# TrueNAS<sup>®</sup> Mini Family Basic Setup Guide

3rd Generation

Version 3.41







## Contents

1 Introduction	1
1.1 The TrueNAS Mini E+	2
1.2 The TrueNAS Mini X	3
1.3 The TrueNAS Mini X+	4
1.4 The TrueNAS Mini XL+	5
2 Hard Drives	6
2.1 Removing Drive Trays	6
2.2 Removing Drive Fillers	6
2.3 Installing Drives and Trays	7
2.4 3.5" to 2.5" SSD Adapters	8
3 SSD Drives	9
3.1 Mini XL+ SSD Drives	9
3.2 Mini X/X+ SSD Drives	10
4 Network and Power Cables	11
4.1 Powering on the TrueNAS Mini	11
4.2 Notice: High Draw USB Devices	11
5 Console Setup	12
6 TrueNAS Web Interface	13
6.1 Change TrueNAS Versions	13
7 Additional Resources	14
8 Contacting iXsystems	14

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## **1** Introduction

The TrueNAS Mini Storage Appliance supports all the features of TrueNAS in various convenient form factors. The Mini E+ has four hot-swappable 3.5" drive bays. The Mini X and X+ have five hot-swappable 3.5" drive bays and two 2.5" drive bays. The Mini XL+ has eight hot-swappable 3.5" drive bays and a single 2.5" drive bay.

TrueNAS Mini products share similar chassis and front panels but have different system components that can change available connection types and locations. Each Mini product has images that show where indicators and connectors are on that product.

From left to right are the TrueNAS Mini E+, the TrueNAS Mini X/X+ and the TrueNAS Mini XL+ :



The drive bay door can be locked for added security. To lock the door, insert one of the door keys in the lock and turn the key clockwise ninety degrees.



TrueNAS units are carefully packed and shipped with trusted carriers to arrive in perfect condition. If there is any shipping damage or missing parts, please take photos and contact iXsystems support immediately at <u>support@ixsystems.com</u>, **1-855-GREP4-iX** (1-855-473-7449), or **1-408-943-4100**.

Please locate and record the hardware serial numbers on the back of each chassis for quick reference.

Carefully unpack the shipping boxes and locate these components:

#### 1.1 The TrueNAS Mini E+





- 1. Four hot-swap 3.5" drive bays,
- 2.5" drive adapters are optional
- 2. Power Button
- 3. Reset Button
- 4. Power Indicators
- Disk Activity Light
   Network Activity Indicator
- 7. Unit Identification Indicators
- 8. Two USB 2.0 ports



5. IPMI remote management network port

Removing the Tamper Resistant sticker does not affect the warranty.



- 1. Four 3.5" drive trays
- 2. Two Ethernet cables
- 3. One bag of HDD screws
- 4. One power cord
- 5. One set of keys



#### 1.2 The TrueNAS Mini X



- 1. Five 3.5" drive bays, 2.5" drive
- adapters are optional. 2. Two 2.5" drive bays
- 3. Two USB 2.0 ports 4. Power Button
- 5. Reset Button
- 6. Power Indicator
- 7. Disk Activity Light
- Network Activity Indicators
   Unit Identification Indicator



- 1. Power Connector
- 2. Serial Port
- 3. VGA connector
- 4. Four GbE network ports
- 5. IPMI out of band management port
- 6. Port cover
- 7. USB 3.0 port



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- 1. Five 3.5" drive trays
- 2. Two 2.5" drive trays and screws
- 3. Two Ethernet cables
- 4. One bag of 3.5" HDD screws
- 5. One power cord
- 6. One set of keys

#### 1.3 The TrueNAS Mini X+





- adapters are optional. 2. Two 2.5" drive bays
- 3. Two USB 2.0 ports
- 4. Power Button
- 5. Reset Button
- 6. Power Indicator
- 7. Disk Activity Light
- 8. Network Activity Indicators 9. Unit Identification Indicator



- 1. Power Connector
- 2. IPMI out of band management port
- 3. Two USB 2.0 ports
- 4. Two 10 GbE network ports
- 5. VGA connector





- 1. Five 3.5" drive trays
- 2. Two 2.5" drive trays and screws
- 3. Two Ethernet cables
- 4. One bag of 3.5" HDD screws
- 5. One power cord
- 6. One set of keys

