



XN3002T Hardware Owner's Manual

QSAN Technology, Inc. www.qsan.com

© Copyright 2018 QSAN Technology, Inc. All rights reserved.

No part of this document may be reproduced or transmitted without written permission from QSAN Technology, Inc.



Edition 1.1 (October 2018)

This edition applies to QSAN XCubeNAS XN3002T NAS storage systems. QSAN believes the information in this publication is accurate as of its publication date. The information is subject to change without notice.

Trademarks

QSAN, the QSAN logo, XCubeNAS, and QSAN.com are trademarks or registered trademarks of QSAN Technology, Inc.

Intel, Xeon, Pentium, Core, Celeron and Intel Inside logo are trademarks of Intel Corporation in the United States and other countries.

Other trademarks and trade names used in this document to refer to either the entities claiming the marks and names or their products are the property of their respective owners.

Notices

The information contained in this manual has been reviewed for accuracy. It may include typographical errors or technical inaccuracies. Changes are made to the document periodically. These changes will be incorporated in new editions of the publication. QSAN may make improvements or changes in the products. All features, functionality, and product specifications are subject to change without prior notice or obligation. All statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products.

All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

Regulatory Statements

CE Statement

This device has been shown to be in compliance with and was tested in accordance with the measurement procedures specified in the Standards and Specifications listed below.

Technical Standard: EMC DIRECTIVE 2014/30/EU Class B
 (EN55032 / EN55024)

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B 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 residential installation and used in accordance with the instruction manual may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

Notice: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equivalent.

VCCI Statement

この装置は、クラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

VCCI - B

KCC Statement

B급 기기 (가정용 방송통신기자재)

이 기기는 가정용 (B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

Safety Warnings

1. The XCubeNAS can operate normally in the temperature of 0°C~40°C (31.99 ~ 103.99°F). Please make sure the environment is well-ventilated.
2. The power cord and devices connected to the XCubeNAS must provide a correct supply voltage (100-240 Vac, 50-60Hz, 2.0A; 12Vdc, 5.0A).
3. Do not place the XCubeNAS in direct sunlight or near chemicals. Make sure the temperature and humidity of the environment are in the optimized level.
4. Place the product right side up at all times.
5. Unplug the power cord and all connected cables before cleaning. Wipe the XCubeNAS with a dry towel. Do not use chemical or aerosol to clean the NAS.
6. Do not place any objects on the XCubeNAS for the server's normal operation and to avoid overheating.
7. Use the screws provided in the product package to lock the hard disks in the XCubeNAS when installing hard disks for proper operation.
8. Do not place the XCubeNAS near any liquid.
9. Do not place the XCubeNAS on any uneven surface to avoid falling off and damage.
10. Make sure the voltage is correct in the location where the XCubeNAS is installed. Contact the distributor or the local power supply company for the information.
11. Do not place any object on the power cord.
12. Do not attempt to repair the XCubeNAS in any occasions. Improper disassembly of the product may expose the users to electric shock or other risks. For any inquiries, please contact the distributor.



CAUTION: (English)

Replacing incorrect type of battery will have the risk of explosion. Please replace the same or equivalent type battery use and dispose of used batteries appropriately.



INFORMATION:

QSAN provides a limited warranty for QSAN-branded hardware products:

- System hardware and peripheral product (s): **2** years limited warranty from date of original purchase.

For more detail warranty policy, please refer to QSAN official website:

<https://www.qsan.com/en/warranty.php>

Table of Contents

Notices	i
Regulatory Statements	i
Safety Warnings	iii
Preface	1
About This Manual	1
Related Documents	1
Technical Support	2
Information, Tip and Caution	2
Conventions	3
1. Overview	4
1.1. Package Contents	4
1.2. XN3002T Product Overview	5
2. Hardware Overview	6
2.1. Front and Rear Panel	6
2.2. System Disk Drive Numbering	7
2.3. Disk Drive Form Factors	8
3. Install the System Hardware	9
3.1. Install the Disk Drive in the Tray	9
3.2. Upgrade Memory	16
3.3. Connect the System to the Host	18
3.4. Start Up Your System	19
4. Discover and Install QSM	21
5. Restart/Shutdown/Logout QSM	24
6. Reset to Default	26
7. LED Indicator Table	29
8. Buzzer Indicator Table	31
9. Support and Other Resources	32
9.1. Getting Technical Support	32
9.2. Documentation Feedback	33
Appendix	34
End-User License Agreement (EULA)	34

Preface

About This Manual

This manual provides technical guidance for designing and implementing QSAN XN3002T system, and it is intended for use by system administrators, NAS designers, storage consultants, or anyone who has purchased this product and is familiar with server and computer network, network administration, storage system installation and configuration, network attached storage management and relevant protocols.

**CAUTION:**

Do NOT attempt to service, change, disassemble or upgrade the equipment's components by yourself. Doing so may violate your warranty and expose you to electric shock. Refer all servicing to authorized service personnel. Please always follow the instructions in this owner's manual.

Related Documents

There are related documents which can be downloaded from the website.

- XCubeNAS QIG (Quick Installation Guide): <https://www.qsan.com/en/download.php>
- Compatibility Matrix: <https://www.qsan.com/en/download.php>
- XCubeNAS QSM user manual: <https://www.qsan.com/en/download.php>
- Online FAQ: <https://www.qsan.com/en/faq.php>
- White Papers: <https://www.qsan.com/en/download.php>
- Application Notes: <https://www.qsan.com/en/download.php>

Technical Support

Do you have any questions or need help troubleshooting a problem? Please contact QSAN Support, we will reply to you as soon as possible.

- Via the Web: http://www.qsan.com/en/contact_support.php
- Via Telephone: +886-2-7720-2118 extension 136
(Service hours: 09:30 - 18:00, Monday - Friday, UTC+8)
- Via Skype Chat, Skype ID: qsan.support
(Service hours: 09:30 - 02:00, Monday - Friday, UTC+8, Summertime: 09:30 - 01:00)
- Via Email: support@qsan.com

Information, Tip and Caution

This manual uses the following symbols to draw attention to important safety and operational information.

**INFORMATION:**

INFORMATION provides useful knowledge, definition, or terminology for reference.

**TIP:**

TIP provides helpful suggestions for performing tasks more effectively.

**CAUTION:**

CAUTION indicates that failure to take a specified action could result in damage to the system.

Conventions

The following table describes the typographic conventions used in this manual.

Conventions	Description
Bold	Indicates text on a window, other than the window title, including menus, menu options, buttons, fields, and labels. Example: Click the OK button.
<i><Italic></i>	Indicates a variable, which is a placeholder for actual text provided by the user or system. Example: copy <i><source-file></i> <i><target-file></i> .
[] square brackets	Indicates optional values. Example: [a b] indicates that you can choose a, b, or nothing.
{ } braces	Indicates required or expected values. Example: { a b } indicates that you must choose either a or b.
vertical bar	Indicates that you have a choice between two or more options or arguments.
/ Slash	Indicates all options or arguments.
underline	Indicates the default value. Example: [<u>a</u> b]

1. Overview

Thank you for purchasing QSAN XN3002T. The QSAN XN3002T is a high-performance storage solution that features high availability, reliability, flexibility and easy management. Before setting up your new XN3002T, please check the package contents to verify those items below. Besides, make sure to read the safety instructions carefully.

1.1. Package Contents

Main Unit x1		AC Power cord x1	
			
		65W Adapter x1	
			
RJ45 Cable x2	Lock Key x1	Screws for 2.5" Drives x8	
			

1.2. XN3002T Product Overview

QSAN XN3002T is a simple, solid and stylish storage device, the device is composed of system hardware and the QSM operating system. The system hardware specifies breakthrough 2+1(3.5" LFF¹ x2 + 2.5" SFF² x1) design that can benefit every workgroup and SMB user. Following is the feature list of XN3002T:

- 2+1 (3.5" LFF x2 + 2.5" SFF x1) exclusive design.
- With Intel® Celeron® 1.1GHz Quad-Core Processor.
- 4GB DDR3L SO-DIMM RAM that can be expanded up to 8GB.
- Built-in 1GbE Ethernet LAN ports x2.
- Exclusive service door for a memory upgrade.
- Screw-less design for HDD / SSD installation.

Following tables are hardware specifications of XN3002T.

