

Hardware Installation

Warning!

Only qualified server personnel should install and service this product in order to avoid risk of injury from electrical shock and energy hazard.

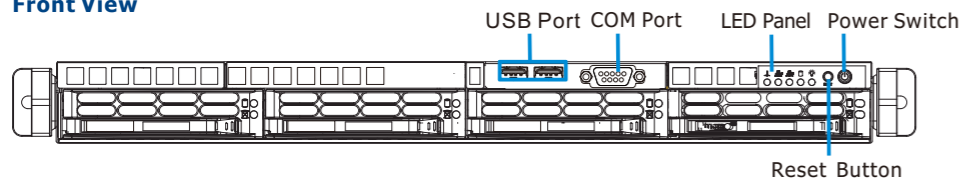
Observe all ESD (Electro-static Discharge) procedure during installation to avoid damage to the system and other components.

User-provided Items

- Flat-blade Screwdriver
- Phillips Screwdriver
- LAN Cable
- GbE Switch
- PC with Windows XP (or above) used as VMS remote client/SANWatch management center

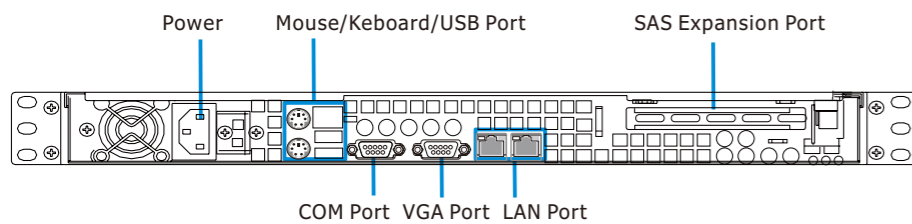
1 Hardware Overview

Front View



Note: The functions of USB port and COM port are reserved.

Rear View



2 Unpacking the Subsystem

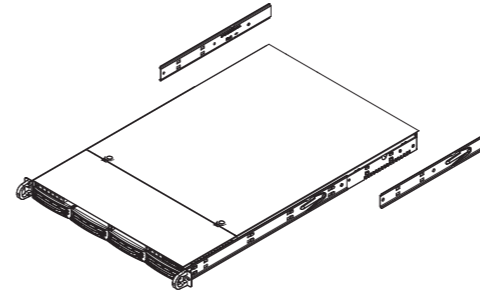
Preparing for Setup

The box should include two sets of rail assemblies, six rail mounting brackets and the mounting screws

you will need to install the system into the rack. Please check the package content and follow the instruction below.

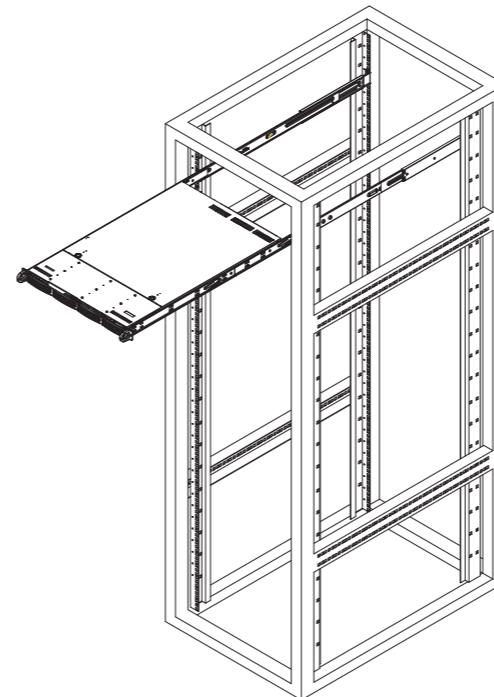
Attaching the rack mounting rails to the enclosure

1. Secure the short bracket to the front side of the outer rail w/ 2 screws, and the long bracket to the rear side of the outer rail w/ 3 screws.
2. Repeat the process to install another outer rail.



