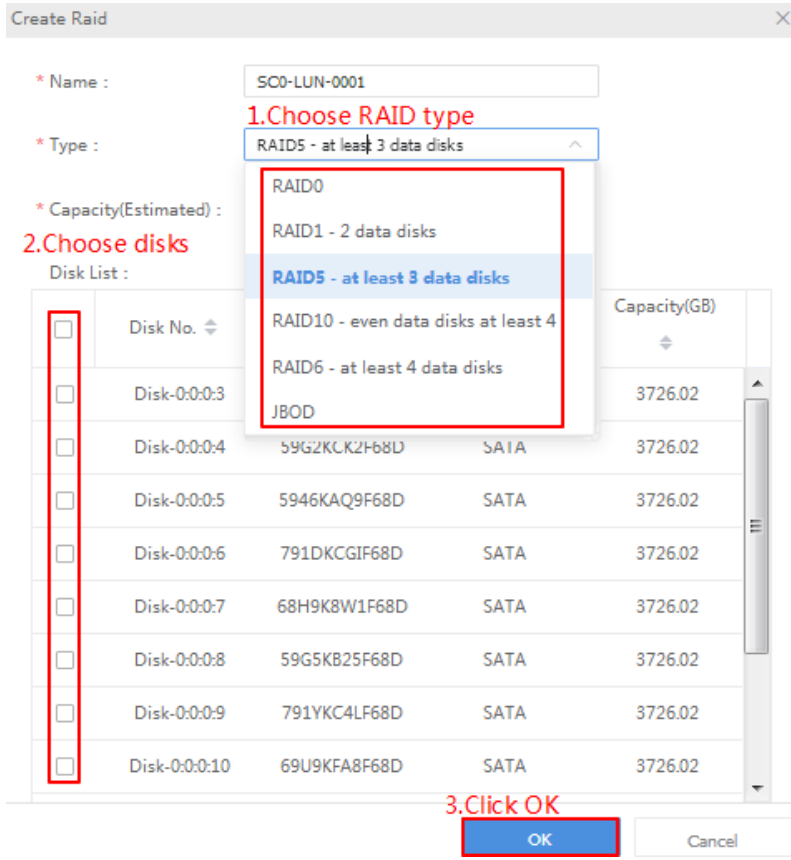
4.6 Create and Format RAIDs

1. Choose **System > Disk > RAID Manage > Physical Disk**. Check whether the number of disks under "DEU" is consistent with the actual number.
2. Click **Manual Create** to Create RAIDs.

Recommend number of disks:

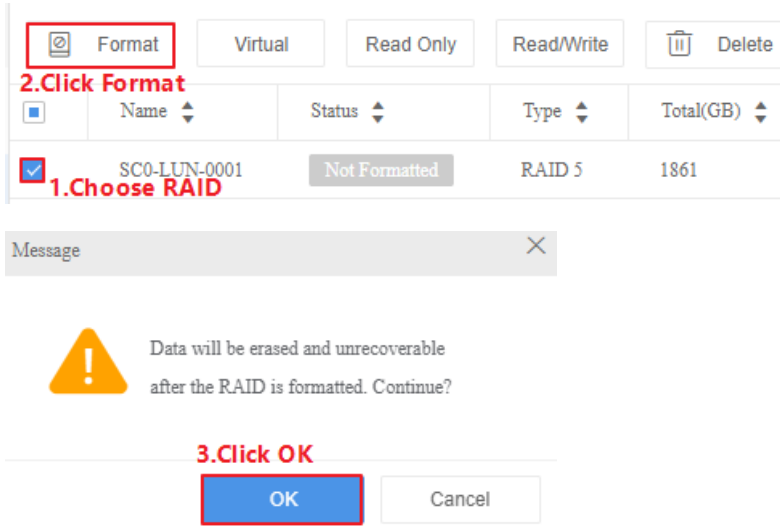
11 (RAID5) + 1 (hot standby) + 11 (RAID5) + 1 (hot standby)
11 (RAID5) + 12 (RAID5) + 1 (hot standby)
7 (RAID5) + 8 (RAID5) +1 (hot standby)

