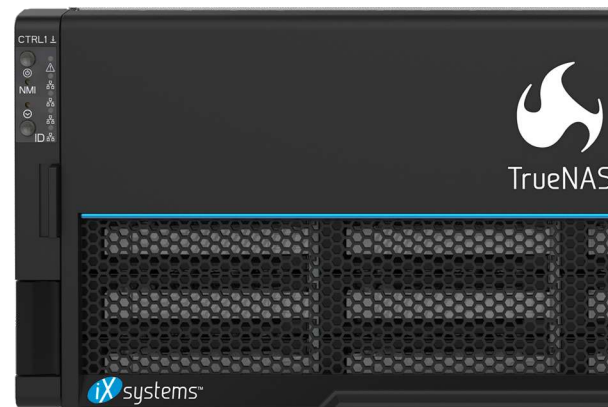


TrueNAS® M-Series Unified Storage Array

Basic Setup Guide

Version 1.3



Copyright © 2019 iXsystems, Inc. All rights reserved.
All trademarks are the property of their respective owners.

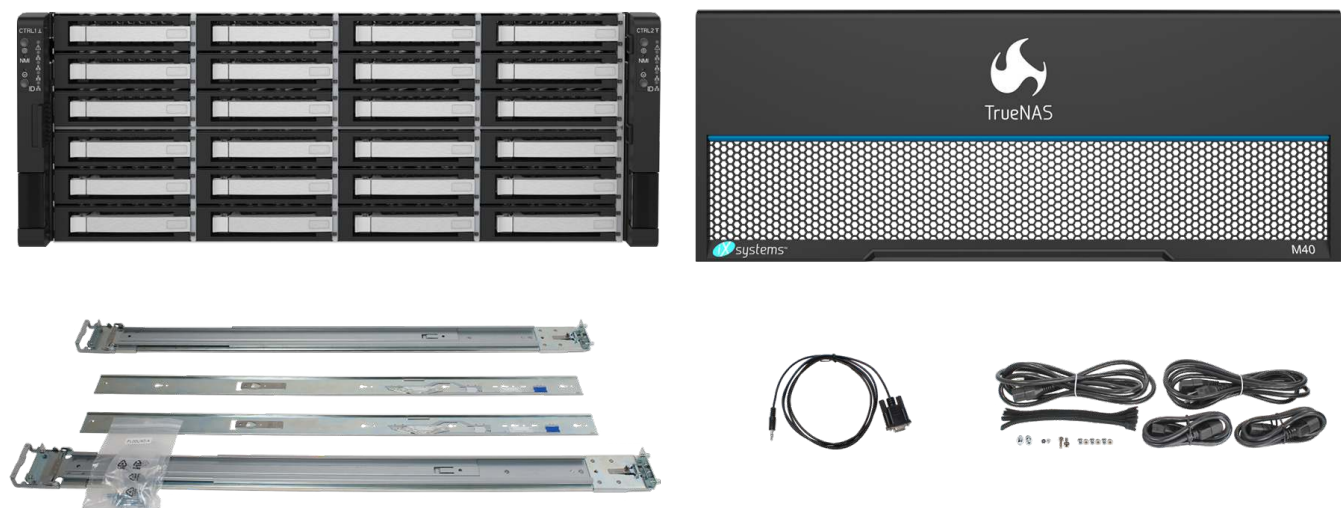
1 M-Series Unified Storage Array

The TrueNAS® M-Series Unified Storage Array is a 4U, 24-bay, hybrid data storage array.

Note: 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 **1-855-GREP4-iX** (1-855-473-7449) or 1-408-943-4100.

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

Carefully unpack the shipping boxes and locate these components:



M-Series Unified Storage Array, M-Series Bezel, set of rackmount rails, up to 24 drive trays populated with drives, DB9 to 3.5mm serial cable, and an accessory kit with 2 IEC C13 to NEMA 5-15P power cords, 2 IEC C14 to C13 cords, velcro cable ties, M4x4L screws, M5x18 screws, screw posts, and alternate pins for round hole racks.

1.1 Become Familiar With the M-Series System

The M-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](https://www.ixsystems.com/documentation/truenas/tn_options.html#alert) (https://www.ixsystems.com/documentation/truenas/tn_options.html#alert).