#### 1.4 The TrueNAS Mini XL+



- Eight 3.5" drive bays, 2.5" drive adapters are optional
   One 2.5" drive bay
   Power Button
   Reset Button
   Power Indicator
- 6. Disk Activity Light
- 7. Network Activity Indicators
- 8. Unit Identification Indicator

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1. Eight 3.5" drive trays

3. Two Ethernet cables

5. One power cord 6. One set of keys

2. One 2.5" drive tray and screws

4. One bag of 3.5" HDD screws

- 9. One USB 3.0 port
- 10. One USB 2.0 port





1. Power Connector

- 2. IPMI out of band management port
- 3. Two USB 2.0 ports
- 4. Two 10 GbE network ports
- 5. VGA connector





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## 2 Hard Drives

TrueNAS Minis support iXsystems qualified hard drives up to 18 TB. Minis require drives designed for Network Attached Storage (NAS). These drives run cooler and quieter than desktop drives. Please see the **Drive Compatability List** available on <u>https://www.truenas.com/truenas-mini/</u>.

When ordered without hard drives, drive trays ship with protective filler inserts. If you don't fill all bays with hard drives, keep the fillers in the empty trays to protect them.

## 2.1 Removing Drive Trays

If you must remove a drive tray, release the latch by pushing the large circular button to the right. Swing the latch to the left to eject the tray, then pull outwards on the latch to begin sliding the tray out. Grip the top and bottom of the tray and gently remove it.



## 2.2 Removing Drive Fillers

To mount a hard drive in a tray, remove the two rear screws holding the filler (1). Gently spread both sides of the tray away from the filler (2) until the pins release (3), then remove the filler.



## 2.3 Installing Drives and Trays

Place the hard drive into the tray and mount it with four screws.



Starting with the top bay, gently insert a drive tray until it stops, then swing the latch closed until it locks. Repeat for all hard drives. Load trays with fillers into empty bays.





You can lock the drive tray release latches to prevent tray removal. The tray button is unlocked when the inner slot is horizontal and locked when the slot is vertical. To lock a tray, insert a flat-head screwdriver into the slot in the center of the button and turn it ninety degrees clockwise until the slot is vertical.



## 2.4 3.5" to 2.5" SSD Adapters

Users can convert TrueNAS Mini 3.5" hard drive trays into 2.5" SSD trays using an adapter. If present, remove the filler from the drive tray before installing the adapter.

Place the adapter into the tray and mount it with three screws.



To add an SSD, attach it to the adapter with four screws (from the bag labeled 2.5" that came with the adapter) through the side of the adapter and tray.



To install the tray into the system, follow the instructions in section 2. Make sure you have attched the SSD to the adapter with the prongs facing toward the system bay.

## **3 SSD Drives**

## 3.1 Mini XL+ SSD Drives

The Mini XL+ has a single additional 2.5" SSD bay.

To remove the tray, release the latch by sliding the button to the left. Gently swing the latch to the right, then slide the tray out.





To add an SSD, unscrew the two attachment screws from the SSD tray underside and remove the SSD tray filler. Attach the SSD to the tray with four screws from the bag labeled 2.5" through the bottom of the tray.



Gently insert the tray into the bay until it stops, then swing the latch closed until it locks.





## 3.2 Mini X/X+ SSD Drives

The Mini X and X+ have two 2.5" drive bays.

To remove the tray, release the latch by sliding the button to the left. Gently swing the latch to the right, then slide the tray out. Remove the filler tray from the drive tray by removing the screws. Place the drive in the tray and secure the drive to the tray with the provided screws.



Follow the same process for both drive trays. To reinsert a tray, gently insert the tray into the bay until it stops and the latch is nearly shut. Swing the latch closed until it locks.



## 4 Network and Power Cables

Connect the network cable to the router or switch and to a gigabit networking port. Plug the power cable into the TrueNAS Mini and a power outlet.



## 4.1 Powering on the TrueNAS Mini

The Power and Reset buttons control the power state of the TrueNAS Mini. These buttons behave in the same manner as standard PC power and reset buttons. When the system is off, pressing the power button will turn the system on. Pressing and holding the power button while the system runs will perform a hard power off. The reset button will reboot the system.

By default, the Mini will power on as soon as you plug the cable into a live power source and, in the event of power loss, power on whenever power restores.

