



TerraMaster NAS

Model: F4-425 Pro

Fundamentals and Preliminaries



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1. Overview

A TNAS product includes hardware, operating systems (OS), and other auxiliary applications. Therefore, you should carefully read the instructions prior to operation. For any questions, please contact our online customer service on the official website, or contact our technical support team at sales@terra-master.com.

Once you receive your new TerraMaster TNAS product, please install and set up your TNAS according to the **“Quick Installation Guide”**.

Please note that given our commitment to the continuous improvement of our products, their appearances, designs, and specifications may be subject to change without prior notification.

Finally, the images and illustrations in this instruction manual may be slightly different from the actual product, and so please always refer to the actual product.

2. Hardware Installation

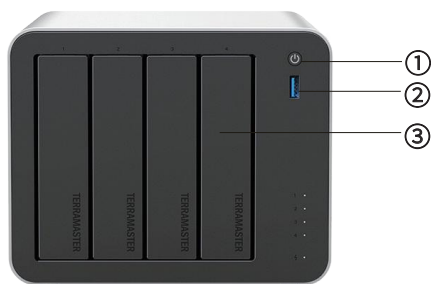
2.1 Package List

Once you receive your new TNAS, please check to ensure that the package includes the items detailed below. If any items are missing, please contact the reseller immediately.

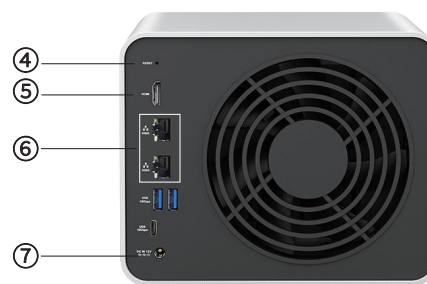
TNAS unit x 1	Power Cord x 1	Power adaptor x 1	Several screws
			
	Installation guide x 1	Product brochure (optional)	Network core x 1
			

2.2 Appearance

Panel Illustration:



Rear Cover Illustration:



Item	Subject	Description
①	Power button	Used to turn the device on/off
②	USB host	Use to connect USB storage device or USB wireless adaptor
③	Hard drive tray	Hard drive tray Used for installing and securing hard drives
④	Reset	When the device is powered off, use a pin to continuously press and hold the RESET button on the back of the product. While keeping the RESET button pressed, briefly press the power button to start the device. Wait for approximately 30 seconds until you hear three consecutive "beep beep beep" sounds, then release the pin. Next, use the TNAS PC client software to perform a new search for the TNAS device and follow the client's instructions to restart the TOS system initialization process.
⑤	HDMI interface	Only software code output (no audio or video output)
⑥	Network interface	5000M/2500M/1000M/100M bps network interface
⑦	Power interface	DC 12V power input NOTE: Do not use a third-party power adaptor.

2.3 Indicators and Buzzers

Item	Indicator	Description
①	Hard drive indicator	Always On: Normal operation status fllickering: Reading/writing data Off: No hard drive detected
②	Power indicator	Always On: Power on Off: Power off

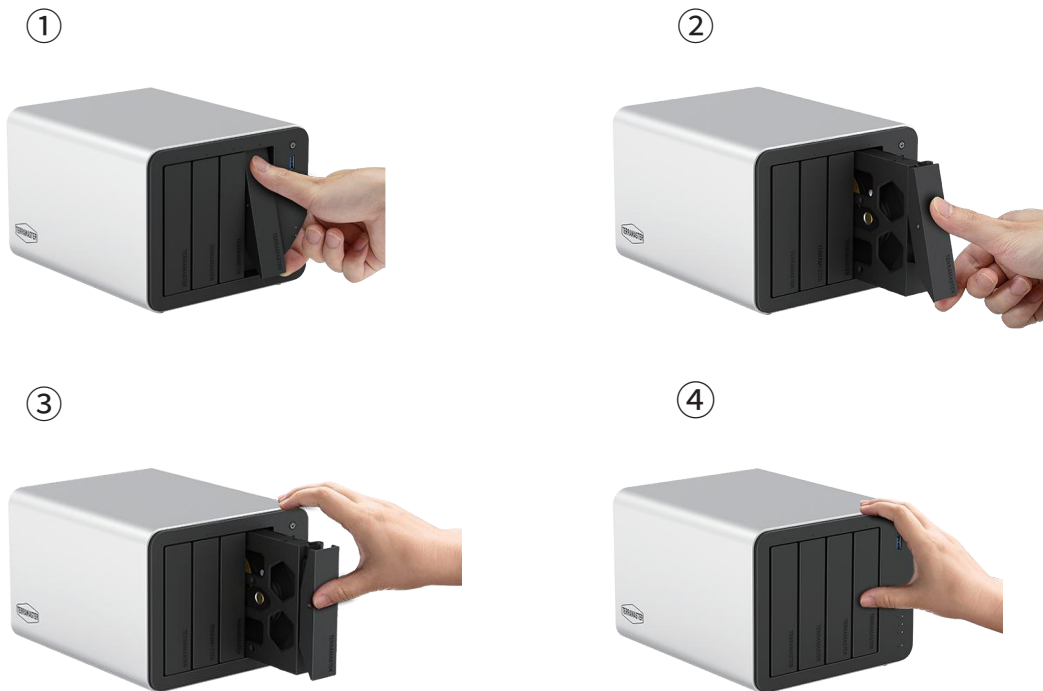
Item	Buzzer Sound	Description
①	Short beeps	1. Booting complete 2. System shutting down
②	Long beeps	An exception has occurred on the system. Please log in to TOS to fix the exception and turn off the buzzer manually.