The M-Series has one or two storage controllers in an over-and-under configuration. Examples of typical M40 (top) and M50 (bottom) models are shown here.



| | |
|---|---|
| 1: Redundant power supplies | 8: ID LED |
| 2: Serial port | 9: HD Mini SAS3 connectors |
| 3: 1Gb Ethernet Out of Band (OOB) dedicated management port, dual USB 2.0 ports | 10: Networking port |
| 4: Dual USB 3.0 ports | 11: Asterisk slot: Fibre Channel or additional networking |
| 5: 10Gb Ethernet port | 12: Storage controller management port |
| 6: 10Gb Ethernet port | 13: NVMe activity indicators |
| 7: VGA monitor port | |

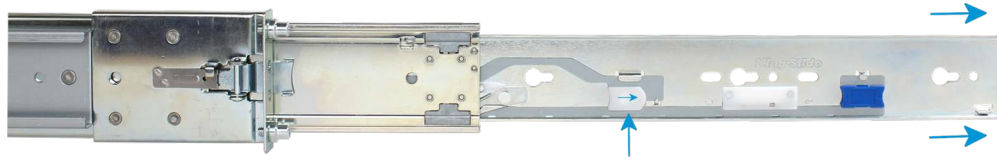
M-Series systems with only a single storage controller must be shut down and powered off before removing the controller, or data stored in the NVDIMM SLOG will be lost! Dual storage controller systems synchronize data between each NVDIMM, but can lose data if both controllers are removed before being properly shut down.

For remote management with IPMI, the 1 Gb Ethernet Out of Band management port (#3) must be connected to a network.

1.2 ES24 and M-Series Rail Kit Assembly

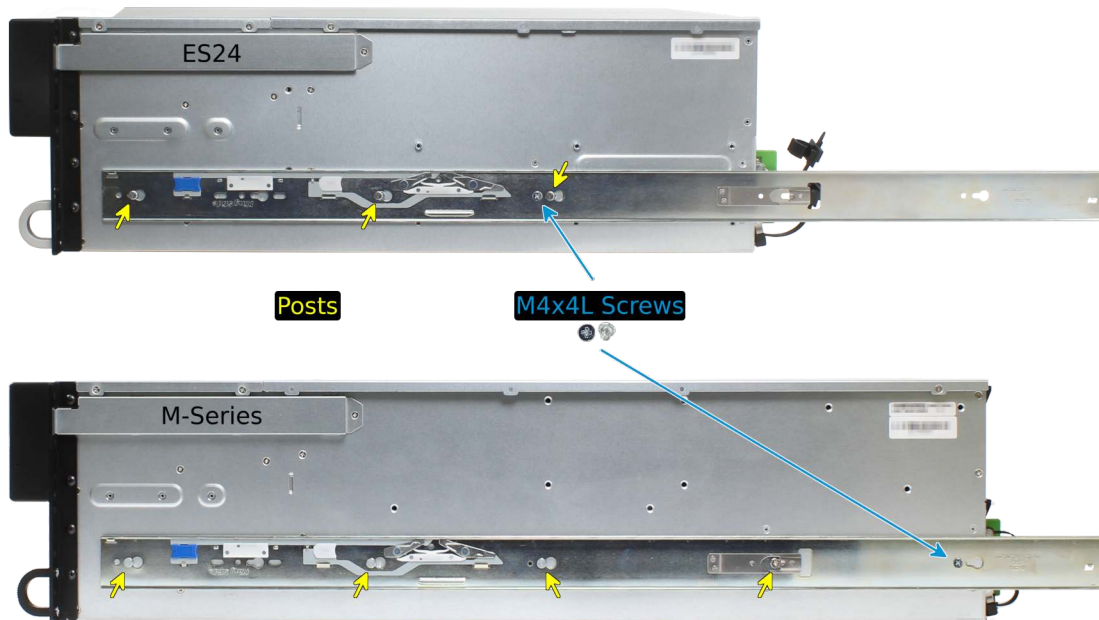
1.2.1 Remove Cabinet Rails from Rack Rails

Extend the cabinet rail until it stops. To remove the cabinet rail, press the white release tab to the right while pulling the cabinet rail.



1.2.2 Mount Cabinet Rails

The cabinet rails are mounted on both sides of the system cabinet. Align the cabinet rail keyholes with the three posts (ES24) or four posts (M-Series) on the side of the chassis and slide the rail until the post is secured in the keyhole slot of the rail.