Model Name	XN3002T
Form Factor	Tower, 2bay (LFF)+1 (SFF)
CPU	Intel® Celeron® 1.1GHz Quad-Core Processor
RAM	4GB DDR3L SO-DIMM (Max 8GB)
USB	USB 3.0 x3 (Front x1, Rear x2) USB 2.0 x2 (Rear x2)
Flash	8GB USB DOM
HDMI	1
Tray type	3.5" HDD tray with key lock x2 2.5" SSD tray x1
No. of Internal Hard Disks	2 (LFF disk) + 1 (SFF disk)
Max. Raw Capacity	14TB x2 + 2TB = 30 TB (LFF=14TB, SFF= 2TB)
Hard Drive Interface	SATA 6Gb/s (backward compatible with SATA 3Gb/s)
Ethernet Ports	1GbE LAN (RJ45) x2
PSU	External Power Adapter, 65W
Dimension (H x W x D) mm	160 x 119 x 216
Agency Certifications	FCC Class B • CE Class B • BSMI Class B • VCCI Class B • RCM Class B • KCC Class B

Note: Model specifications are subject to change without notice. Please refer to <http://www.qsan.com> for the latest information.

¹ LFF : Large Form Factor / 3.5" disk drive

² SFF : Small Form Factor / 2.5" disk drive

2. Hardware Overview

This chapter outlines the key hardware components of the XN3002T system. After reading this chapter, you will have a basic understanding of each XN3002T hardware component and give you the ability to configure and operate your system successfully. Following is the key components of XN3002T:

- Front and Rear Panel
- System Disk Drive Numbering
- Disk Drive Form Factors

2.1. Front and Rear Panel

The figure below contains the information about buttons and indicators modules.

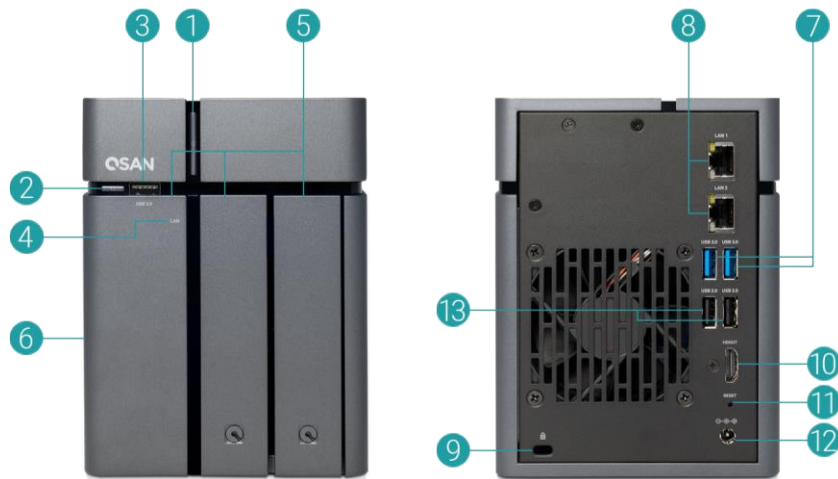


Table 2-1 Descriptions of System Controls and Indicators.

Number	Location	Description
1	Front	Power button / LED Indicator for Power and System Status
2		USB copy button / LED Indicator for USB Status
3		USB 3.0 Port
4		LED Indicator for LAN Status
5		LED Indicator for HDD and SSD Status
6		Service Door
7	Back	USB 3.0 Port
8		Gigabit LAN Port
9		Kensington Lock
10		HDMI Port
11		Reset to Factory Default Button
12		Power Port
13		USB 2.0 Port

For a better understanding of the related colors and behaviors of each indicator on the front panel, please refer to the chapter 7. [LED Indicator Table](#) section.

2.2. System Disk Drive Numbering

The figure illustrates the XN3002T system disk drive numbering.



2.3. Disk Drive Form Factors

QSAN has tested and approved the popular SATA HDDs and SSD models available on the market, you have the highest flexibility to choose the most advanced HDDs or SSD available from the manufacturers or purchase the best cost/performance SATA HDDs or SSD from the market, it will significantly reduce your IT infrastructure investment cost. Please refer to the following website for the compatibility of HDD and SSD:

<https://www.qsan.com/en/download.php>

Table 2-2 Supported Disk Drive Types

Form Factor	Number of Trays	Supported Drive Type
Type1: 3.5" LFF Tray	2	3.5"/2.5" SATA HDD
		2.5" SATA SSD
Type2: 2.5" SFF Tray	1	2.5" SATA SSD



TIP:

1. 2.5" SATA drives can also be installed on 3.5" LFF trays.
2. If you would like to maximize volume space with RAID being set, we recommend that all your installed drives be the same size.

3. Install the System Hardware

This chapter will show you the procedure of the XCubeNAS hardware installation and initial configuration.

3.1. Install the Disk Drive in the Tray

3.1.1. Tools and Parts for Drive Installation

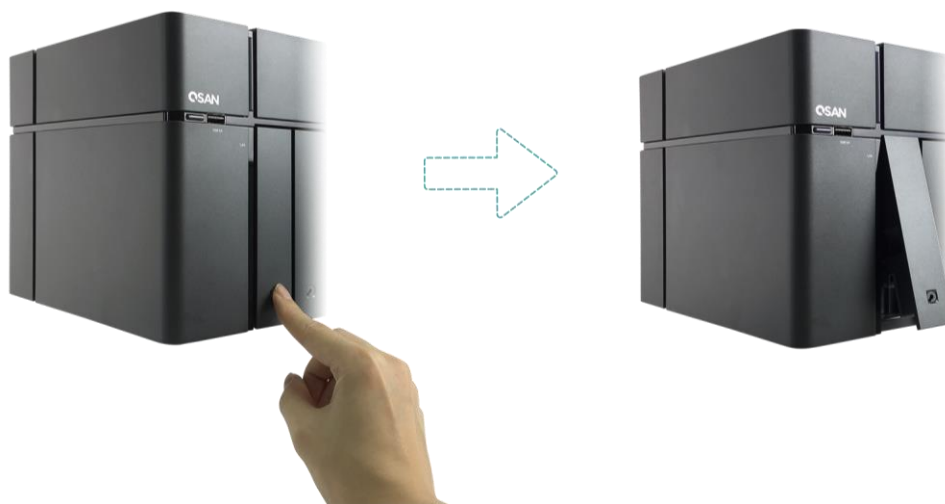
- At least one 3.5" or 2.5" SATA drive (please visit <http://www.qsan.com> for compatible drive models).
- A screwdriver (Phillips #1, for installing 2.5" SATA drive on LFF only).

**CAUTION:**

Please ensure that there is no data on the disk to prevent important data being formatted.

3.1.2. Install the Disk Drive (LFF)

1. Open the drive tray.
 - ① Push to release the carrier handle.

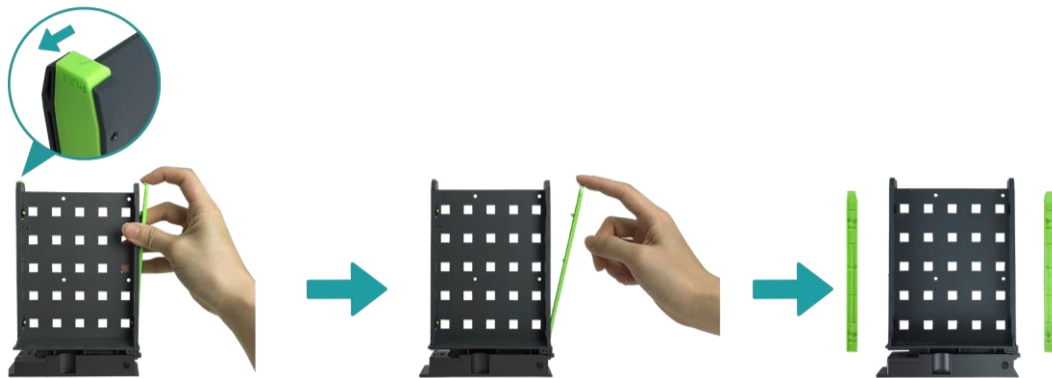


- ② Hold the carrier handle and pull out the disk drive tray, repeat the steps above to remove other disk drive tray.