2.4 Hard Drive Installation

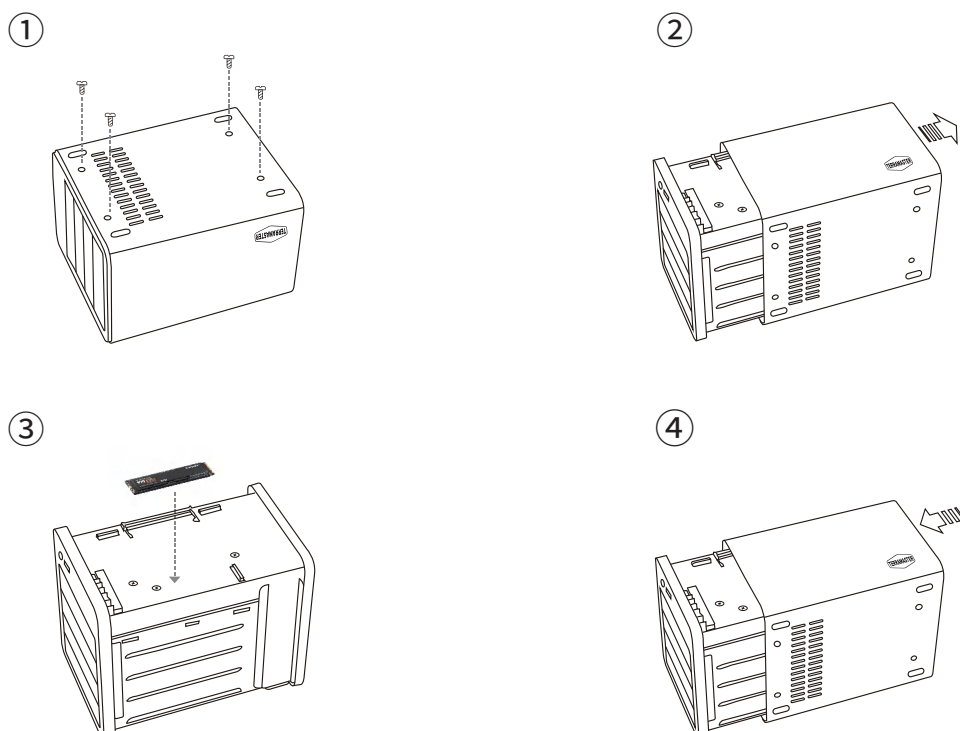
A TNAS may be installed with or without a hard drive, since different models are available for purchase. If you purchase a TNAS without a hard drive, you should purchase a hard drive separately. Only after hard drives have been installed and initialised can the TNAS be used.

Please refer to the **“Quick Installation Guide”** to complete hard drive installation.

TNAS should be installed with hard drives of the following type: firstly, 2.5/3.5 inch SATA hard drive; or secondly, 2.5 SATA SSDs. TNAS is a durable storage device, which means that in order to operate for long periods of time, high-quality hard drives are required. Therefore, please visit TerraMaster's official website to read our **“Hard Drive Compatibility”** guide, and then select the correct hard drive for your TNAS.



NVMe M.2 SSD/RAM



2.5 Connection

Before it can function properly, your TNAS device needs to be connected to the network and powered on.

Therefore, to complete the connection, please follow the instructions below:

Step 1:

Connect TNAS to the network using a network cable. The possible network devices that TNAS can connect to can be routers, hubs, network switching.

Step 2:

Connect TNAS to a power supply using the supplied power adapter (Warning: Please do not use a third-party power adapter. If you do, the device may sustain severe damage, and in extreme cases, damage to the physical body can occur).

Step 3:

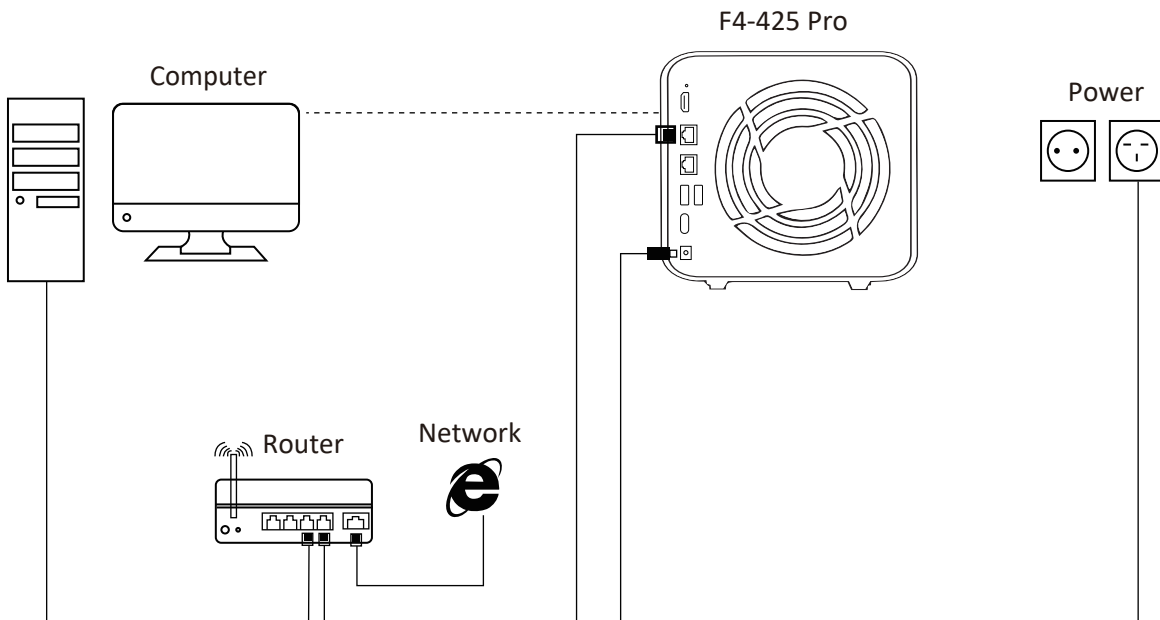
Press the power button to power on TNAS.