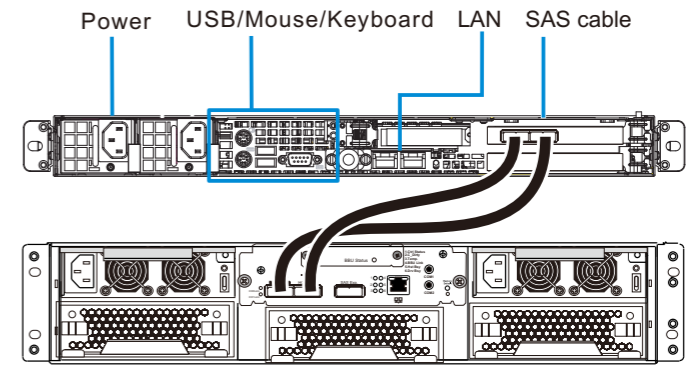
Installing the enclosure to the rack

1. Install the server by lining up the rear of the chassis rails with the front of the rack rails.
2. Slide the chassis into the rack rails, keeping the pressure even on both sides (you may have to depress the locking tabs when inserting).
3. When fully inserted into rack, you should hear a click sound made by locking tabs.



3 Cabling

Making Host Connections



Make the following connections:

- LAN port: to connect the NVR2000 to the Internet
- SAS cable: to connect the NVR2000 controller to the storage alley/enclosure
- Power cable
- (Optional) USB port: to connect external devices such as CD-ROM for recovery
- (Optional) Mouse and Keyboard

Making Network Connections

You do not need to connect other interfaces, such as VGA, mouse/keyboard, etc. They are reserved for debug purposes. A web-based GUI is provided with the server by connecting to LAN0 server IP.

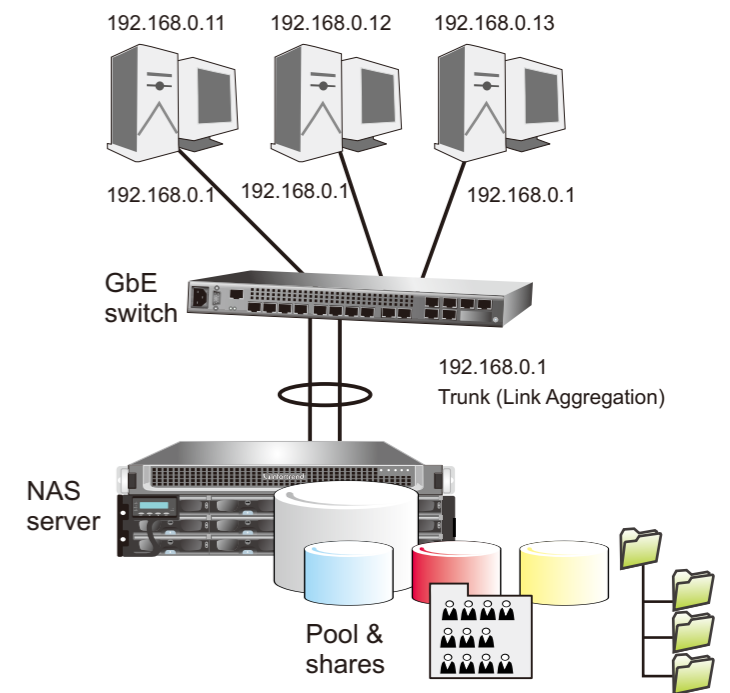
LAN1 comes with a default IP: <10.0.0.2> and netmask 255.255.0.0.

Use a LAN cable to connect LAN1 from a laptop to start the initial access and begin the initial setup such as changing its IP address.

Ethernet cables are user-supplied.

Use quality CAT5e cables.

