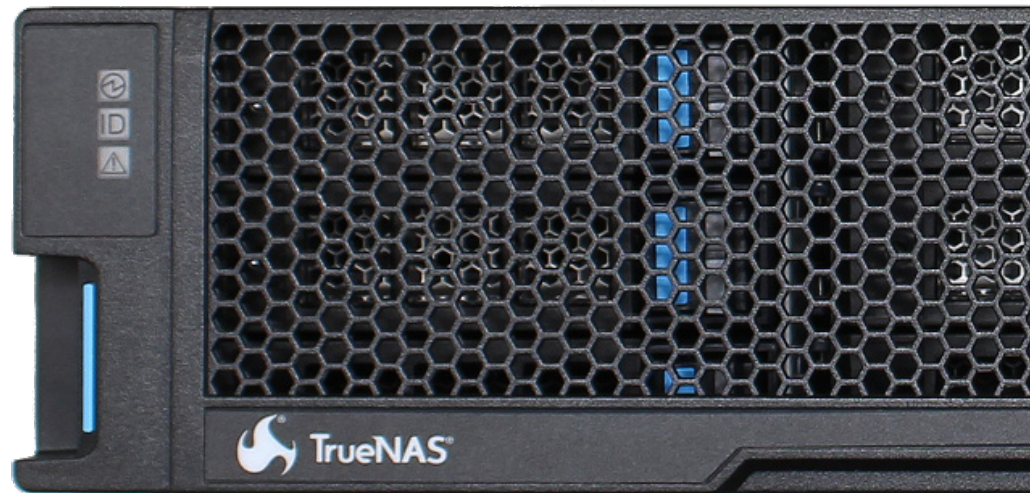


TrueNAS® X-Series Unified Storage Array Basic Setup Guide

Version 1.6



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The TrueNAS X-Series Unified Storage Array is a 2U, 12-bay, hybrid unified data storage array.

1 Unpacking the Unit

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



X-Series Unified Storage Array



X-Series Bezel



Set of rackmount rails. The rails have a specific front end, identified by a label visible on the left above. The front ends of the rails must be installed facing the front of the rack.



A total of 12 populated or empty “air baffle” drive trays. Trays must be installed in all bays to maintain proper airflow for cooling. Up to ten drive trays are packed in a cardboard tray. Additional drive trays are packed with the accessory kit.



Accessory kit with 2 IEC C13 to NEMA 5-15P power cords, 2 IEC C14 to C14 cords, and a set of velcro cable ties.