Step 4:

If the hard drive indicator light is off, the hard drive is not being detected. In this case, reinstall the hard drive or replace it with a new one before retrying.

Step 5:

If the hard drive indicators and network indicators display a normal connection, your TNAS hardware is ready.



3. Software Installation

To ensure that TNAS functions properly, please install some necessary software.

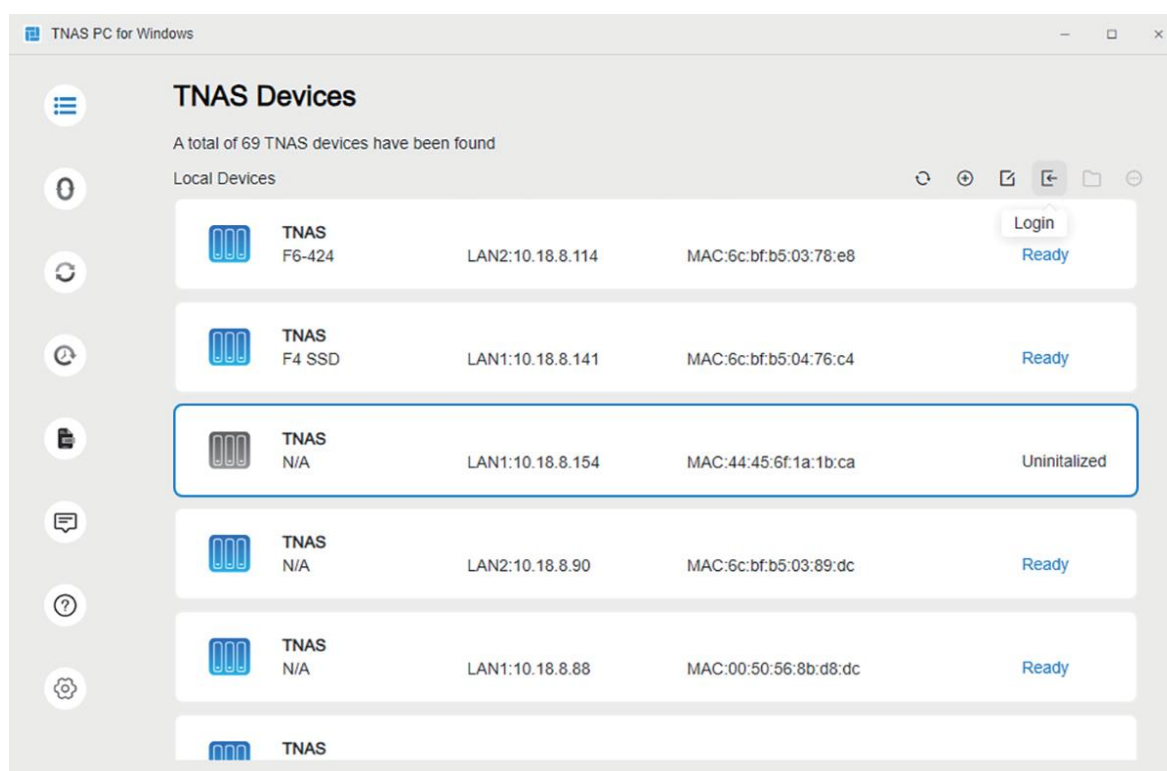
3.1 TNAS PC

TNAS PC is a desktop application designed for TNAS devices. It helps you to quickly search, log in, or set up your TNAS. The application is available in both Mac OS and Windows OS versions.

Please follow the instructions below to download the TNAS PC application:

1. Visit www.terra-master.com and click **"Download"**
2. Select your TNAS model
3. Locate TNAS PC using the download checklist
4. Choose a version that works for you and click **"Download"**
5. Install the TNAS PC application you just downloaded onto your computer

The following are the core features of TNAS PC



Search:

You can access your TNAS device only after it has been found on the network. To search for your TNAS device, click the **“Search”** button (Note: You can only search when TNAS and your computer are on the same sub-network).

Login:

To log in to TNAS's advanced settings menu (TOS), select your TNAS and click **“Login”** (Note: Only users with administrator privileges can use TOS' s advanced features).

TerraSync Server:

You can manage and view all remote TerraSync servers connected to the TNAS PC client. This includes checking their IP addresses, task counts, and the connection status between your local computer and the remote servers.

Map Network Drive:

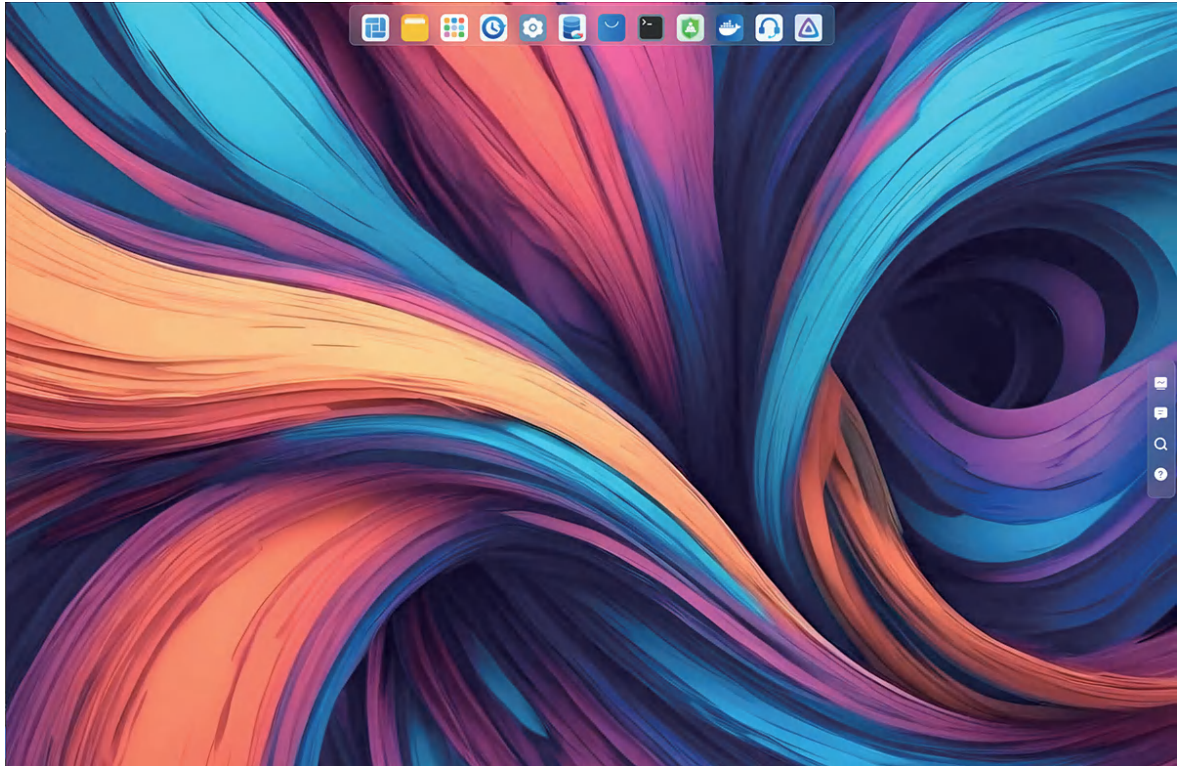
By mapping your drive, you can simplify file management by creating a shortcut to frequently used folders. To create a mapped drive, select your TNAS and click **“Map Network Drive”** (Note: The Mac OS version of TNAS PC does not have this feature).

Change IP:

You can use the **“Change IP”** option to manually change your TNAS IP address. You may need to do this if your TNAS IP address conflicts with the network IP address segment. Otherwise, TNAS will be inaccessible.

3.2 TOS

TerraMaster's Operating System (TOS) was specially developed for TNAS.



Newly purchased TNAS devices must be initialised prior to use. In the process of initialisation, TOS will be installed onto your TNAS. Please see the section on “**Initialisation**” for an operation guide to TOS installation. You can also update your TOS software at any time after completing initialisation.

3.3 TNAS Mobile App

TNAS Mobile is a dedicated mobile app designed for TNAS devices. It allows you to remotely access your TNAS from a mobile device, browse or play multimedia files, and monitor the system's operational status. To access files via mobile devices (e.g., iOS or Android devices), please download the TNAS Mobile App to your mobile device.

Scan the QR code to download the TNAS Mobile App



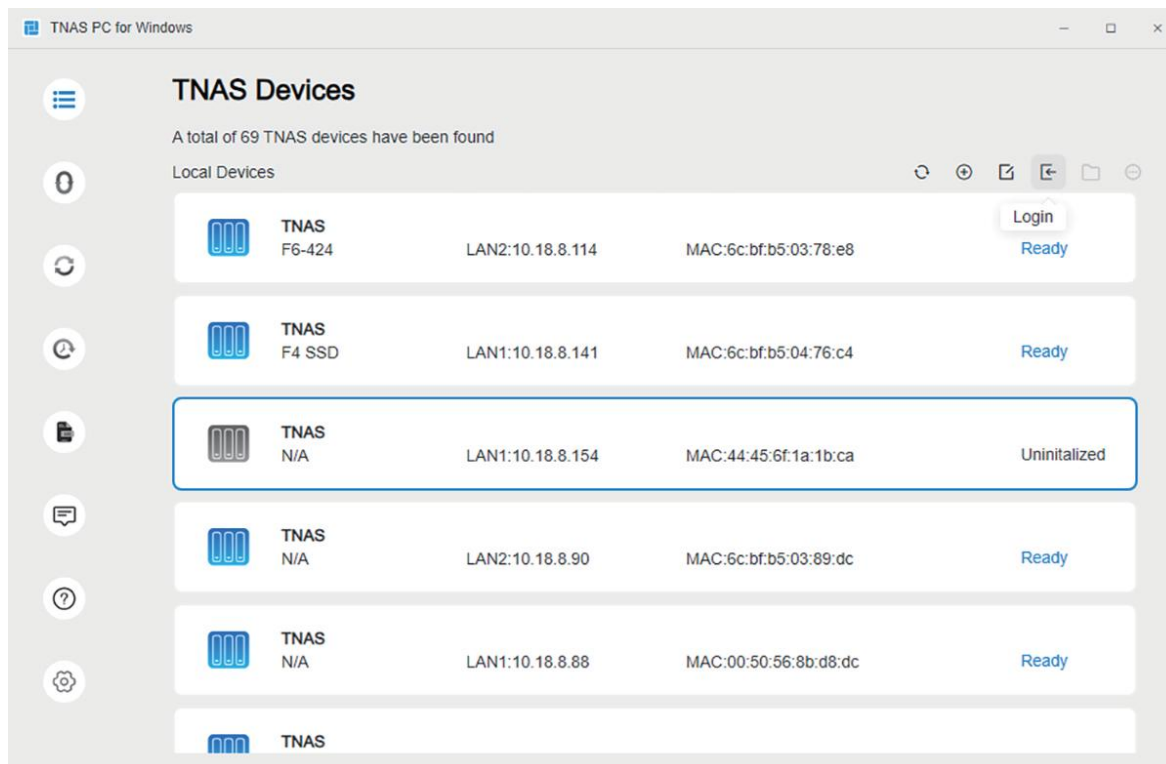
TNAS Mobile App

4. Initialisation

Your newly purchased TNAS must be initialised prior to use. However, before you initialise your device, please ensure the following: (1) That your TNAS hardware is installed properly; and (2) That you have installed the TNAS PC desktop application on your computer.