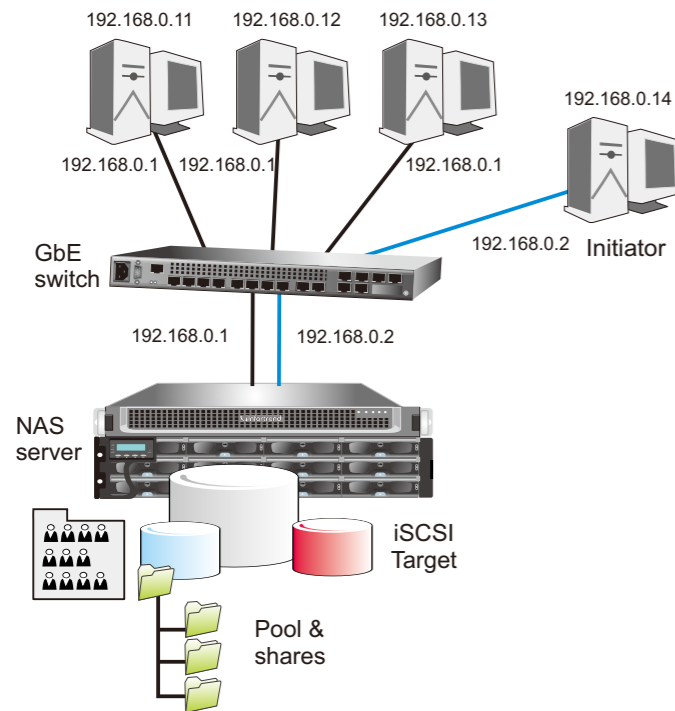
It is preferred the server shares the same subnet with its clients.



Cabling with iSCSI targets

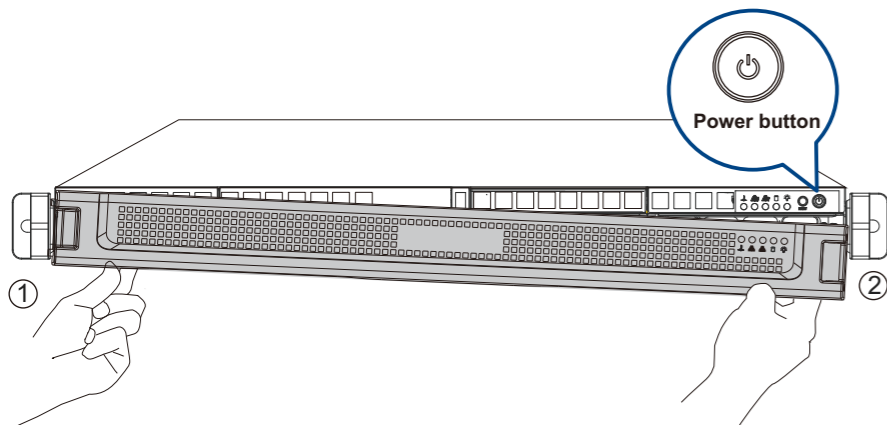
You can also present a storage volume within a virtual pool as an iSCSI target.

The default iSCSI path is LAN0, and you might consider using LAN Masking or VLAN to segregate different I/O paths. iSCSI CHAP authentication is also supported.



Providing Power

1. Plug the power cord from the power supply unit into a high-quality power strip that offers protection from electrical noise and power surges. It is recommended that you use an uninterruptible power supply (UPS).
2. Depress the power button on the front of the chassis to power up the system.



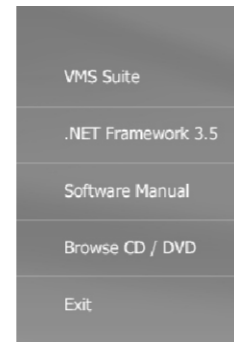
Front Cover

1. Slide the left end of the front cover into the chassis until the two pegs are seated in the chassis wall.
2. While depressing the tab, insert the right end of the cover into the chassis. Release the tab to lock the front cover into place.

Software Installation

1 VMS Installation

Insert the product CD. The disk should auto-run. Click **VMS Suite** to start the installation. Follow the installation prompts. When completed, click **OK** to restart the computer.