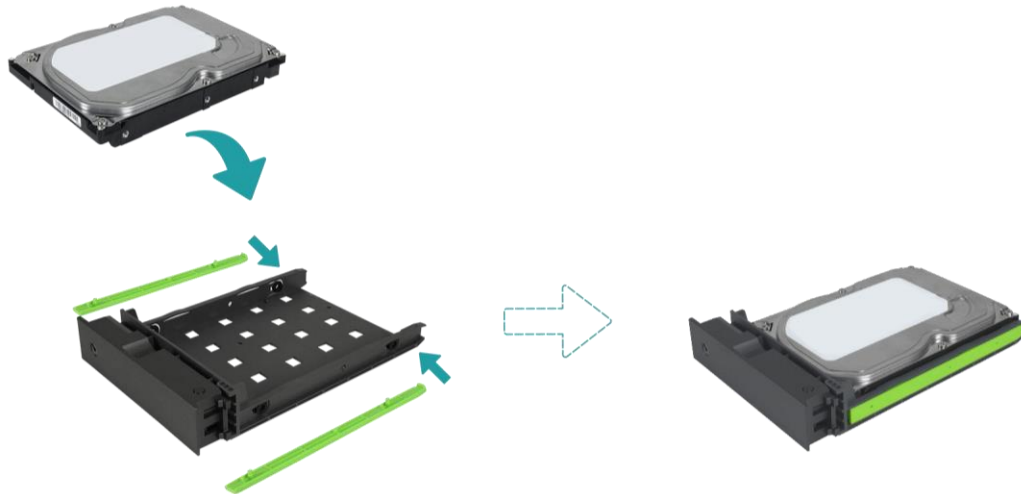


2. Install a 3.5" HDD into a LFF tray.

- ① Remove both brackets from each side of the tray by following the arrow direction shown on the bracket (please see the figure below).

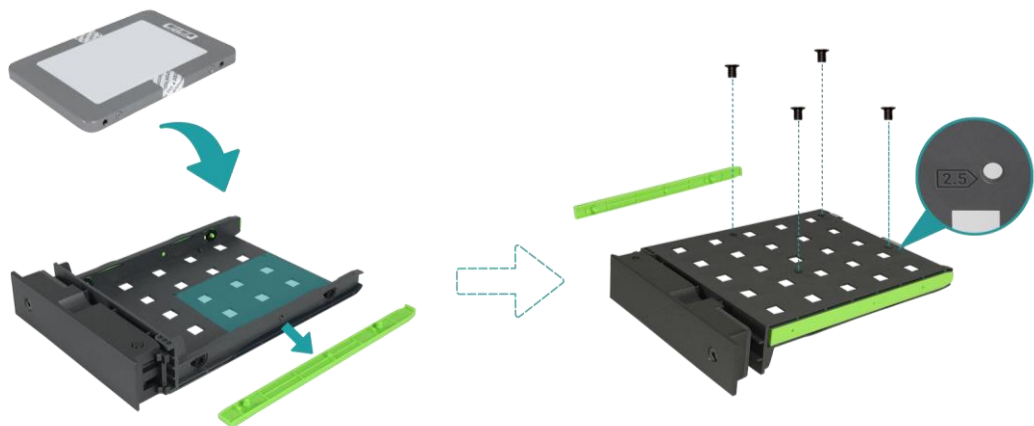


- ② Place the drive on the tray and clip-in both brackets to tighten the disk drive to the tray.



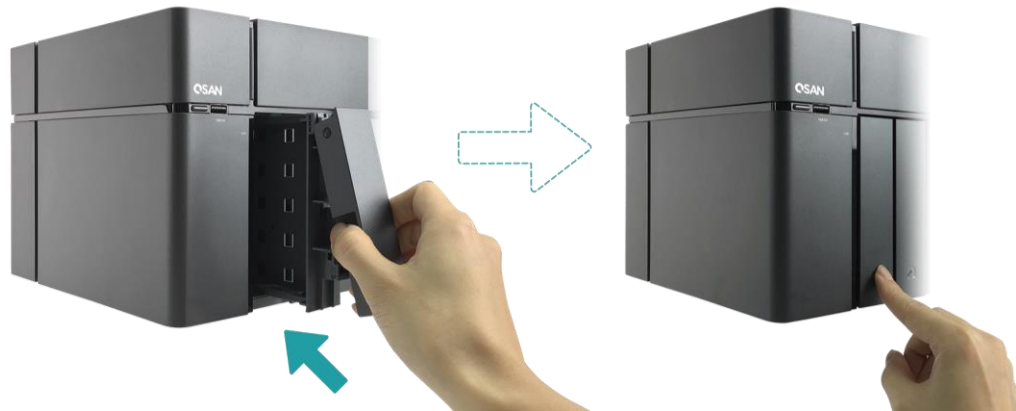
3. Install a 2.5" SSD into a LFF tray.

- ① Only remove the bracket next to the 2.5" screw holes (they are marked on the bottom of the tray).
 ② Place the drive in the blue area (shown below) of the tray.
 ③ Turn the tray upside down and secure the drive from the bottom of the tray with four screws provided in the accessory box.



4. Install a LFF tray into the XCubeNAS.

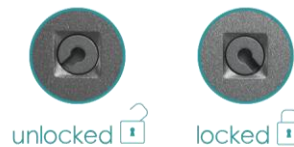
- ① Insert the loaded drive tray into the empty drive bay all the way to the back until the carrier handle can be closed.



TIP:

Make sure the tray is pushed in all the way, otherwise the drive might not function properly.

5. Repeat the steps above to install all prepared drives.
6. Lock/unlock the LFF tray.
 - ① Use the key provided in the accessory box to lock/unlock the carrier handle lock.



3.1.3. Install the Disk Drive (SFF)

1. Open the service door and pull out the SFF tray.

① Use the key provided in the accessory box to press the door button.



② Remove the service door.



2. Install a 2.5" SSD into a SFF tray.

① Hold down the release button and pull out the disk drive tray from the XCubeNAS.

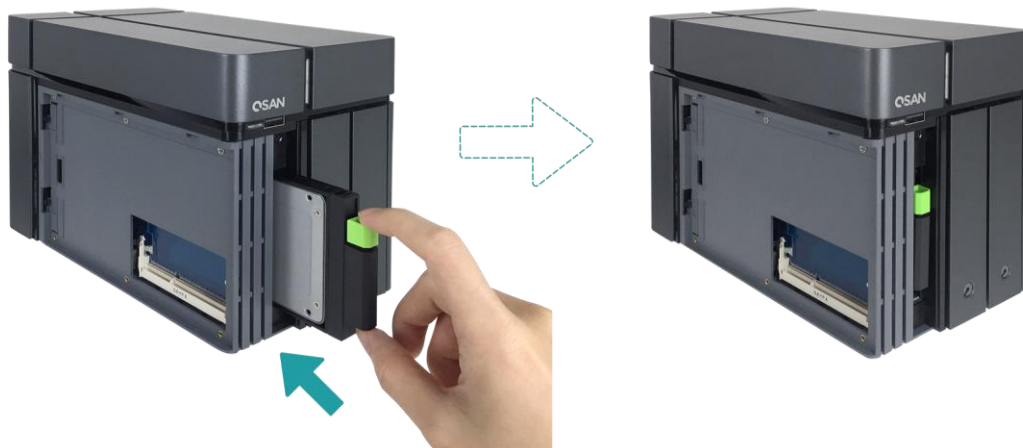


- ② Follow the mark shown on the side of the SFF tray and place the SSD with its label side facing accordingly.
- ③ Secure the disk drive by making sure the four pins on the side of the SFF tray is clutched to the disk drive.



3. Install a SFF tray into the system.

- ① Insert the loaded drive tray into the empty drive bay all the way to the back until you hear a “click” sound.



4. Close the service door.

- ① Follow the steps below by closing the service door from the front.
- ② Once the door is clutched to the front of the NAS, close the door until you hear a “click” sound.



3.2. Upgrade Memory



CAUTION:

- The following instructions should only be performed by an authorized and trained technician. Strictly adhere to the instructions to install a RAM module on the NAS.
- Before you start, please ensure that you turn off the NAS, disconnect the power adapter, network cable(s), and also remove any other device/cable that is attached to the NAS.