Figure 4-2 Create RAID



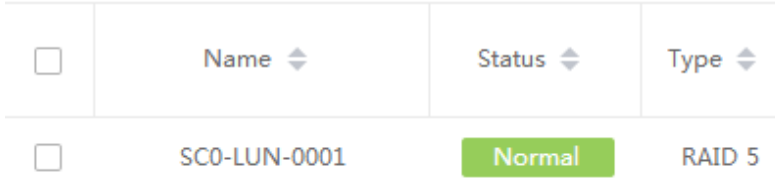
3. Format RAID. Choose **System > Disk > RAID Manage > RAID**.

Figure 4-3 Format RAID



4. Check formatting results.

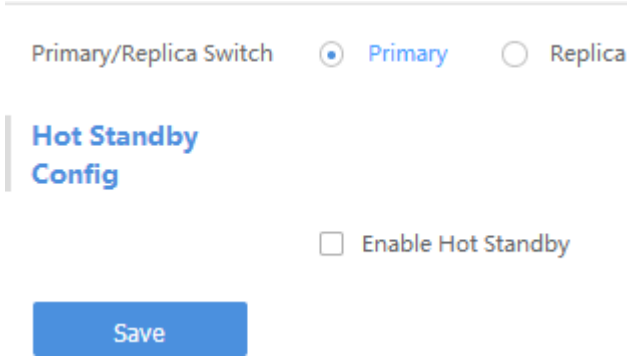
Figure 4-4 Ensure The Status Is Normal



4.7 Primary/Replica Switch

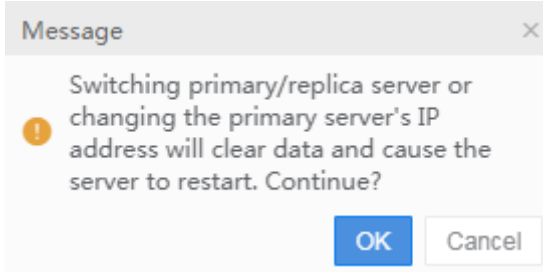
1. Choose System > Primary/Replica Switch.
2. If this server as Replica mode, enter Primary IP address, Click Save.
3. If this server as Primary mode, switch Primary, Click Save.

Figure 4-5 Primary/Replica Switch



4. Click OK to restart.

Figure 4-6 Confirm Restart



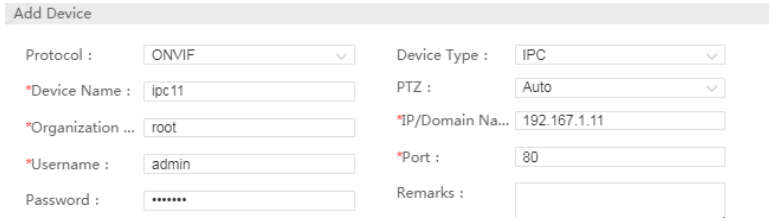
4.8 Add IPC and Recording Schedule (Primary)

Make sure RAID has been added and formatted successfully before you start configuring a recording schedule.

The following steps take ONVIF as an example. You may add the IPC with other protocols.