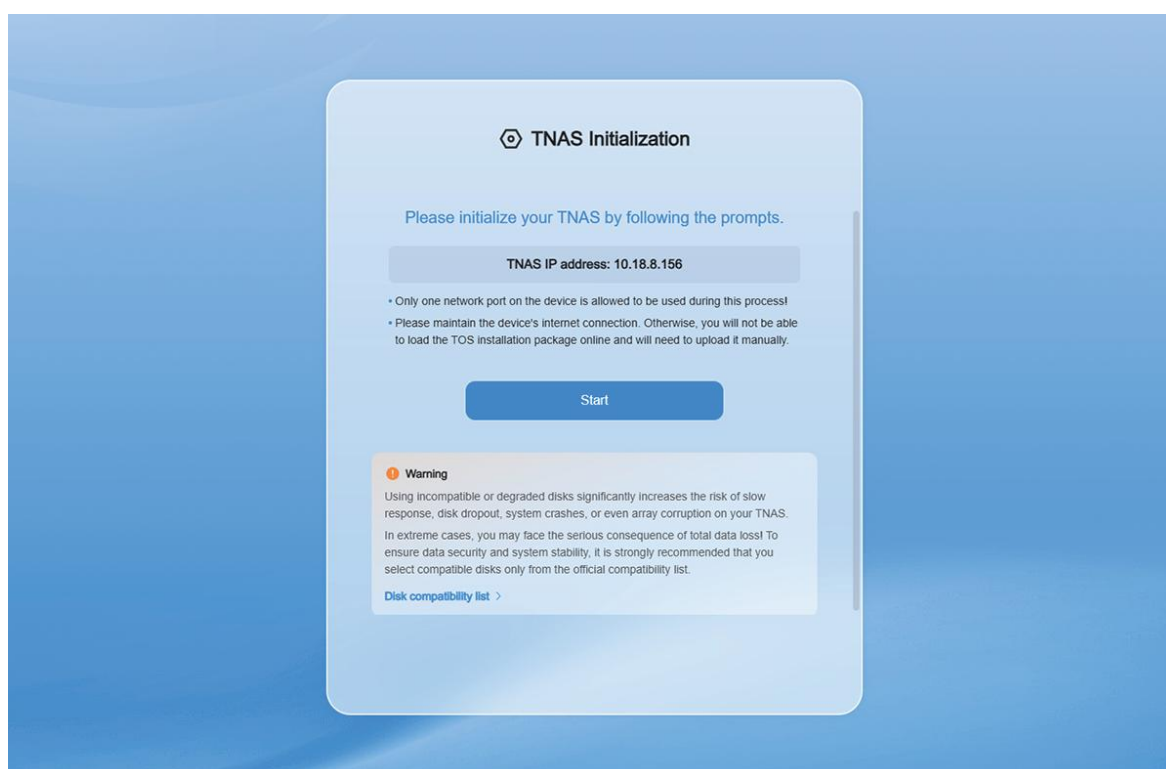
Step 1: Search for TNAS Devices

Before initialising your device, you need to find your TNAS device on the network. To find your TNAS, open the TNAS PC desktop application on your computer and click “Search” .