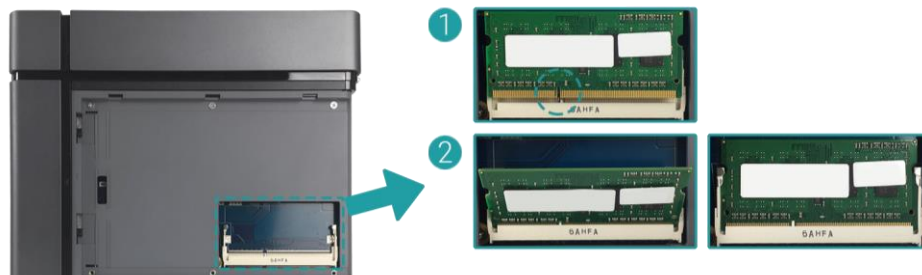
XN3002T is installed with a 4GB DDR3L memory module by default. If you want to expand the memory capacity, please follow the steps as illustrated below:

1. Shutdown your XCubeNAS and disconnect power adapter, network cable(s) or any other device/cable that is attached to your system to prevent any possible damages.
2. Use the key provided in the accessory box to press the door button and remove the service door.



3. Installing the memory module

- ① Align the notch on the gold edge of the module.
- ② Slide the memory module into the slot at a 45-degree angle. Press the memory module down until it clips into place. Ensure the memory module sits properly with the retention clips in place.



The following table is the suggested installation combination for memory.

Table 3-1 The Suggested Installation Combination for Memory

Slot #1	Slot #2	Total Memory
4GB	-	4GB (Default)
4GB	4GB	8GB



CAUTION:

To ensure the system stability, you MUST install genuine QSAN memory modules for system memory size expansion.



INFORMATION:

- (1) If you want to purchase the optional memory, please contact your nearest local reseller or visit QSAN official website:
<https://qsan.com/location>
 - (2) See the recommended memory module from the QSAN official website: <https://www.qsan.com/en/download.php>
-

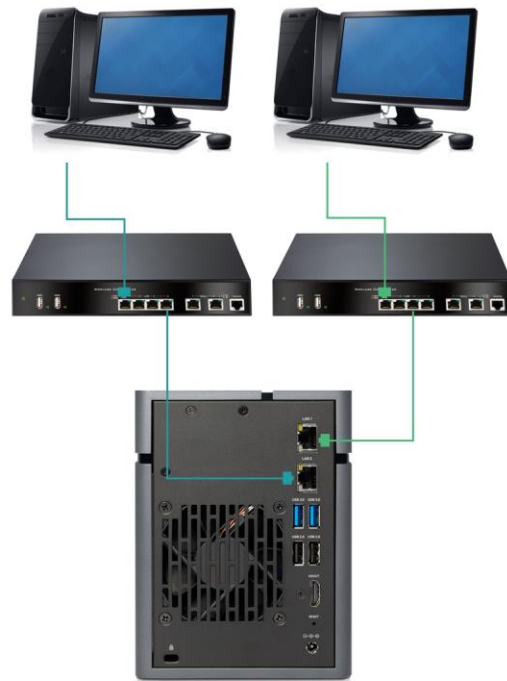
3.3. Connect the System to the Host

XN3002T has two onboard 1Gbps LAN ports for host connections. You can learn more about the path configuration in cabling for the XN3002T by following images:

a. One LAN connection



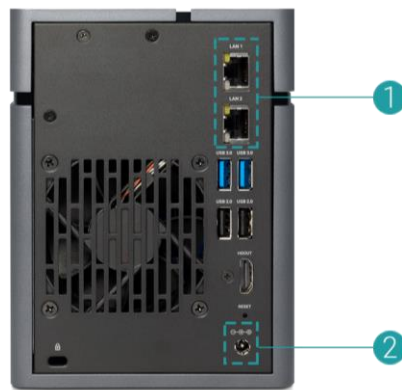
b. Multiple LAN connections



3.4. Start Up Your System

Before you power on your XCubeNAS for the first time, please make sure the following tasks are done:

1. Use the LAN cable to connect the XCubeNAS to your switch, router, or hub.
2. Connect the AC adapter to the power port of the XCubeNAS. Connect one end of the AC power cord to the AC power adapter, and the other to the power outlet.



3. Press the power button to turn on your XCubeNAS.



Your XCubeNAS is now online and detectable from a network computer.

**INFORMATION:**

The power cord rating is the minimum requirement. The rating of the power cord that you purchase must equal to or be higher than the minimum requirement to ensure the system safety and reliability.

**INFORMATION:**

The Following are the operational conditions for XN3002T:

Temperature:

- Operating temperature 0 to 40°C
- Shipping temperature -10°C to 50°C

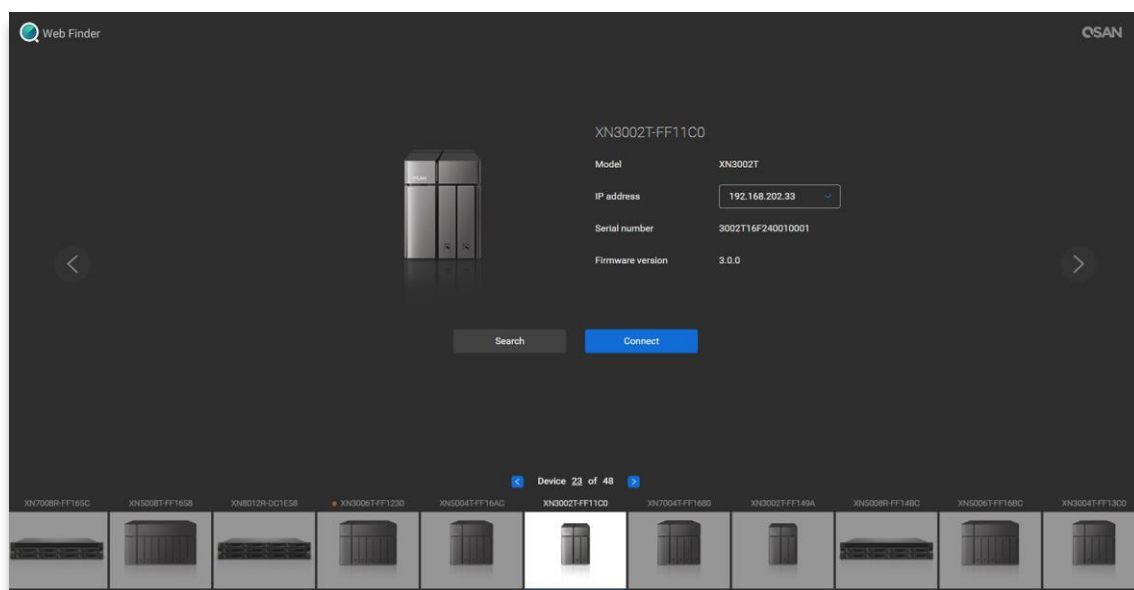
Relative Humidity:

- Operating Relative Humidity 20% to 80% non-condensing
 - Non-Operating Relative Humidity 10% to 90%
-

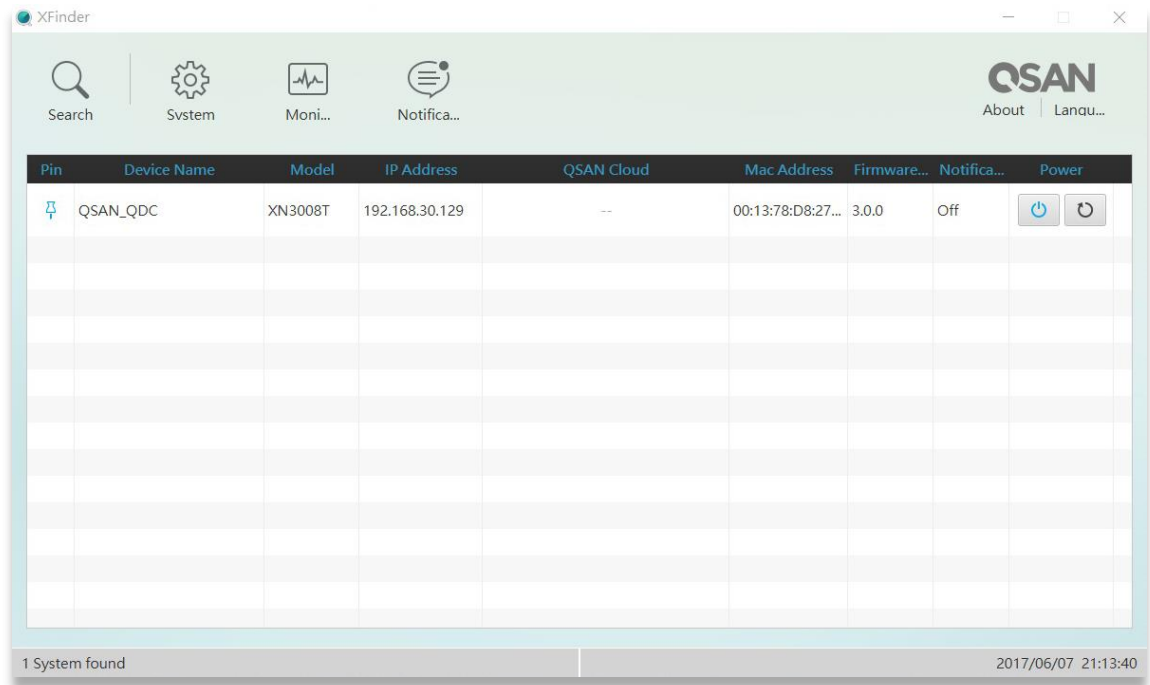
4. Discover and Install QSM

After hardware setup is finished, the next step is to discover the system on the network and start the initial configuration. To discover and install the QSAN Storage Manager (QSM), please follow the steps below:

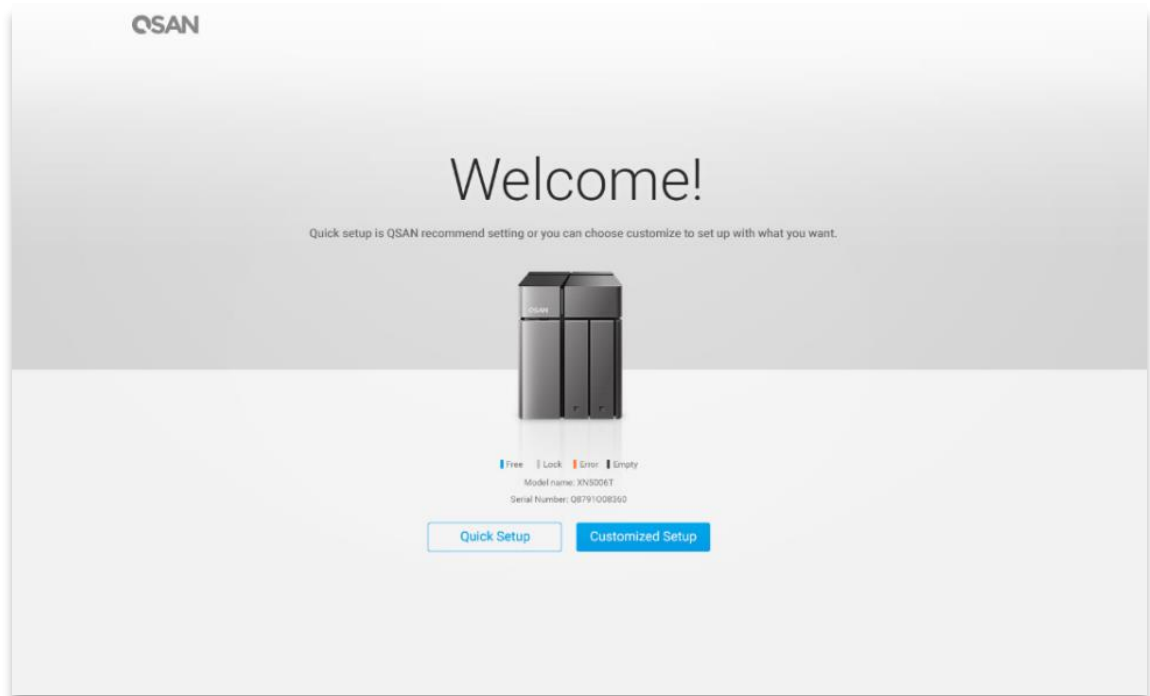
1. Power on the XCubeNAS.
2. Open a web browser on your computer connected to the same local area network as XCubeNAS, and use either of the following methods on the browser:
 - a. Use Web Finder: find.qsan.com (Please make sure the XCubeNAS has internet access ability before using the Web Finder).



- b. If your XCubeNAS cannot be connected to the internet, please try downloading and installing XFinder application from the QSAN website to your PC:
<https://www.qsan.com/zh-tw/download.php>

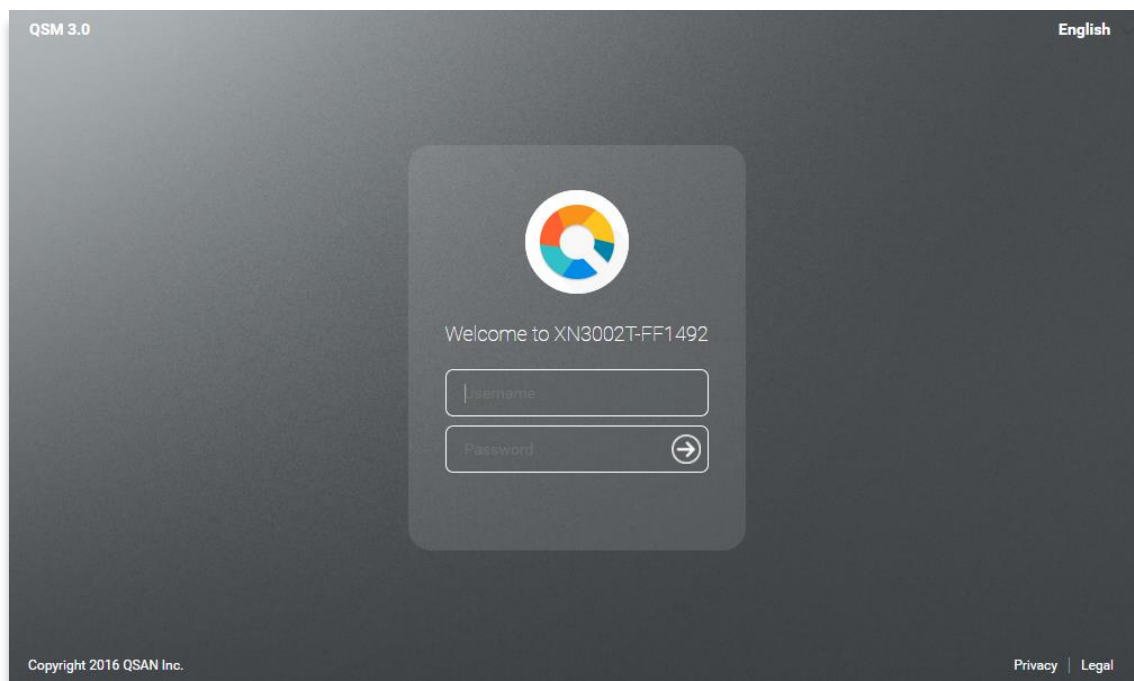


3. Click "**Connect**" on the Web Finder or double click on your XCubeNAS on the XFinder, the welcome page will be launched on your web browser.



4. Click **Quick Setup** or **Custom Setup** to start the setup process and follow the onscreen instructions.

5. If you accidentally leave the quick install page, you can always return to the setup page by go through the steps above from step 1 again.
6. After quick setup is finished, login to the QSM as “**admin**” (default account name) with the password you set on former instructions.