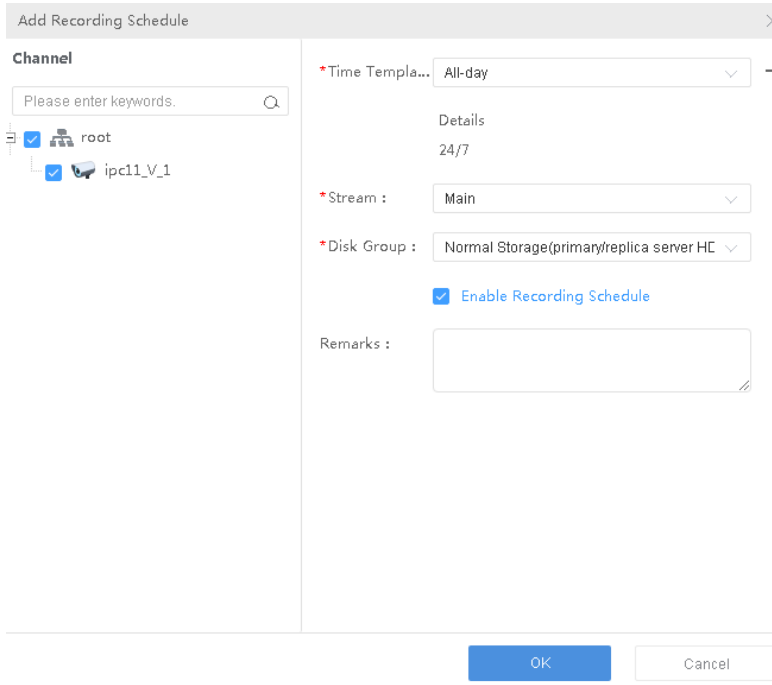
1. Choose Basic > Device > Encoding Device, click +Addipc11.

Figure 4-7 Add Device



2. Choose **Basic > Recording Schedule**, click **+Add**, select ipc11_V_1, click **OK**.

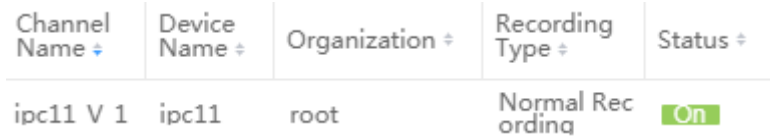
Figure 4-8 Add Recording Schedule



4.9 Recording Status and Playback (Primary)

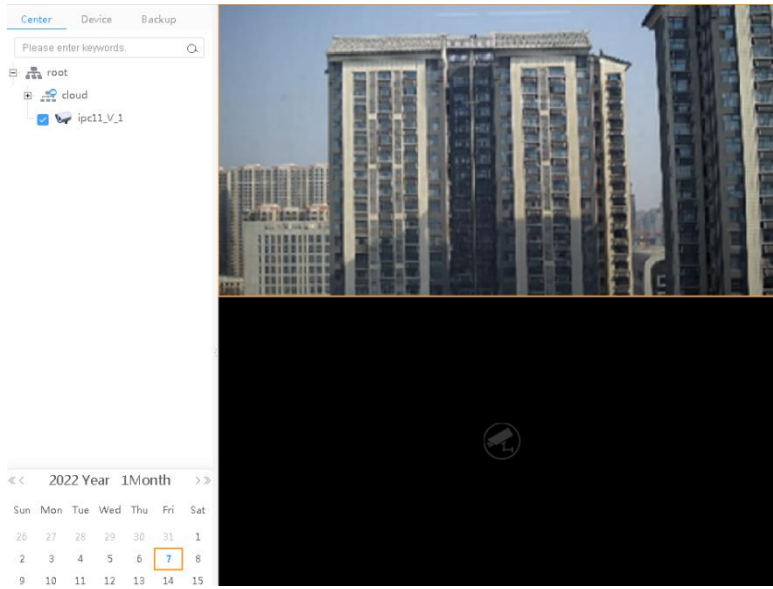
1. Choose **Statistics > Server > Recording**.

Figure 4-9 Check Recording Status



2. Choose **Video Service > Playback > Center**, select **ipc11_V_1**, click **Search**.

Figure 4-10 Playback



5 Appendix Disk Installation and Removal for the 60 Slots Products

For the 60 slots products, the installation and removal of the disk are slightly different from other slots. Here is a separate introduction.

Do not touch the Printed Circuit Board (PCB) of the disk.

Verify that the handle and screws on both sides of the disk case are secure.

Installing a Disk

The steps to install the disk are as follows:

1. Unplug the disk subrack. Turn the screw (counter clockwise, please refer to the blue mark in the figure below). When the screws are loose, pull out the disk subrack with both hands at the same time (like pulling a drawer).