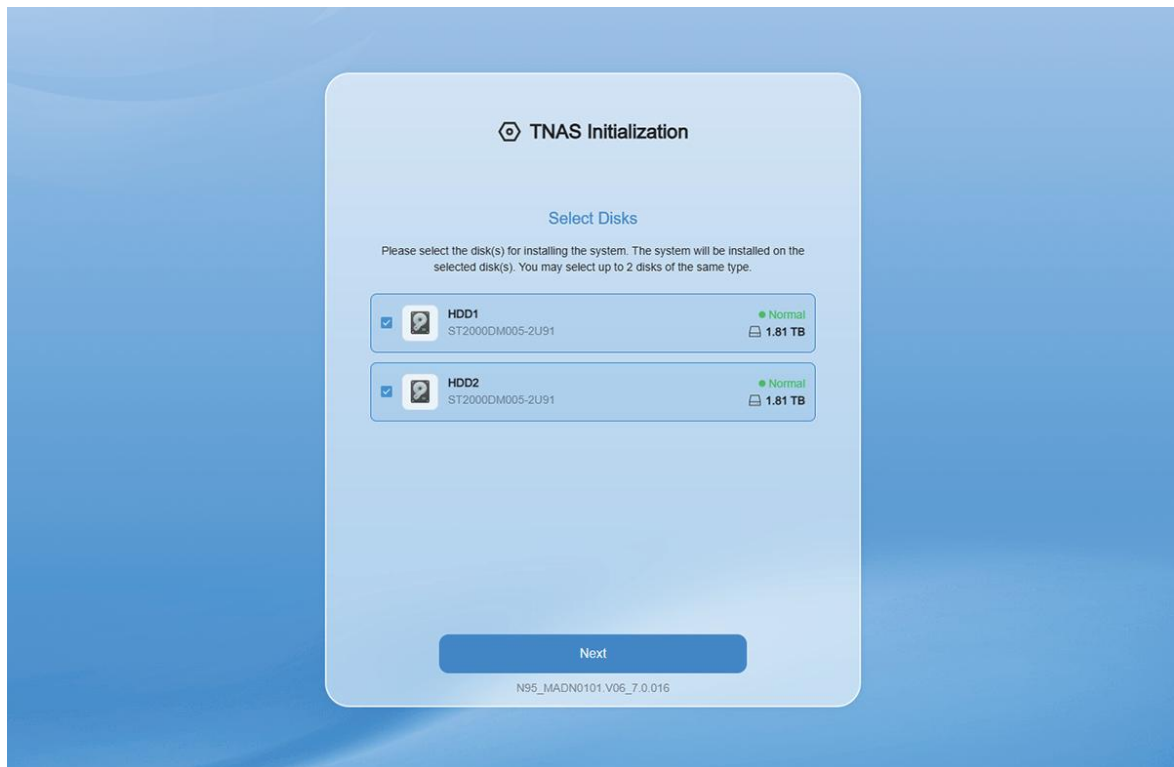
Step 2: Start Initialisation

Select your TNAS from the search list and click “Login” . If your TNAS is not initialised, you will be redirected to the initialisation page. Please Click “Start” to initiate the initialisation process.



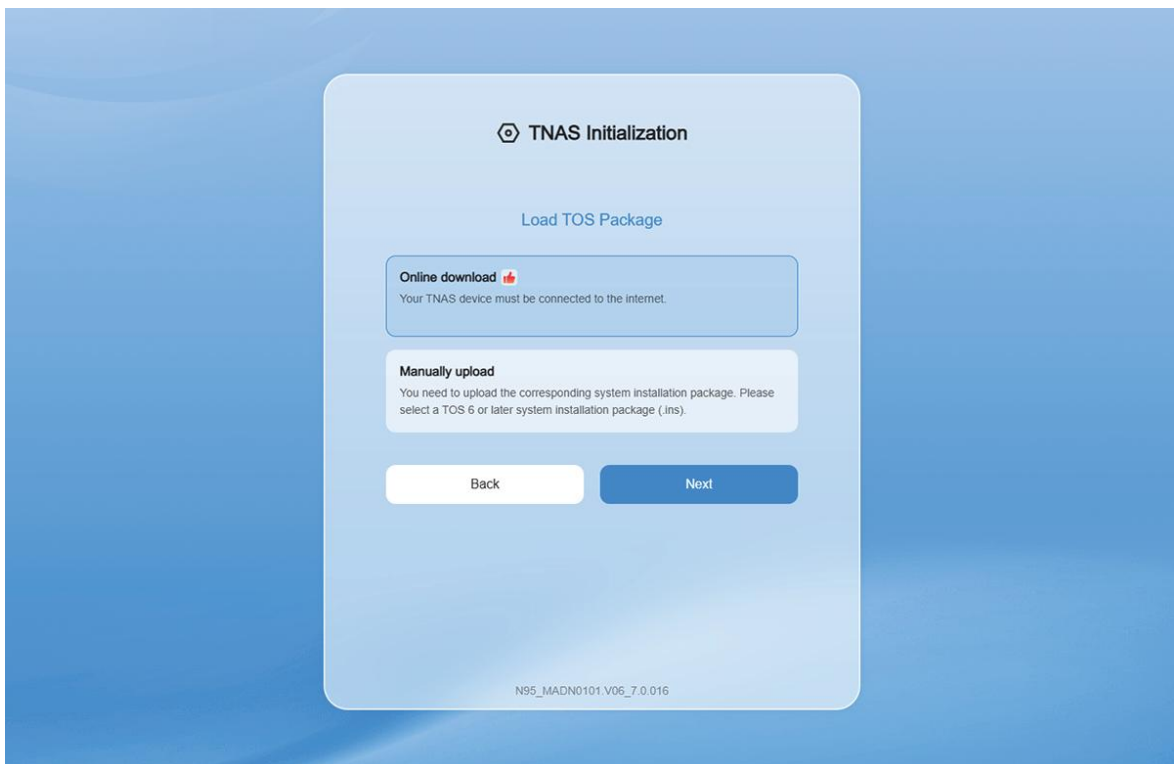
Step 3: Hard Drive Detection

If the TNAS detects a hard drive, the initialization boot process will automatically proceed to the next step. If no hard drive is installed, please install one and then click "Re-detect". Since the TNAS supports hot-swapping of hard drives, you can directly install the hard drive without shutting down the device.