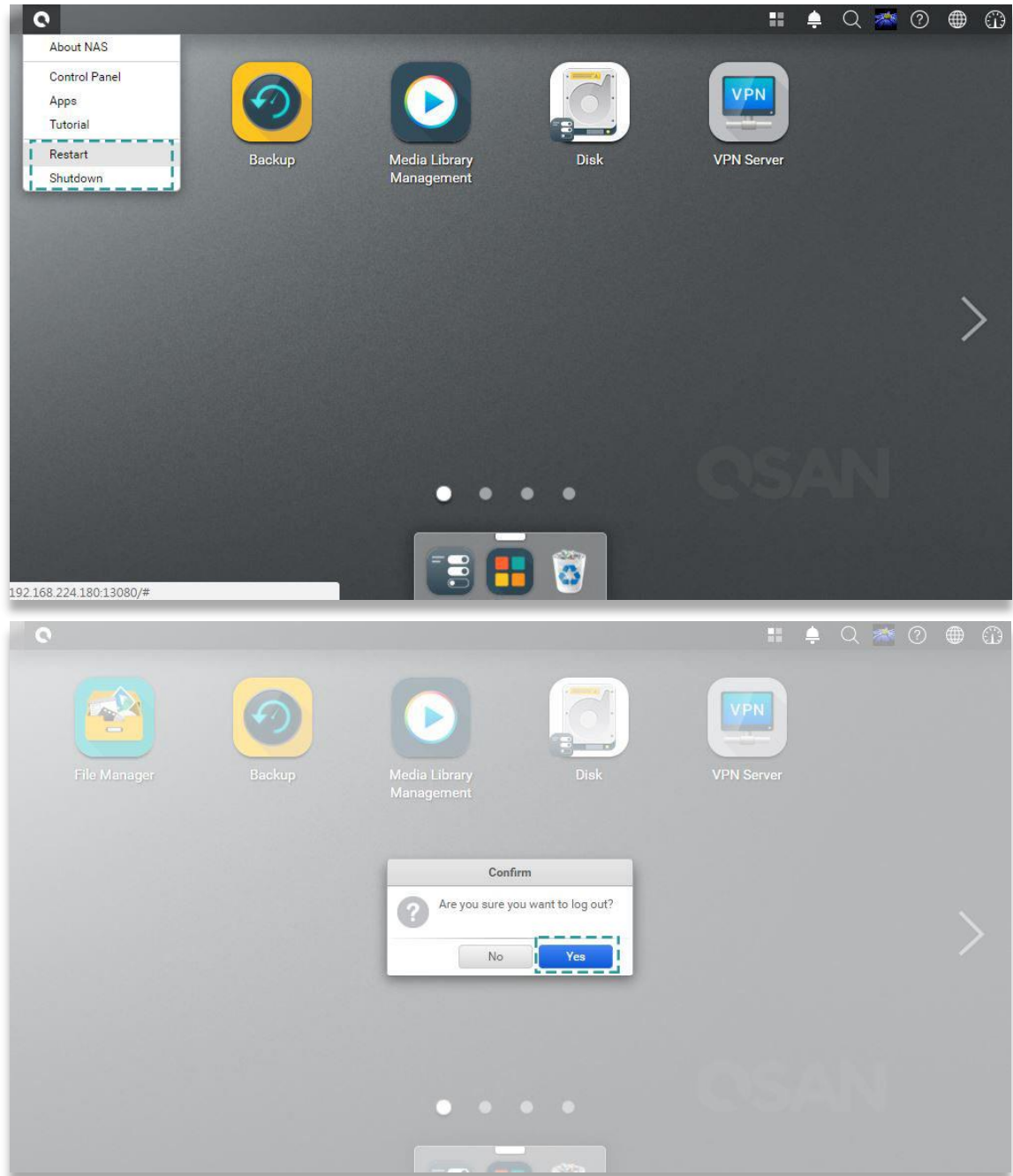
**INFORMATION:**

1. The XCubeNAS must be connected to the Internet to install QSM with Web Finder.
 2. Both the XCubeNAS and your PC must be on the same local network.
 3. If you cannot find your XCubeNAS, the default IP address for LAN 1 is 169.254.1.234.
 4. If you expanded your memory earlier on, you can now check to make sure the system recognizes the new memory capacity. You can check the status by following steps:
 - a. Login to QSM as **admin** or a user belongs to the **administrator's** group.
 - b. Find the memory status in **Monitor app** → **Hardware**.
- If your system cannot recognize the expanded memory or failed to start up, please check again and ensure the memory is properly installed.

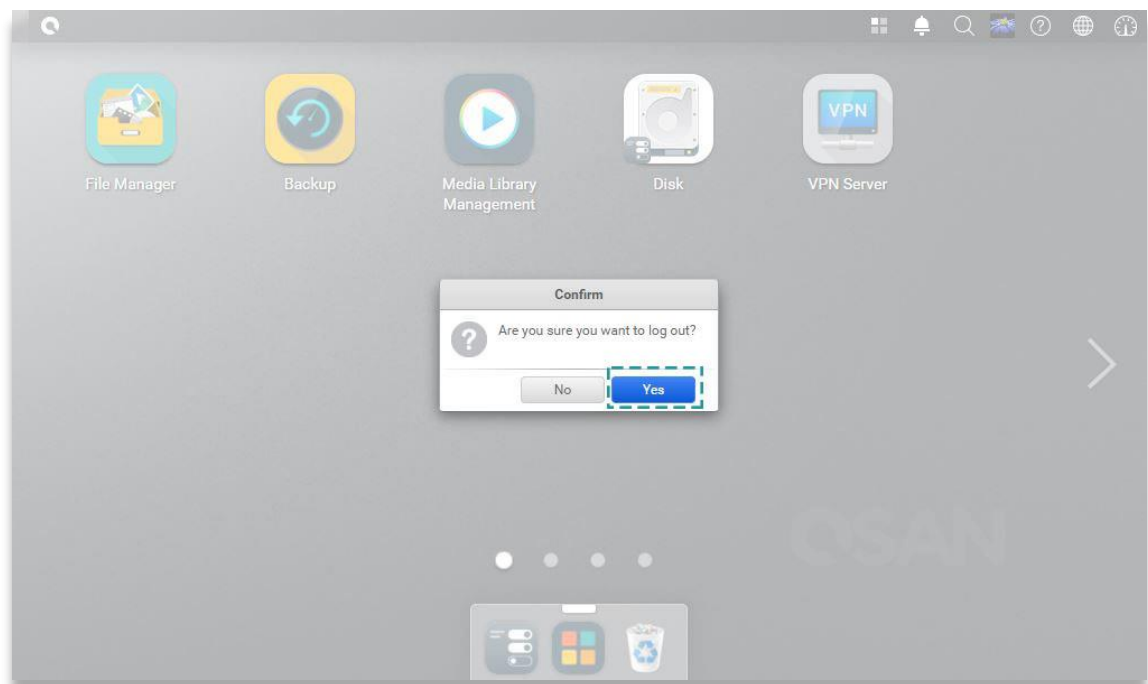
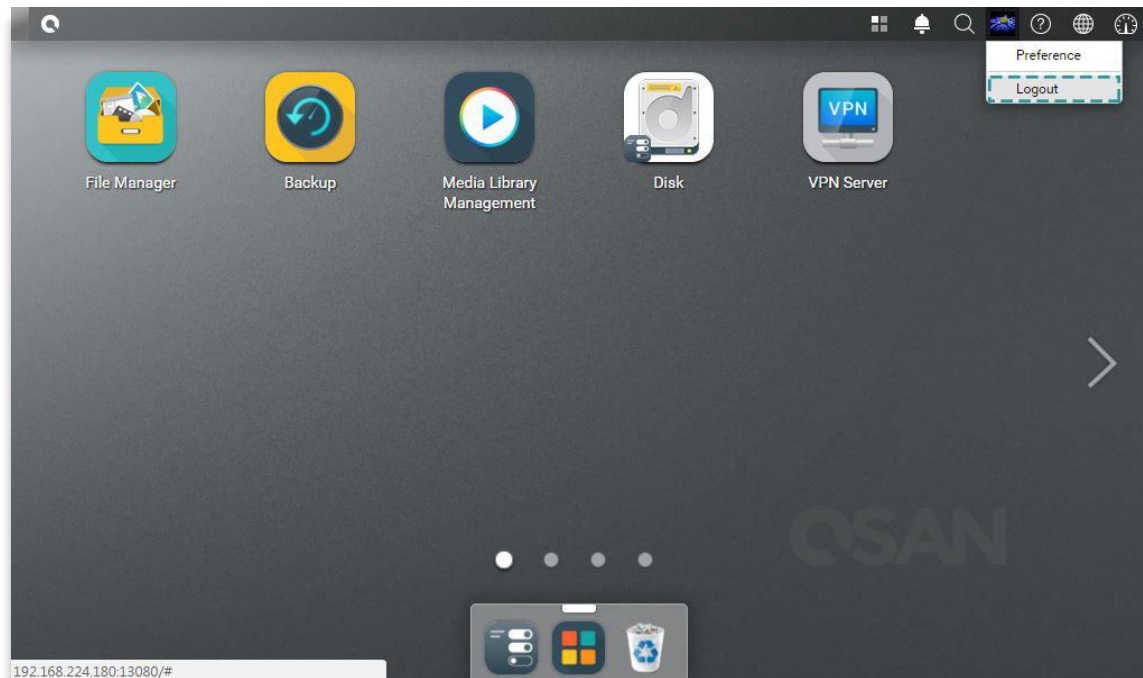
5. Restart/Shutdown/Logout QSM

If you want to restart, shutdown or log out QSM, please follow the steps below:

1. To restart or shutdown QSM, please click on the QSAN logo on the top left corner, then choose the option which you would like to proceed. Click **Yes** button on the confirm window.