2 Logging in

Click **Programs > VMS Suite > VMS Client** under the Windows **Start** menu. The software will prompt for the following information:

The screenshot shows the VMS Client login dialog box with the following fields and options:

- Access Method: Directly Access
- Port: (empty)
- Type: VMS
- VMS/NVR: DAISYCHAN - 172.18.6.91
- Username: admin
- Password: admin
- Auto Login:
- Buttons: Login, Cancel

- **Access Method:** Directly Access.
- **Type:** Choose VMS.
- **VMS/NVR:** The default IP address for the NVR Server. You can click **Search** button to obtain it.
- **Username:** The username of the domain, **which is always admin.**
- **Password:** The password of the domain. **Default password is admin.**

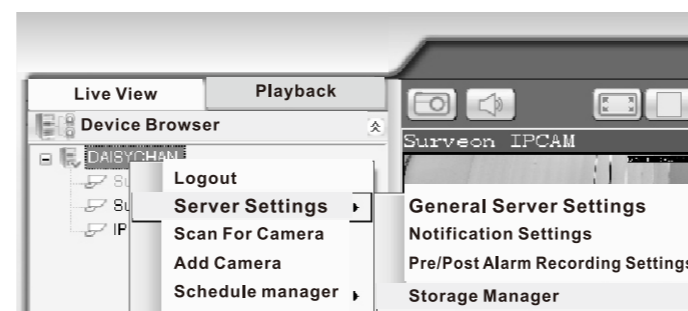
Note: If you need to connect remote PC(s) to the NVR server within a private LAN, please refer to **Port Forwarding** and **Start the VMS Client** section in NVR user manual for more details.

Click **Login** after the password is entered.

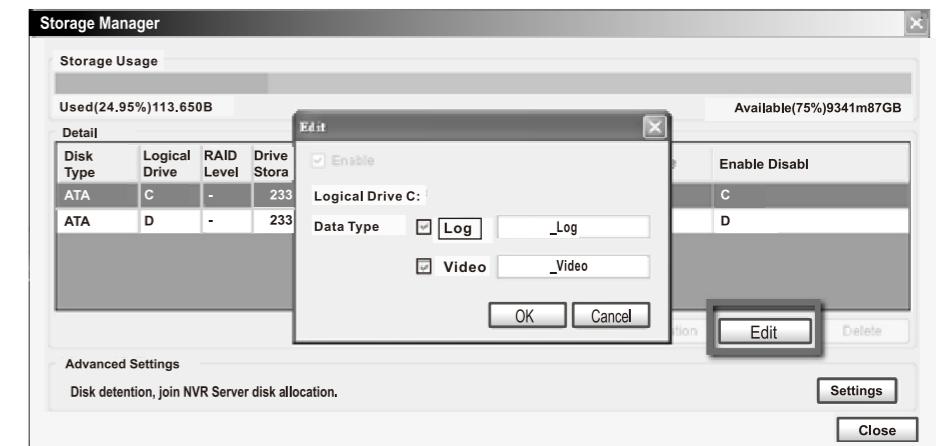
3 Storage Management

Note: If you connect the Eonstor DS RAID subsystem through iSCSI, please install SANWatch for storage management.

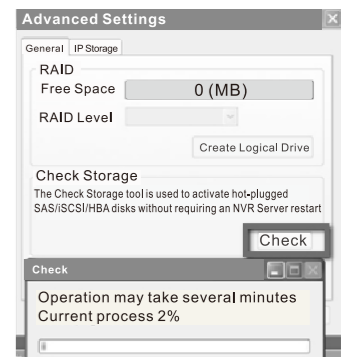
1. To access the information about the drives configured in your server, highlight and click the **Storage Manager** option under **Server Settings**.



2. All available Logical Drives, as well as their sizes, free space, and status will appear. Click **Edit** to set the log and location for saving the video recordings.