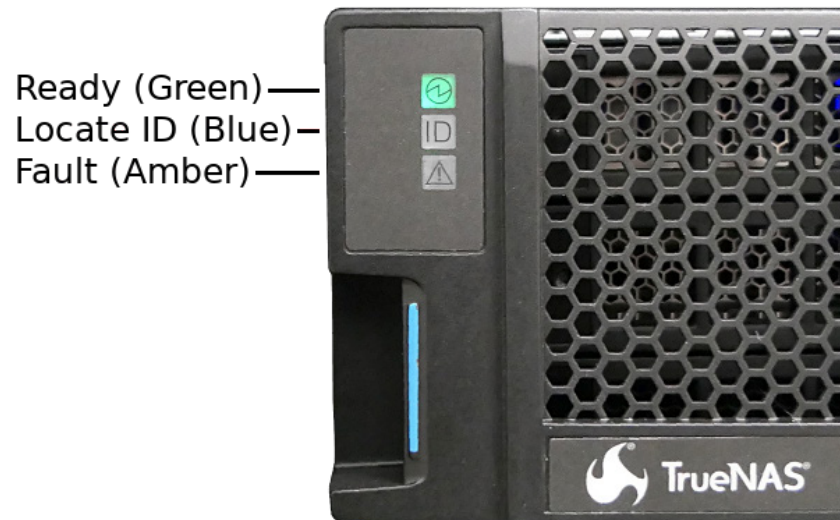
Black USB to 3.5mm, 3.3V serial cable



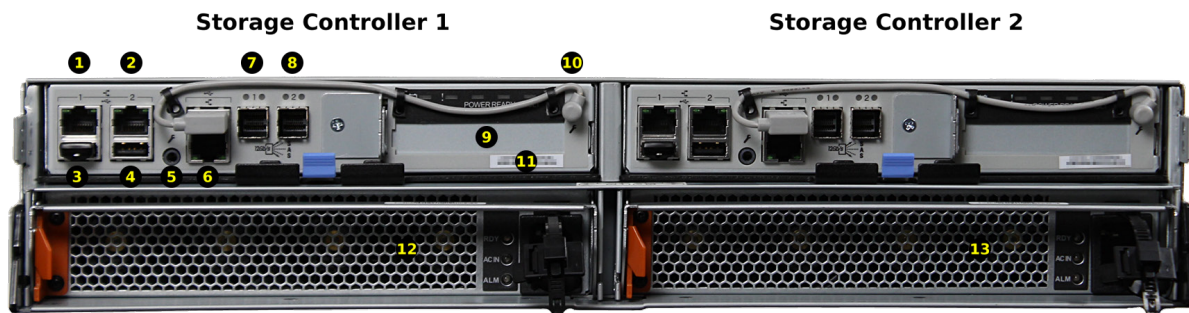
Rail Extenders for racks over 30" deep

2 Become Familiar with the X-Series System

The X-Series has front panel indicators for power, locate ID, and fault. The fault indicator is on during the initial power-on self-test (POST) and turns off during normal operation. It turns on if the TrueNAS software issues an alert.



The X-Series has one or two storage controllers in a side-by-side configuration.



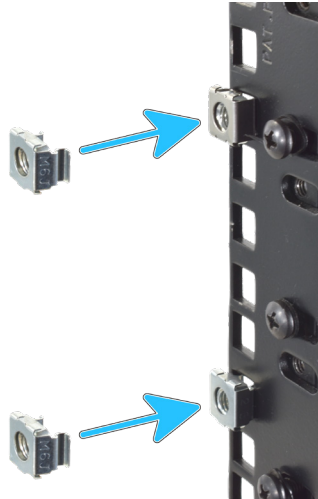
- (1) Gigabit Ethernet connector
- (2) Gigabit Ethernet connector
- (3) USB device (reserved, do not remove)
- (4) USB 2.0 connector
- (5) Out-of-Band (OOB) serial port (3.5mm)
- (6) Out-of-Band Management Ethernet connector
- (7) HD mini SAS3 connector 1
- (8) HD mini SAS3 connector 2
- (9) PCIe x8 expansion port
- (10) System console port (reserved)
- (11) MAC address label
- (12) Redundant power supply
- (13) Redundant power supply

3 Rail Kit Assembly

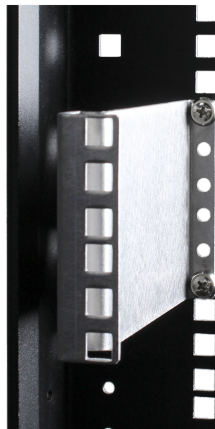
On racks that are 30 inches deep or less, skip to “3.2 Rail Spring”.

3.1 Rail Extenders

Racks from 31 to 36 inches deep require installation of the included rail extenders. For these deeper racks, install cage nuts on the outside rear of the rack. **The tabs on the cage nuts must be horizontal as shown.**



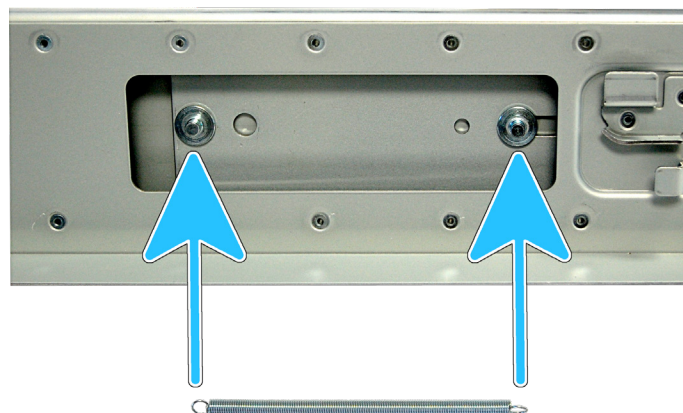
Using the included bolts, install the rail extender inside the rear of the rack. Repeat the process for the second extender, which is a mirror image of the first.