- To log out QSM, please click **User Profile** on the top right corner, then choose **Logout**. Click **Yes** button on the confirm window.



6. Reset to Default

If you want to reset XCubeNAS to factory default, there are several options to choose from. Please follow the steps below:

Reset to default by using the reset button on the back of XCubeNAS:



1. Reset network settings: Press and hold the reset button on the rear panel for **3 seconds**, a short beep sound for 1 second will be heard. The administrator password and all the network settings will be reset, the system configuration will result in:
 - Reset Admin password to the default value: 1234.
 - All networking set to "DHCP".
 - All data service ports set to default setting (All data service enable and set to default port).
 - VLAN will be terminated.
 - Vswitch will be deleted.
 - Port trunking will be disabling.
 - After configs are deleted, restart the XCubeNAS.
 - Log out QSAN Cloud.
 - DNS settings.
 - DDNS and UPNP settings.

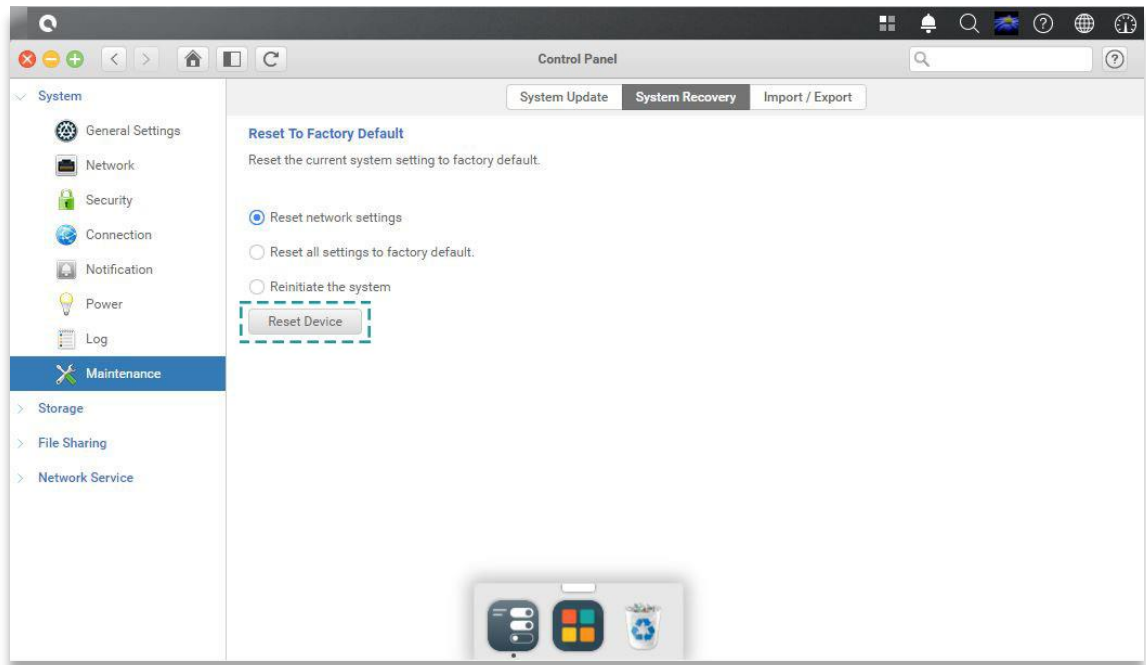
2. Reset all settings: Press and hold the reset button on the rear panel for **10 seconds**, you will hear a short beep sound at the third second and a long beep sound at the tenth second. The operating system (including reset the administrator password and all the network settings) will be reinstalled, the system configuration will result in:

- Reset all network settings to factory default.
- Reset all system settings to factory default.
- All accounts, groups, folder permission, and ACL are deleted.
- Access control lists are all deleted.
- All backup tasks are deleted.
- Cloud sync job delete.
- VPN settings are deleted.
- Web server setting are set to default.
- AntiVirus setting are deleted.
- SQL settings are set to default.
- Media Library index will be deleted.
- After configs are deleted, restart the XCubeNAS.
- Log out QSAN Cloud.

Reset to default through QSM:

You can also reset network setting or all the setting through QSM.

1. Please click **Control Panel → System → Maintenance → System Recovery**. Choose the option which you would like to proceed.
 - a. Reset network settings: The administrator password and all the network settings will be reset.
 - b. Reset all settings to factory default: The operating system (including reset the administrator password and all the network settings) will be reinstalled.
 - c. Reinitiate the system: All settings will return to factory default. The system config and all data will be deleted. The system will restart automatically and return to quick install page.



2. Click the Reset Device button to proceed.

7. LED Indicator Table

XN3002T features the button and indication module on both the front panel and the rear panel. Please refer to the following content for definitions of LED behaviors.



Table 7-1 Descriptions of the System Controls and Indicators LEDs.

Number	Description	Definition
1	USB One Touch Copy Button/ USB Status LED	<p>USB Copy Button</p> <ul style="list-style-type: none"> Press the button one time to start the action defined through UI (Note: USB one touch copy function needs to be enabled through UI first) <p>USB Status LED</p> <ul style="list-style-type: none"> Blue: A front USB device is detected (after the device is mounted). Blue flashes every 0.5 sec: 1) The USB device (connected to the front USB port) is being accessed. 2) The data is being copied to or from the external USB or eSATA device. OFF: No USB device is mounted.
2	Solid State Drive (SSD) LED	<ul style="list-style-type: none"> Blue: The hard disk is attached. Blue flashes: The disk data is being accessed. Amber: A hard drive read/write error occurs. Blue and Amber flashes alternatively: The hard disk is being rebuilt or identify a specific disk drive. OFF: No disk drive is inserted.

3	Power Button/LED	<p>Power Button</p> <ul style="list-style-type: none"> Press the button one time to turn ON or OFF the system power. <p>Power LED</p> <ul style="list-style-type: none"> White: power is ON. White flashes every 0.5 sec: the system is at the stage of starting up or shutting down, or the NAS is not configured. Amber: 1) The system pool has reached its full capacity (100%). 2) The system pool is going to be full (95%). 3) The system fan is out of function. 4) A bad sector is detected on the hard disk drive or hard disk failed. 5) One of the pool is in degraded read-only mode. 6) Hardware self-test error. e.g. abnormal voltage, the temperature is at critical high/low, any cooling fan module failed, any pool failed. White and Amber flash every 0.5 sec alternatively: 1) The system firmware is being updated. 2) RAID rebuilding is in a process. 3) Software control LED indicator. Off: the system shutdown.
4	LAN Status LED	<ul style="list-style-type: none"> Blue: The NAS is connected to the network. Blue flashes: The disk data is being accessed from the network.
5	Disk Drive Status LED	<ul style="list-style-type: none"> Blue: The hard disk is attached. Blue flashes: The disk data is being accessed. Amber: A hard drive read/write error occurs. Blue and Amber flashes alternatively: The hard disk is being rebuilt or identify a specific disk drive. OFF: No disk drive is inserted.
6	LAN Port	<p>Activity/Link:</p> <ul style="list-style-type: none"> Light OFF: No connection. Light ON: Connected to the internet Light flashes: when data is being accessed. <p>Speed:</p> <ul style="list-style-type: none"> Light OFF: Speed less than 10Mbps Light ON: Connected to the internet

8. Buzzer Indicator Table

Number	Beep Sound	No. of Times	Description
1	Short beep (0.5 sec)	1	<ul style="list-style-type: none"> The XCubeNAS is ready (finish start up). The XCubeNAS is being shut down (software shutdown). The system firmware has been updated. Front USB start copy Front USB finish copy USB drive is removed The user starts hard drive rebuilding.
2	Short beep (0.5 sec)	3 times, interval of 0.5 sec	<ul style="list-style-type: none"> The NAS data cannot be copied to the external storage device from the front USB port.
3	Long beep (1.5 sec)	Beep until event finishes, interval of 0.5 sec	<ul style="list-style-type: none"> 1) The system pool has reached its full capacity (100%). 2) The system pool is going to be full (95%). 3) The system fan is out of function. 4) A bad sector is detected on the hard disk drive or hard disk failed. 5) One of the pool is in degraded mode. 6) Hardware self-test error. e.g. PSU failed, abnormal voltage, the temperature is at critical high/low, any cooling fan module failed or removed, any pool failed. 7) Remove hard disk or solid state drive.