3. Click the target drive first and then **Settings**. In "Advanced Settings" dialogue, "General" tab, click **Check**.



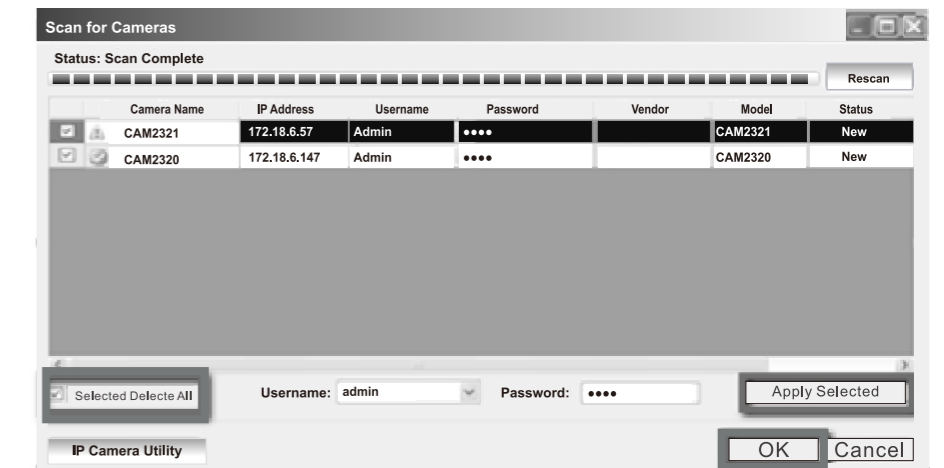
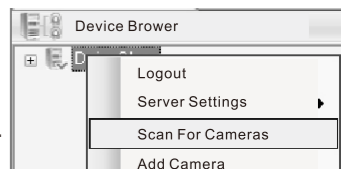
4. Choose the RAID level, and then click **Create Logical Drive** to create the RAID configuration.

4 Adding Network Camera to the Server

Cameras can be added to the Server in two ways: via an automatic scan or by manually inputting the camera information.

To begin an automatic scan for cameras:

1. Right-click the Server entry and select **Scan for Cameras**. The cameras that are added to the Server will be displayed. To add a camera manually, select **Add Camera** menu.
2. To add a camera to the system, check the box by the camera entry. Enter the username and password, and press **Apply Selected**. Click **OK** to add the selected camera to the Server.



5 Setting up Live View

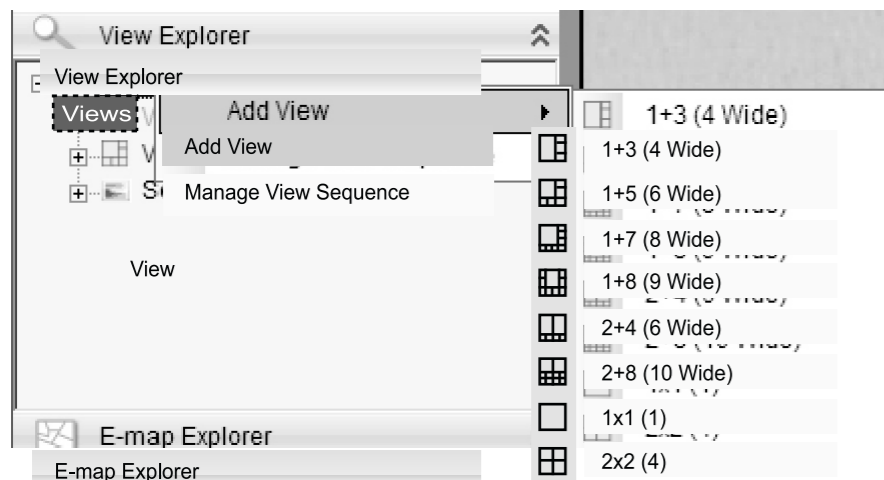
An important part of monitoring your surveillance network is to have the right views so that you will have the optimum viewing angle to discern a situation.

The default view setting is 3x3.



You can also add a customized view to the VMS Client:

1. Right click on **Views > Add View** in the View Explorer window of the VMS, and choose the type of view that you wish to add. The software responds by placing a blank template in the main viewing area.

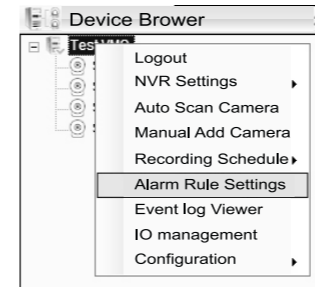


2. From the Device Browser window, you can click and drag each camera into separate frames. The camera output will be displayed in the frame.