**Extender Installed
Viewed from Inside the Rack**

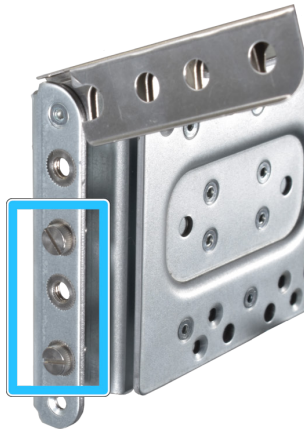
3.2 Rail Spring

If not already present, install a spring on the silver posts in the side of each rail.

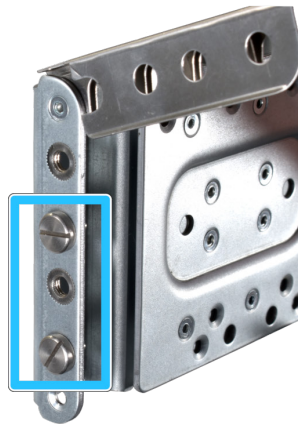


3.3 Attaching Rails to the Rack

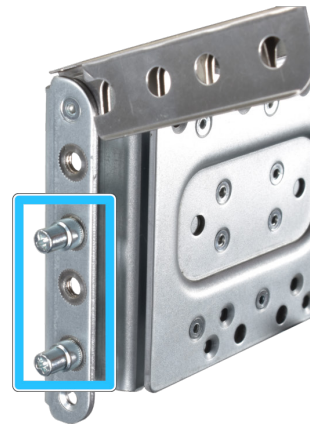
Chassis rails are configured to attach to round hole racks. Additional pins are included in the accessory kit to configure the rails for square or 4mm hole racks. To reset the rails to fit a square or 4mm hole rack, unscrew the pins at each end of the rails and replace them with the correct pins.



Round Hole Rack Pins

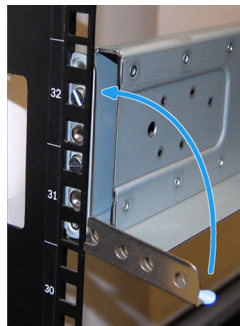
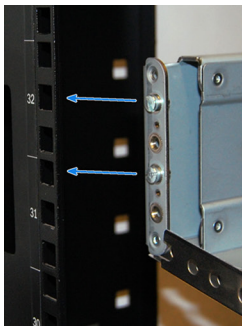


Square Hole Rack Pins



4mm Hole Rack Pins

To secure a rail to the rack, open the clamp latches on the ends of each rail. Place the rail in the rack with the front end toward the front of the rack, aligning the pins on both ends of the rail with the mounting holes in the rack. Swing the clamp latch closed to hold the rail in place. Use two of the supplied screws to secure the back end of the rail in place. Repeat the process for the second rail.



Caution: Two people are required to safely lift the chassis for rack installation or removal. Do not install drives until after the chassis has been installed in the rack, and remove all drives before removing the chassis from the rack. Carefully place the chassis onto the rails mounted in the rack. Push the chassis in until the ears are flush with the front of the rack. If needed, attach the bezel. Use two of the supplied screws to secure each ear to the rack.

4 Install Drive Trays

Drive trays are used to mount drives in the chassis. Each drive tray has a status LED which is blue when the drive is active or a hot spare. The LED changes to amber if a fault has occurred.

A tray must be placed in each drive bay to maintain proper airflow for cooling. If fewer than twelve drives are connected, empty “air baffle” trays must be placed in the empty bays.

A standard drive tray installation order simplifies support and is strongly recommended:

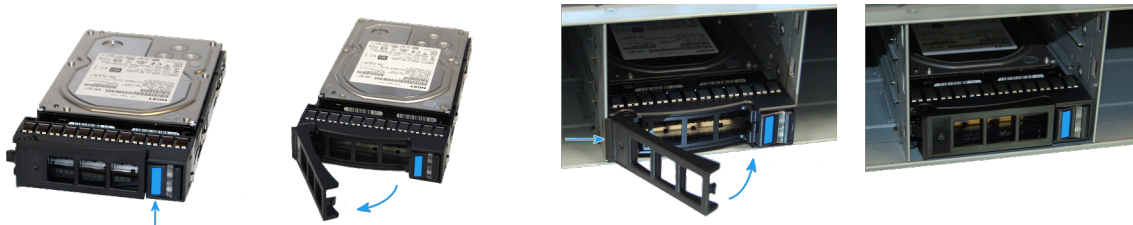
- SSD drives for write cache (W), if present
- SSD drives for read cache (R), if present
- Hard drives or SSD drives for data storage
- Air baffle filler trays to fill any remaining empty bays

Install the first drive tray in the top left drive bay. Install the next drive tray to the right of the first. Install remaining drive trays to the right across the row. After a row is filled with drives, move down to the next row and start again with the left bay.