NOTE!

- The disk subrack cannot be completely unplugged. You only need to extract it to the appropriate position to install the disk.
- No. 0-3 slot of each disk subrack must be full before using other slots to install the disk.

2. Put the disk into the disk subrack (hold the middle position on both sides of the disk), and put the rotating shaft on the disk into the disk support (as shown in the corresponding position of the blue area in the figure below).

3. If the frame is not fully loaded with hard disks, make sure each subrack is installed with at least 4 hard disks; the hard disks are awalys installed from the outermost row toward inside and in the order as shown below (from slot 0 to slot 3). As shown in the figure below, No. 0-3 slot of each disk subrack must be full before using other slots to install the disk.

4. After putting the disk into the slot one by one, press the handle to install the disk in place (following the blue arrow radian in the figure below).

5. After all the disks are installed, push the disk subrack back into place to let the handle bar fit the panel. Turn the screws on the panel clockwise (as shown in the figure below), and lock the screws of the disk insert frame.

Removing a Disk

The steps to remove the disk are as follows:

1. Turn the screw of the disk subrack (counter clockwise, please refer to the blue mark below). After the screws are loose, pull out the disk insert frame (like pulling a drawer) with both hands at the same time.

2. Hook out the disk pull ring. Find the location of the disk to be pulled out, and use your fingers to hook out the pull ring on the disk (see the blue part in the figure below).

3. Pull the pull ring with your finger, pull out the disk (along the blue arc direction shown in the figure below), and take out the disk by holding the middle position on both sides of the disk.

4. Disk subrack reset. Make sure that the disk insert frame is pushed back in place, the handle bar is connected with the panel, turn the screws on the panel (clockwise, as shown in the figure below), and lock the screws.

Disclaimer and Safety Warnings

Copyright Statement

Trademark Acknowledgements

Export Compliance Statement

Uniview complies with applicable export control laws and regulations worldwide, including that of the People's Republic of China and the United States, and abides by relevant regulations relating to the export, re-export and transfer of hardware, software and technology. Regarding the product described in this manual, Uniview asks you to fully understand and strictly abide by the applicable export laws and regulations worldwide.

EU Authorised Representative

UNV Technology EUROPE B.V. Room 2945,3rdFloor,Randstad 21-05 G,1314BD,Almere,Netherlands.

Privacy Protection Reminder

Uniview complies with appropriate privacy protection laws and is committed to protecting user privacy. You may want to read our full privacy policy at our website and get to know the ways we process your personal information. Please be aware, using the product described in this manual may involve the collection of personal information such as face, fingerprint, license plate number, email, phone number, GPS. Please abide by your local laws and regulations while using the product.

About This Manual

- This manual is intended for multiple product models, and the photos, illustrations, descriptions, etc, in this manual may be different from the actual appearances, functions, features, etc, of the product.
- This manual is intended for multiple software versions, and the illustrations and descriptions in this manual may be different from the actual GUI and functions of the software.
- Despite our best efforts, technical or typographical errors may exist in this manual. Uniview cannot be held responsible for any such errors and reserves the right to change the manual without prior notice.
- Users are fully responsible for the damages and losses that arise due to improper operation.
- Uniview reserves the right to change any information in this manual without any prior notice or indication. Due to such reasons as product version upgrade or regulatory requirement of relevant regions, this manual will be periodically updated.

Disclaimer of Liability

- To the extent allowed by applicable law, in no event will Uniview be liable for any special, incidental, indirect, consequential damages, nor for any loss of profits, data, and documents.
- The product described in this manual is provided on an "as is" basis. Unless required by applicable law, this manual is only for informational purpose, and all statements, information, and recommendations in this manual are presented without warranty of any kind, expressed or implied, including, but not limited to, merchantability, satisfaction with quality, fitness for a particular purpose, and noninfringement.
- Users must assume total responsibility and all risks for connecting the product to the Internet, including, but not limited to, network attack, hacking, and virus. Uniview strongly recommends that users take all necessary measures to enhance the protection of network, device, data and personal information. Uniview disclaims any liability related thereto but will readily provide necessary security related support.
- To the extent not prohibited by applicable law, in no event will Uniview and its employees, licensors, subsidiary, affiliates be liable for results arising out of using or inability to use the product or service, including, not limited to, loss of profits and any other commercial damages or losses, loss of data, procurement of substitute goods or services; property damage, personal injury, business interruption, loss of business information, or any special, direct, indirect,