Step 4: Install TOS

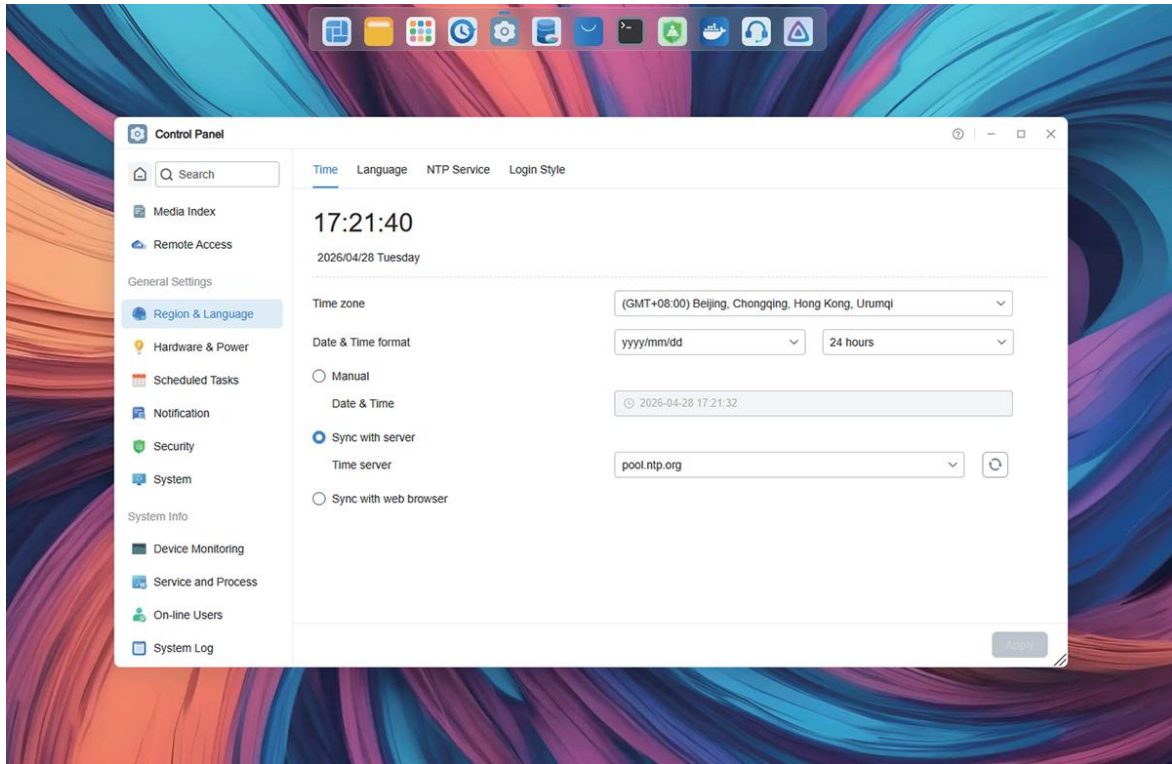
Please follow the on-screen instructions to install TOS. If your TNAS is connected to the internet, we recommend selecting 'Default Installation'. Otherwise, choose 'Custom Installation'. For custom installation, please download the TOS software package from the Download Center on TerraMaster's official website before proceeding.



After TOS installation is complete, TNAS will take several minutes to restart. Please wait patiently for this process to finish. Once TNAS has restarted successfully, you will be guided to the next step.

Step 5: Basic Settings

Please follow the instructions to complete the initial setup of your TNAS. This setup includes creating an administrator username and password, which will serve as the root account for your TNAS device.

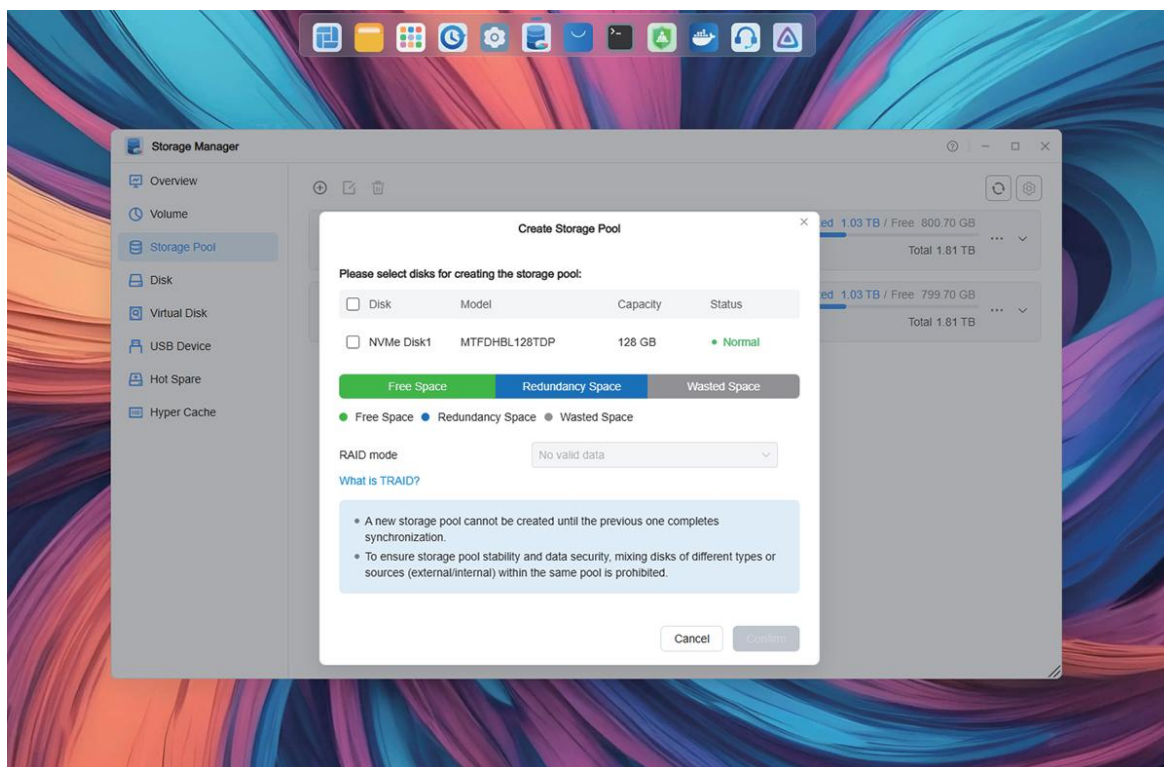


Step 6: Setting Up the Security Email

Please set up a security email for the administrator (this is very important! If the administrator forgets the password, they can reset it via the security email). Then, click "Send Verification Code." Your security email will receive a message containing the verification code. Please log in to your email, retrieve the verification code, and then complete the remaining setup.