Note: If one event has triggered the beep sound, the next event will not trigger the beep sound until the previous event has finished.

Note 2: The beep sound will not be triggered if buzzer function is disabled from the QSM. You can check the error messages through the **Notification Center** on QSM.

9. Support and Other Resources

9.1. Getting Technical Support

After installing your device, locate the serial number on the sticker located on the side of the chassis and register your product at partner.qsan.com/ (End-User Registration). We recommend registering your product in QSAN partner website for firmware updates, document download, and latest news in eDM. To contact QSAN Support, please use the following information.

1. Via the Web: http://www.qsan.com/en/contact_support.php
2. Via Telephone: +886-2-7720-2118 extension 136
(Service hours: 09:30 - 18:00, Monday - Friday, UTC+8)
3. Via Skype Chat, Skype ID: qsan.support
(Service hours: 09:30 - 02:00, Monday - Friday, UTC+8, Summertime: 09:30 - 01:00)
4. Via Email: support@qsan.com

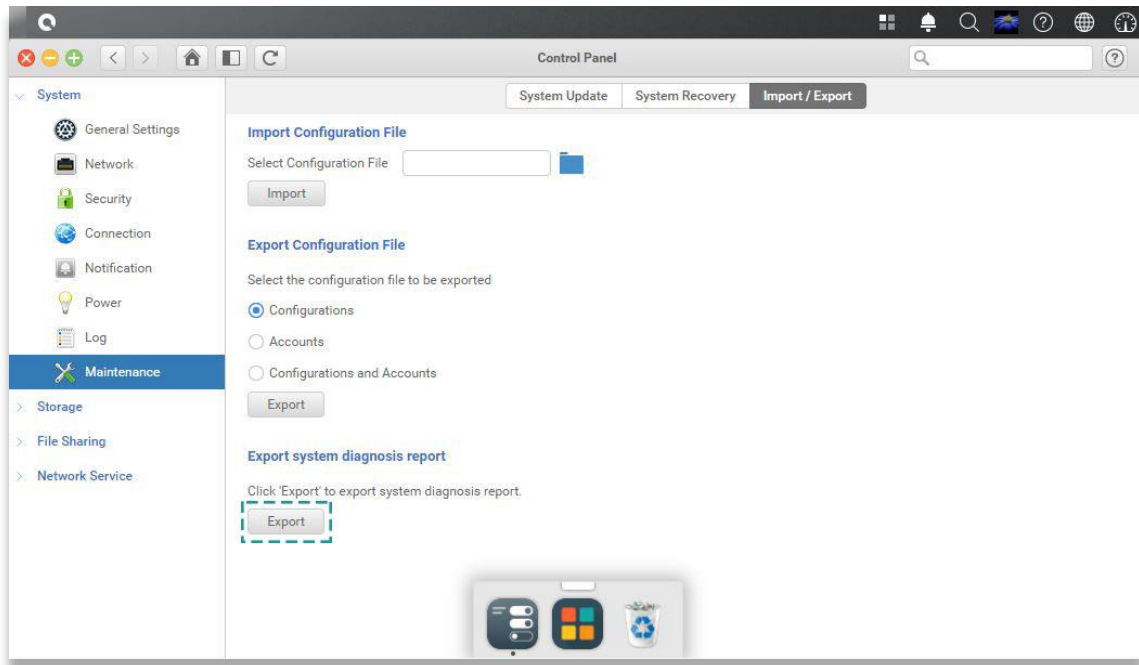
Collect Information for Analysis

1. Product name, model or version, and serial number
2. Firmware version
3. Error messages or screenshot images
4. Product-specific reports and logs
5. Add-on products or components installed
6. Third-party products or components installed

Information for Technical Support

The following system information is necessary for technical support, please refer to following for what and where to get the information of your XN3002T model.

If the technical support requests you to download the service log, please navigate to the QSM UI → **Control Panel** → **System** → **Maintenance** → **Import/Export** → **Export system diagnosis report**, and then click the **Export** button.



9.2. Documentation Feedback

QSAN is committed to providing documentation that meets and exceeds your expectations. To help us improve the documentation, email any errors, suggestions, or comments to docsfeedback@qsan.com.

When submitting your feedback, including the document title, part number, revision, and publication date located on the front cover of the document.

Appendix

End-User License Agreement (EULA)

Please read this document carefully before you use our product or open the package containing our product.

YOU AGREE TO ACCEPT TERMS OF THIS EULA BY USING OUR PRODUCT, OPENING THE PACKAGE CONTAINING OUR PRODUCT OR INSTALLING THE SOFTWARE INTO OUR PRODUCT. IF YOU DO NOT AGREE TO TERMS OF THIS EULA, YOU MAY RETURN THE PRODUCT TO THE RESELLER WHERE YOU PURCHASED IT FOR A REFUND IN ACCORDANCE WITH THE RESELLER'S APPLICABLE RETURN POLICY.

General

QSAN Technology, Inc. ("QSAN") is willing to grant you ("User") a license of software, firmware and/or other product sold, manufactured or offered by QSAN ("the Product") pursuant to this EULA.

License Grant

QSAN grants to User a personal, non-exclusive, non-transferable, non-distributable, non-assignable, non-sub-licensable license to install and use the Product pursuant to the terms of this EULA. Any right beyond this EULA will not be granted.

Intellectual Property Right

Intellectual property rights relative to the Product are the property of QSAN or its licensor(s). User will not acquire any intellectual property by this EULA.

License Limitations

The user may not, and may not authorize or permit any third party to (a) use the Product for any purpose other than in connection with the Product or in a manner inconsistent with the design or documentations of the Product; (b) license, distribute, lease, rent, lend, transfer, assign or otherwise dispose of the Product or use the Product in any commercial hosted or

service bureau environment; (c) reverse engineer, decompile, disassemble or attempt to discover the source code for or any trade secrets related to the Product, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation; (d) adapt, modify, alter, translate or create any derivative works of the Licensed Software; (e) remove, alter or obscure any copyright notice or other proprietary rights notice on the Product; or (f) circumvent or attempt to circumvent any methods employed by QSAN to control access to the components, features or functions of the Product.

Disclaimer

QSAN DISCLAIMS ALL WARRANTIES OF PRODUCT, INCLUDING BUT NOT LIMITED TO ANY MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, WORKMANLIKE EFFORT, TITLE, AND NON-INFRINGEMENT. ALL PRODUCTS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. QSAN MAKES NO WARRANTY THAT THE PRODUCT WILL BE FREE OF BUGS, ERRORS, VIRUSES OR OTHER DEFECTS.

IN NO EVENT WILL QSAN BE LIABLE FOR THE COST OF COVER OR FOR ANY DIRECT, INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL, CONSEQUENTIAL OR SIMILAR DAMAGES OR LIABILITIES WHATSOEVER (INCLUDING, BUT NOT LIMITED TO LOSS OF DATA, INFORMATION, REVENUE, PROFIT OR BUSINESS) ARISING OUT OF OR RELATING TO THE USE OR INABILITY TO USE THE PRODUCT OR OTHERWISE UNDER OR IN CONNECTION WITH THIS EULA OR THE PRODUCT, WHETHER BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHER THEORY EVEN IF QSAN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Limitation of Liability

IN ANY CASE, QSAN'S LIABILITY ARISING OUT OF OR IN CONNECTION WITH THIS EULA OR THE PRODUCT WILL BE LIMITED TO THE TOTAL AMOUNT ACTUALLY AND ORIGINALLY PAID BY CUSTOMER FOR THE PRODUCT. The foregoing Disclaimer and Limitation of Liability will apply to the maximum extent permitted by applicable law. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the exclusions and limitations set forth above may not apply.

Termination

If User breaches any of its obligations under this EULA, QSAN may terminate this EULA and take remedies available to QSAN immediately.

Miscellaneous

- QSAN reserves the right to modify this EULA.
- QSAN reserves the right to renew the software or firmware anytime.
- QSAN may assign its rights and obligations under this EULA to any third party without condition.
- This EULA will be binding upon and will inure to User's successors and permitted assigns.
- This EULA shall be governed by and constructed according to the laws of R.O.C. Any disputes arising from or in connection with this EULA, User agree to submit to the jurisdiction of Taiwan Shilin district court as first instance trial.