incidental, consequential, pecuniary, coverage, exemplary, subsidiary losses, however caused and on any theory of liability, whether in contract, strict liability or tort (including negligence or otherwise) in any way out of the use of the product, even if Uniview has been advised of the possibility of such damages (other than as may be required by applicable law in cases involving personal injury, incidental or subsidiary damage).

- To the extent allowed by applicable law, in no event shall Uniview's total liability to you for all damages for the product described in this manual (other than as may be required by applicable law in cases involving personal injury) exceed the amount of money that you have paid for the product.

Network Security

Please take all necessary measures to enhance network security for your device.

The following are necessary measures for the network security of your device:

- **Change default password and set strong password**: You are strongly recommended to change the default password after your first login and set a strong password that includes at least 9 characters including uppercase letter, lowercase letter, digit and special character.
- **Keep firmware up to date**: It is recommended that your device is always upgraded to the latest version for the latest functions and better security. Visit Uniview's official website or contact your local dealer for the latest firmware.

The following are recommendations for enhancing network security of your device:

- **Change password regularly**: Change your device password on a regular basis and keep the password safe. Make sure only the authorized user can log in to the device.
- **Enable HTTPS/SSL**: Use SSL certificate to encrypt HTTP communications and ensure data security.
- **Enable IP address filtering**: Allow access only from the specified IP addresses.
- **Minimum port mapping**: Configure your router or firewall to open a minimum set of ports to the WAN and keep only the necessary port mappings. Never set the device as the DMZ host or configure a full cone NAT.
- **Disable the automatic login and save password features**: If multiple users have access to your computer, it is recommended that you disable these features to prevent unauthorized access.
- **Choose username and password discretely**: Avoid using the username and password of your social media, bank, email account, etc, as the username and password of your device, in case your social media, bank and email account information is leaked.
- **Restrict user permissions**: If more than one user needs access to your system, make sure each user is granted only the necessary permissions.
- **Disable UPnP**: When UPnP is enabled, the router will automatically map internal ports, and the system will automatically forward port data, which results in the risks of data leakage. Therefore, it is recommended to disable UPnP if HTTP and TCP port mapping have been enabled manually on your router.
- **SNMP**: Disable SNMP if you do not use it. If you do use it, then SNMPv3 is recommended.
- **Multicast**: Multicast is intended to transmit video to multiple devices. If you do not use this function, it is recommended you disable multicast on your network.
- **Check logs**: Check your device logs regularly to detect unauthorized access or abnormal operations.
- **Physical protection**: Keep the device in a locked room or cabinet to prevent unauthorized physical access.
- **Isolate video surveillance network**: Isolating your video surveillance network with other service networks helps prevent unauthorized access to devices in your security system from other service networks.

Learn More

You may also obtain security information under Security Response Center at Uniview's official website.

Safety Warnings

The device must be installed, serviced and maintained by a trained professional with necessary safety knowledge and skills. Before you start using the device, please read through this guide carefully and make sure all applicable requirements are met to avoid danger and loss of property.