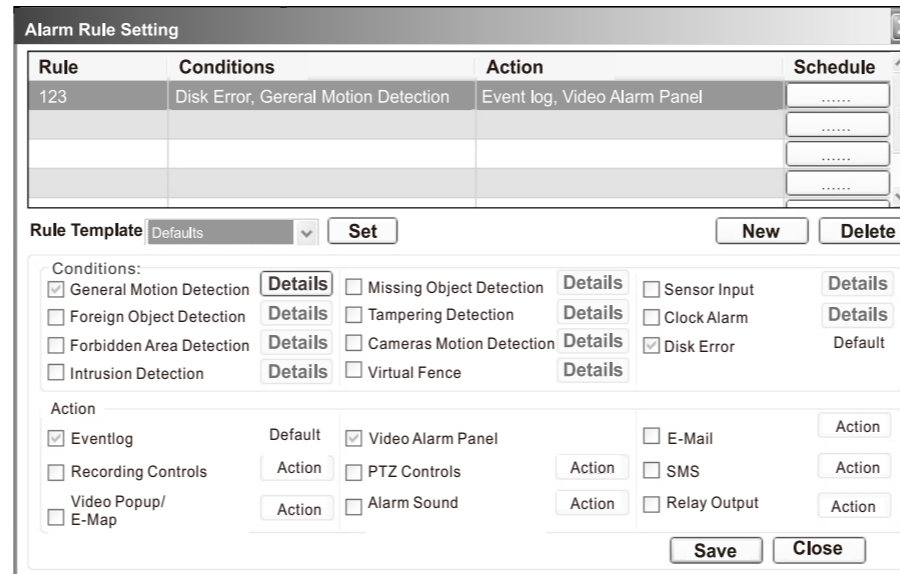
Note: Dragging a camera into a frame that already has a camera assigned will cause the frame to be reassigned to the new camera.

6 Alarm Rule Settings

VMS Client provides robust alarm handling features. To access these features, right click the Server entry and then highlight and click **Alarm Rule Settings** option.



You can combine the alarm trigger conditions with action items such as event notification, video recording, and/or camera movements. Multiple alarm rules can be created using the following elements:



1. **Rule:** A short description. For example, "east-fence intrusion detection" or "front entrance access control."
2. **Condition:** Specifies triggering conditions such as Motion/Video Loss/Sensor Input/Clock Alarm, etc.
3. **Action:** Specifies the action to take when the alarm is triggered.
4. **Schedule:** Allows the user to schedule the application of specific alarm rules. This is useful in cases such as applying rules to non-office hours.

Adding an Alarm Rule

1. Click the **New** button.
2. Enter a short description for the new rule in the **Add Rule** field.
3. Choose conditions and actions. Click the button in the alarm field to set up a schedule for the rule.
4. Click the **Save** button to save the rule.

7 SANWatch Installation

Installing SANWatch

If you connect the Eonstor DS RAID subsystem through iSCSI, please install SANWatch for storage management.

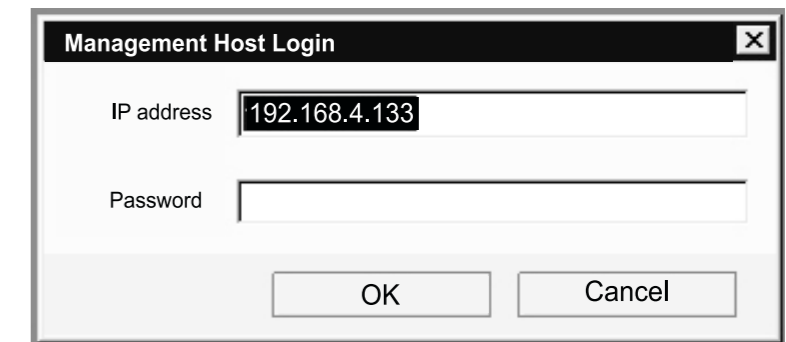
Note: Only **Windows Platform** is introduced in this section. For Linux, Solaris and Mac users, please refer to SANWatch User Manual for more details.