Step 7: Creating an Array

After selecting "Default Installation" for the TOS system, the TOS will automatically create a storage pool and volume. If you opt for a custom installation of the TOS system, you will need to manually create a storage pool and volume. Please select an array type, then check the hard drives you intend to use for creating the array, and click Confirm. There are two file system options: EXT4 and Btrfs, with Btrfs being the default file system. Once the array is created, the hard drives will be formatted, so please back up your data in advance. Formatting the hard drives will take some time, so please be patient. When you see the message "Congratulations! Initialization is complete," it means your TNAS is ready for use.



As a final note, if you receive an error message stating that the number of hard drives you have picked does not match the RAID type you have selected, please reset your settings.

5. Getting Started

This section provides a quick overview of your TNAS device's core functions.

How to Use SMB File Services on a Windows Computer

Method 1:

Through the TNAS PC client application, locate and log in to your device. Click on **"Network Disk"** in the opened interface and enter your username and password to access the shared folders on TNAS.

Method 2:

Enter \TNAS IP address in the address bar of File Explorer, for example: \192.168.0.200.

Method 3:

Open the **"Run"** menu on your computer (shortcut: Windows key + R key), then enter \TNAS's IP address, for example: \192.168.1.123. Then, enter the TNAS username and password.

Method 4:

Select "This PC," right-click, and choose "Map Network Drive." Enter the path of the shared folder you want to map, select the drive letter you want to use, and enter the username and password to map the shared folder to your Windows computer.

How to Use SMB File Services on a Mac Computer

Method 1:

Through the TNAS PC client application, locate and log in to your device. Click on "Network Disk" in the opened interface and enter your username and password to access the shared folders on TNAS.

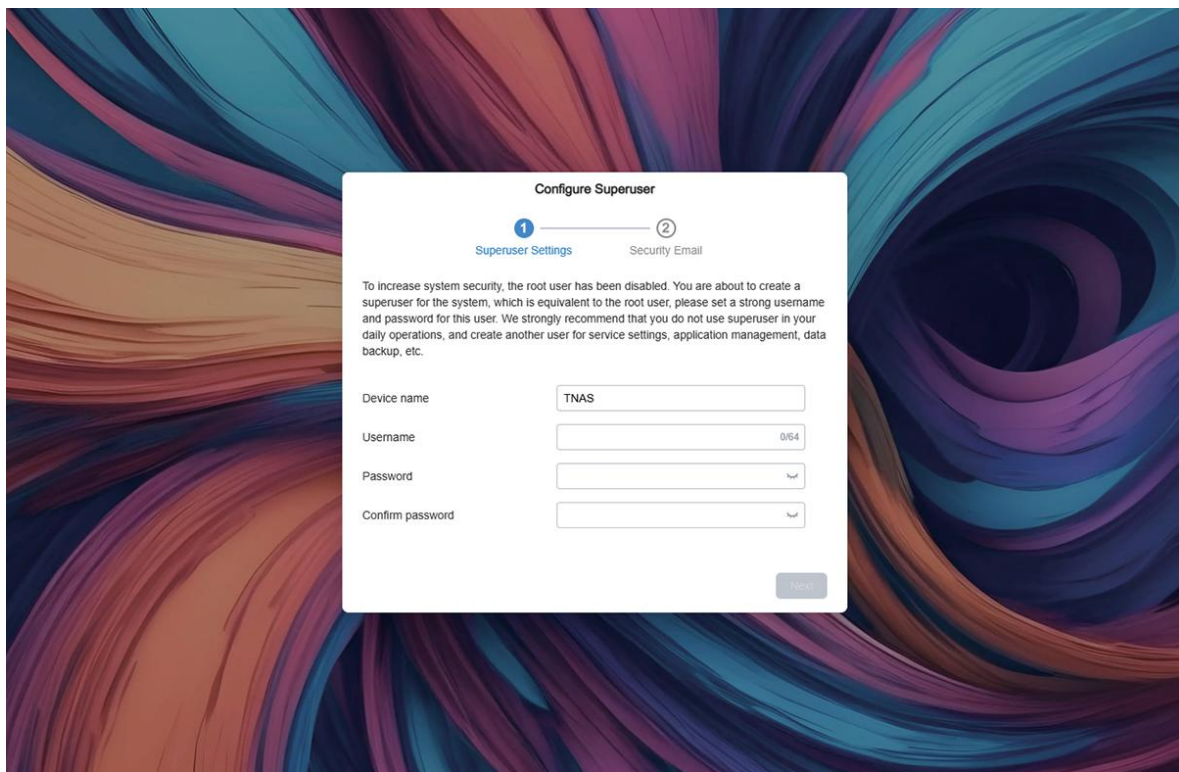
Method 2:

Open Finder on your Mac, click on "Go," and then select "Connect to Server." Enter smb://TNAS's IP address, for example: smb://192.168.1.123.

For added efficiency, you can also map your drive to display frequently accessed folders or to create quick links. This method is only applicable to windows OS users, Mac OS users create shortcuts in a slightly different way, please visit the TOS Help for more details.

5.1 Advanced Settings

If you need to use the advanced settings features (e.g., to create users, manage permissions, monitor system resources, or to install applications), please log in to TOS. Only users with administrator privileges can use TOS's advanced features.



For more information about TOS's functions and operating instructions, please refer to **"TOS Help"** (Note: You can find **"TOS Help"** from the TOS desktop).