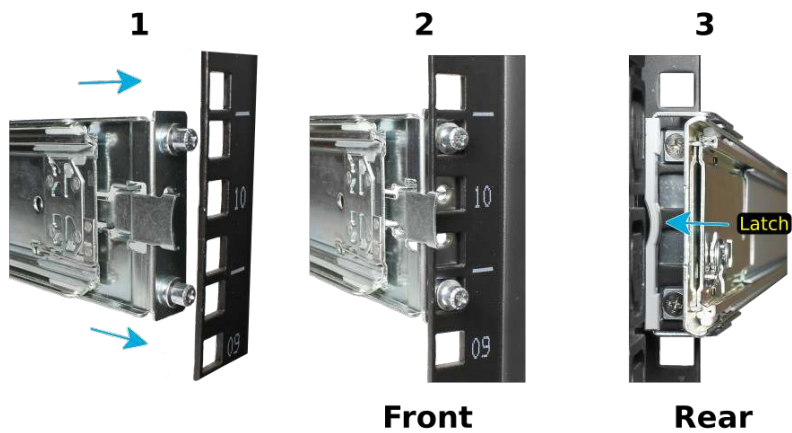


Align the rail hole with the screw hole and secure the rail with one M4x4L screw from the rail kit. Repeat this process to mount and secure the second cabinet rail on the other side.

1.2.3 Mount the Rack Rails

Place the rail in the rack with the front end toward the front of the rack, aligning the pins with the mounting holes in the front of the rack. Push the pins into the holes until the latch clicks.

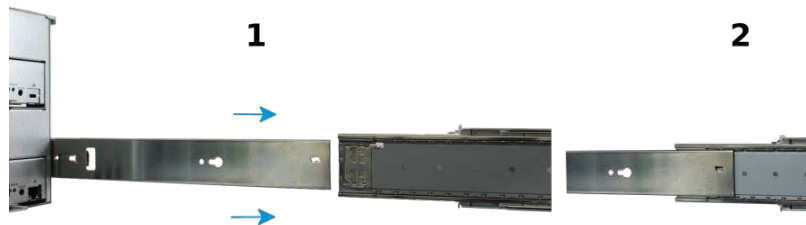
For the rear end of the rail, align the pins with the mounting holes on the rear rack. Pull the white latch toward the rear until the pins click in place. Repeat this process for the second rear rail.



1.2.4 Mount the Unit in the Rack

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.

Pull the front rack rail forward until it stops. Align the cabinet rail with the inside of the front rack rail and slide the cabinet rail forward until it is fully seated inside the rack rail. Repeat the process for the second rail.



When both cabinet rails are secured in the rack rails, gently push the chassis until it stops halfway in. Slide the blue release tabs on both cabinet rails toward the front of the system while pushing the unit in. Push the chassis into the rack until it is flush with the front of the rack.



Anchor the unit in the rack on both sides with the M5x18L screws included in the rail kit.

1.3 Install Drive Trays

Drive trays are used to mount drives in the array. Drive trays are installed in drive bays in the chassis. Each drive bay in the chassis has two indicator LEDs to the right of the tray. The status LED is blue when the drive is active, and the fault LED is red if a fault has occurred.

Press the silver button on the drive tray to open the latch. Carefully slide the tray into a drive bay until the right side of the latch touches the metal front edge of the chassis, then gently swing the latch closed until it clicks into place.



1.4 Connect Expansion Shelves

Refer to the installation instructions included with expansion shelves for details on connecting them.

1.5 Connect Network Cables

Note: Network cables vary by configuration and are not included. Please contact [iX Support](#) (page 7) 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 M-Series for the first time.

1.6 Connect Power Cords

Do not plug the power cords into a power outlet yet. Connect a power cord to the back of one power supply. Place the cord into the plastic clamp and press the tab into the latch to lock it in place. Repeat the process for the second power supply and cord.



After both power cords have been connected to the M-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 M-Series comes back on when power is restored after a power failure.

1.7 Install Bezel (Optional)

The included bezel is not required for operation.

1.8 Perform TrueNAS® Initial Software Configuration

The console displays the IP address of the TrueNAS® M-Series graphical web interface, *192.168.100.231* in this example:

```
The web user interface is at:  
  
http://192.168.100.231
```

Enter the IP address into a browser on a computer on the same network to access the web user interface.

1.9 User Guide

The TrueNAS® User Guide with complete configuration instructions is available by clicking *Guide* in the TrueNAS® web interface or going directly to <https://www.ixsystems.com/documentation/truenas/>.

2 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 | 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) |