Storage, Transportation, and Use

- Store or use the device in a proper environment that meets environmental requirements, including and not limited to, temperature, humidity, dust, corrosive gases, electromagnetic radiation, etc.
- Make sure the device is securely installed or placed on a flat surface to prevent falling.
- Unless otherwise specified, do not stack devices.
- Ensure good ventilation in the operating environment. Do not cover the vents on the device. Allow adequate space for ventilation.
- Protect the device from liquid of any kind.
- Make sure the power supply provides a stable voltage that meets the power requirements of the device. Make sure the power supply's output power exceeds the total maximum power of all the connected devices.
- Verify that the device is properly installed before connecting it to power.
- Do not remove the seal from the device body without consulting Uniview first. Do not attempt to service the product yourself. Contact a trained professional for maintenance.
- Take proper waterproof measures in accordance with requirements before using the device outdoors.
- This equipment is not suitable for use in locations where children are likely to be present.
- Always disconnect the device from power before attempting to move the device.

CAUTION!SHOCK HAZARD!

Power Requirements

- Installation and use of the device must be in strict accordance with your local electrical safety regulations.
- Use the battery properly. Improper use of the battery may cause risks of fire and explosion. Replace only with an identical battery. Dispose the used battery according to your local regulations or the battery manufacturer's instructions. Never dispose of the battery in fire.
- Use the recommended cordset (power cord) in accordance with the specified ratings.
- Only use the power adapter supplied with your device.
- Use a mains socket outlet with a protective earthing (grounding) connection.
- Ground your device properly if the device is intended to be grounded by a skilled person.
- If the equipment is not used for a long time, disconnect the equipment from outlet.

Battery Use Caution

- When battery is used, avoid:
  - Extremely high or low temperature and air pressure during use, storage and transportation.
  - Battery replacement.
- Use the battery properly. Improper use of the battery such as the following may cause risks of fire, explosion or leakage of flammable liquid or gas.
  - Replace battery with an incorrect type;
  - Dispose of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery;
- Dispose of the used battery according to your local regulations or the battery manufacturer's instructions.

Avertissement de l'utilisation de la batterie

- Lorsque utiliser la batterie, évitez:
  - Température et pression d'air extrêmement élevées ou basses pendant l'utilisation, le stockage et le transport.
  - Remplacement de la batterie.
- Utilisez la batterie correctement. Mauvaise utilisation de la batterie comme cellesmentionnées ici, peut entraîner des risques d'incendie, d'explosion ou de fuite liquide de gaz inflammables.
  - Remplacer la batterie par un type incorrect;
  - Disposer d'une batterie dans le feu ou un four chaud, écraser mécaniquement ou couper la batterie;
- Disposer la batterie utilisée conformément à vos règlements locaux ou aux instructions du fabricant de la batterie.
- Personal safety warnings:
  - Chemical Burn Hazard. This product contains a coin cell battery. Do NOT ingest the battery. It can cause severe internal burns and lead to death.
  - Keep new and used batteries away from children.
  - If the battery compartment does not close securely, stop using the product and keep it away from children.
  - If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.
- Avertissements de sécurité personnelle:
  - Risque de brûlure chimique. Ce produit contient une batterie de cellules. N'ingérer pas la batterie. Si la batterie de cellule est avalée, elle peut causer de graves brûlures internes en seulement 2 heures et peut entraîner la mort.
  - Gardez les batteries nouvelles ou utilisées à l'écart des enfants.
  - Si le compartiment de la batterie ne se ferme pas en toute sécurité, cessez d'utiliser le produit et gardez-le à l'écart des enfants.
  - Si vous pensez que des piles ont pu être avalées ou placées à l'intérieur d'une partie du corps, consultez immédiatement un médecin.

Regulatory Compliance

FCC Statements

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Compliance Information Statement refer to:

http://en.uniview.com/Support/Download_Center/Product_Installation/Declaration/

Caution: The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

LVD/EMC Directive

This product complies with the European Low Voltage Directive 2014/35/EU and EMC Directive 2014/30/EU.

WEEE Directive–2012/19/EU

The product this manual refers to is covered by the Waste Electrical & Electronic Equipment (WEEE) Directive and must be disposed of in a responsible manner.

Battery Directive-2013/56/EC

Battery in the product complies with the European Battery Directive 2013/56/EC. For proper recycling, return the battery to your supplier or to a designated collection point.

Better Security, Better World

www.uniview.com

globalsupport@uniview.com