This example shows the proper order for a write cache (W) SSD, a read cache (R) SSD, eight hard drives, and two empty air baffle trays.



To load an individual drive tray into a bay, press the blue button to open the latch. Carefully slide the tray into a drive bay until the left side of the latch touches the metal front edge of the chassis, then gently swing the latch closed until it clicks into place.



5 Connect Expansion Shelves

Expansion shelves connect to the HD mini SAS3 connectors on the X-Series. For detailed connection instructions and diagrams, refer to the Basic Setup Guide included with your iXsystems TrueNAS expansion shelf or go to <https://truenas.com/docs/hub/hardware>.

6 Connect Network Cables

Network cables vary by configuration and are not included. Please contact iX Support with any questions.

Connect network cables to the Ethernet ports and Out-of-Band (OOB) management port before attempting to power on and configure the X-Series for the first time.

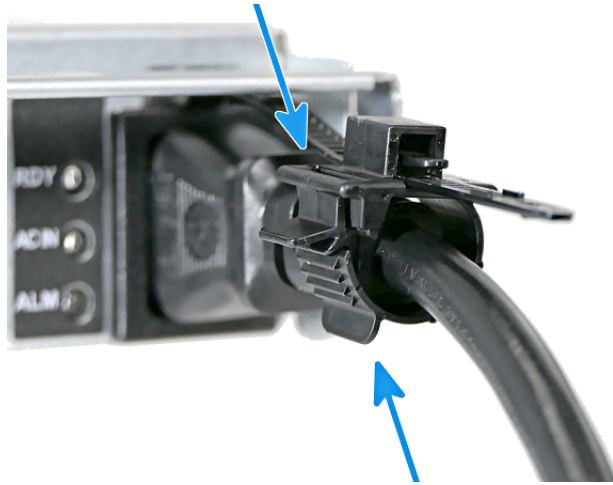
The Out-of-Band management port on the X-Series must be connected with a shielded Ethernet cable.

7 Connect Power Cord

If any TrueNAS expansion shelves are connected to the X-Series, power on the expansion shelves and wait at least two minutes before connecting power cables to the X-Series.

Do not plug the power cords into a power outlet yet.

Connect a power cord to the back of one power supply, pressing it into the plastic clamp and pressing on the tab to lock it in place. Repeat the process for the second power supply and cord.



After both power cords have been connected to the X-Series, they can be plugged into power outlets. The system is configured to automatically power on when connected to a power outlet. This design ensures that the X-Series comes back on when power is restored after a power failure.

If remote physical power disconnection is desired, the X-Series can be connected to a remotely-managed Power Distribution Unit (PDU).

8 Install Bezel (Optional)

The included bezel is not required for operation. If desired, install the bezel by unscrewing the two screws securing the chassis ears to the rack. Aligning the bezel with the pins on the bezel ears and press it into place. Reattach the two screws through the chassis ears to resecure the X-Series to the rack.

9 Logging in to the TrueNAS Web Interface

The IP address of the TrueNAS graphical web interface is provided on the TrueNAS hardware sales order or configuration sheet. It is also displayed in the system console after powering on. Please contact iX Support if the TrueNAS web interface IP address has not been provided with these documents or cannot be identified from the TrueNAS system console.

Enter the IP address into a browser on a computer on the same network to access the web interface. To log into the TrueNAS web interface, enter the default credentials:

- Username: root
- Password: abcd1234

10 User Guide

The TrueNAS Documentation Hub has software configuration and usage articles. It is available by clicking **Guide** in the TrueNAS web interface or going directly to <https://www.truenas.com/docs>.

11 Contacting iXsystems

For assistance, please contact iX Support:

Contact Method	Contact Options
Web	https://support.ixsystems.com
Email	support@ixsystems.com
Telephone	Monday-Friday, 6:00AM to 6:00PM Pacific Standard Time: <ul style="list-style-type: none">• US-only toll-free: 855-473-7449 option 2• Local and international: 408-943-4100 option 2
Telephone	Telephone After Hours (24x7 Gold Level Support only): <ul style="list-style-type: none">• US-only toll-free: 855-499-5131• International: 408-878-3140 (International calling rates will apply)