1. Double click **Setup.exe** in **C:\SANwatch**. An auto-run screen provides a hot link to the Windows Installer program. Click on **Windows Platform**.
2. Install the JAVA-based GUI SANWatch main program. Choose **Full Setup (single server)** and follow the instructions to start the installation.
3. Restart your system after the installation is complete.

Activating SANWatch Commander

1. Double click the desktop shortcut or select **Start > Programs > Infortrend > SANWatch** from Windows Start Menu to start the software.

2. The **Management Host Login** window will prompt.



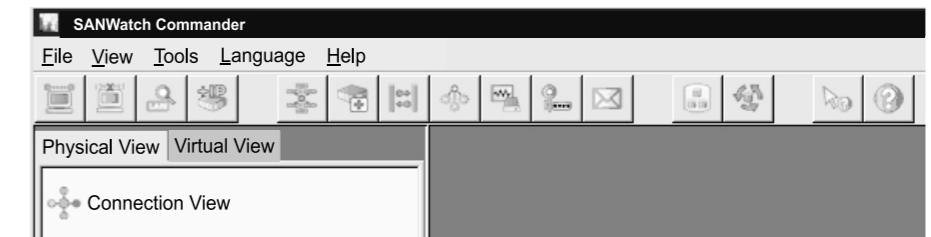
IP address: Enter the IP Address of the NVR system.

Password: Enter the login password. **The default setting is root.**

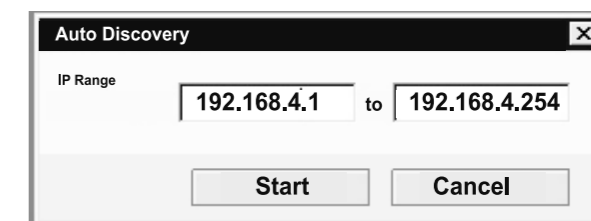
Click **OK** after the address and password are entered.

3. If you login using the default password, root, a warning message will appear, asking you to change the password.

4. SANWatch Commander will appear.



5. For the first time login, you will be required to assign a range of IP address for your RAID subsystem(s). The **Auto Discovery** function will scan for every connected RAID arrays. Specify the "from" and "to" addresses in the IP range fields. Click **Start** to scan the network. Searching for the subsystem(s) might take a few minutes or more. Once the scan is finished, a message will prompt. Click **OK** to proceed.



Note: You can also get the IP address for every RAID subsystem connected by long pressing the ENT key on its LCD panel. Please refer to the software manual that came with your RAID subsystem(s) for more details.

6. When completed, all storage subsystem(s) within the IP address range will appear in the side bar.



RAID Configurations through SANWatch Storage Manager

The SANWatch Storage Manager allows you to do subsystem configurations.

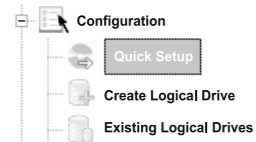
1. In SANWatch Commander sidebar (Connection View), select the subsystem you want to configure.
2. Click the Storage Manager icon.



3. Choose **Configuration** for the user name and enter the password (the password is not needed in default).
Click **Connect**. The Storage Manager will appear.

A dialog box for connecting to the Storage Manager. It features a checkbox for "Enable SSL" which is checked. Below it is a "User Name" dropdown menu with "Configuration" selected. A "Password" text input field is empty. At the bottom, there are two buttons: "Connect" and "Cancel".

4. Select **Device > Configuration > Quick Setup** from the sidebar. The Quick Setup window will appear.



Follow the instructions to create logical drives.

Note: Please refer to SANWatch User Manual for more details.

System Event Notifications

In SANWatch, the Notification Manager module collects the event status and sends them to the user through various channels.

1. Click the Notification Manager icon in SANWatch Commander sidebar.



The Notification Manager will appear in the main window. SNMP, E-mail, Broadcasting, Fax, MSN and SMS notification receivers can be set by clicking the corresponding icons.



Note: Please refer to SANWatch User Manual for more details.