#### 4.2 Notice: High Draw USB Devices

The current draw on the Mini power supply's +5Vsb line can exceed specifications if high-draw USB devices are left attached to the rear USB ports when the Mini is powered off.

Unplug high-draw devices (such as bus-powered USB hard drives) before powering off your Mini.

## 5 Console Setup

You can connect a VGA monitor and USB keyboard for console access, but they are not required. If a monitor and keyboard are attached, you can see the Console Setup Menu. For more details about the Console options, see <a href="https://www.truenas.com/docs/core/gettingstarted/consolesetupmenu/">https://www.truenas.com/docs/core/gettingstarted/consolesetupmenu/</a>.

If you want remote out-of-band management (OOBM) via IPMI, connect a network cable to the IPMI port. See section "1 Introduction" to find your Mini IPMI port.

Your system is equipped with the optimal BIOS and IPMI firmware out of the box. **DO NOT UPGRADE** your system's BIOS and IPMI firmware.

We recommend that IPMI be on a separate and secure network without Internet access. Please contact support if you need to upgrade your system's BIOS or IPMI firmware.

Console setup		
1) Configure Network Interfaces		
2) Configure Link Aggregation		
3) Configure VLAN Interface		
4) Configure Default Route		
5) Configure Static Routes		
6) Configure DNS		
7) Reset Root Password		
8) Reset Configuration to Defaults		
9) Shell		
10) Reboot		
11) Shut Down		
The web user interface is at:		
http://10.0.0.102		
Enter an option from 1-11:		

## 6 TrueNAS Web Interface

TrueNAS uses the Multicast DNS service, also known as Bonjour or mDNS, to make the system accessible on most networks without additional setup.

Open a web browser on another computer on the same network. Open the TrueNAS web interface by navigating to **truenas.local** (or your Mini IP address).

Username *    Left Sector Sect	
LOG IN	
TrueCommand IP: 172.28.0.1	
TrueNAS CORE ® © 2020 🤣 systems	

The TrueNAS web interface uses default credentials for first-time logins:

Username:	root
Password:	abcd1234

After logging in, you can change the root account password in **Accounts > Users** to increase system security.

When more than one TrueNAS device is connected to the network, mDNS can experience name conflicts. Give each TrueNAS device a unique hostname like truenas1.local and truenas2.local to avoid the problem. You can change hostnames in **Network > Global Configuration > Hostname** in the TrueNAS web interface.

Out-of-band logins have separate credentials from the TrueNAS web interface. The credentials are randomized and attached to the back of the TrueNAS Mini chassis. For more details, see <u>https://www.truenas.com/docs/sb-327</u>.

For additional details about OOBM, see the Mini X or Mini X+/XL+ Out-of-Band Management guides:

Mini X : <u>https://www.truenas.com/docs/hardware/mini/minie+xoobm/</u> Mini X+/XL+ : <u>https://www.truenas.com/docs/hardware/mini/minix+xl+oobm/</u>

#### 6.1 Change TrueNAS Versions

If you want to run a different version of TrueNAS, you can find new and legacy versions at truenas.com/download.

After downloading your desired version, you must use image utility like belenaEtcher or rufus to flash the ISO file to a USB drive. Plug the flashed USB drive into a USB port on your Mini and select it from from the boot menu during system startup.

Follow the install instructions for CORE or SCALE on our Documentation Hub.

## 7 Additional Resources

The TrueNAS Documentation Hub has complete software configuration and usage instructions. Click **Guide** in the TrueNAS web interface or go directly to:

https://www.truenas.com/docs/

Additional hardware guides and articles are in the Documentation Hub's Hardware section:

https://www.truenas.com/docs/hardware/

The TrueNAS Community forums provide opportunities to interact with other TrueNAS users and discuss their configurations:

https://www.truenas.com/community/

## 8 Contacting iXsystems

For assistance, please contact iX Support:

Contact Method	Contact Options
Web	https://support.ixsystems.com
Email	<u>support@iXsystems.com</u>
Telephone	Monday-Friday, 6:00AM to 6:00PM Pacific Standard Time: • US-only toll-free: <b>1-855-473-7449</b> option 2 • Local and international: <b>1-408-943-4100</b> option 2
Telephone	<ul> <li>Telephone After Hours (24x7 Gold Level Support only):</li> <li>US-only toll-free: 1-855-499-5131</li> <li>International: 1-408-878-3140 (International calling rates will apply)</li> </ul>