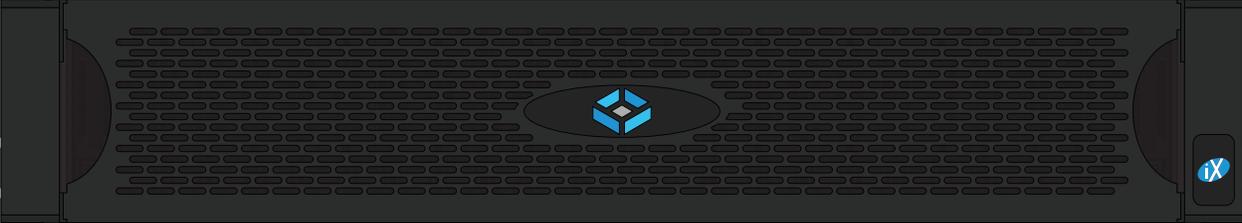


**Connect ES24N to TrueNAS F-Series
Version History**

Version	Editors	Changes	Publish Date & Locations
24061	Tony Rivera	PD-1189 <ul style="list-style-type: none">Document Creation	

Connect ES24N to TrueNAS® F-Series

v.24061



1 Introduction

This document guides you through connecting your ES24N(s) to your TrueNAS F-Series within the TrueNAS OS.

Before starting, ensure your TrueNAS license is active in **System Settings > General**.

ⓘ Important - Licensed Hardware

TrueNAS restricts adding ES24N shelves based on how many are in your license.

You must have at least one ES24N in **Additional Hardware** to access the **NVMe-oF Expansion Shelves** screen.

Support



Customer Name: **TrueNAS Customer**
Features:
Contract Type: **GOLD**
Expiration Date: **2025-05-02** (expires in 332 days)
Model: **AMD EPYC 7543P 32-Core Processor**
System Serial: **A1-103936**
Licensed Serials: **A1-100001/A1-100002**
Additional Hardware: **2 x ES24N Expansion shelf**

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[TrueNAS Forums](#) - Find answers from other users in the forums.
[TrueNAS Licensing](#) - Learn more about enterprise-grade support.

This is a production system

[Update License](#) [File Ticket](#) [Proactive Support](#)

ⓘ Note - IP Addresses

If you already know your ES24N IOM1 and IOM2 IP addresses, you can skip to [step 4](#).

If you know one IOM IP address but not the other, you can use the `curl` command in [step 3](#) to obtain it.

Tip - Entering Commands

We recommend manually entering all shell commands. Copied/pasted commands might not execute correctly.

2 Retrieve the ES24N IOM1 IP Address

Attach a serial cable from IOM1 on the ES24 to the active controller on the F-Series.

Open the **Shell (System Settings > Shell)** on the active F-Series controller and list the active serial ports with:

```
ls /dev/tty* |grep 'USB\|ACM'
```

Example return:

```
root@f60-161a[~]# ls /dev/tty* |grep 'USB\|ACM'  
/dev/ttyACM0  
/dev/ttyACM1
```

Before you can access the port, you might have to change the permissions with:

```
chown :wheel /dev/ttyACM0
```

After modifying permissions, enter:

```
cu -l /dev/ttyUSB/ACM0/1 -s 115200
```

Where:

- **USB/ACM** is the serial port type returned from the `ls` command
- **0/1** is the port number you want to access

Press Enter again. The command logs you into the expansion shelf.

Finally, enter:

```
ip addr show eth0
```

Example return:

```
root@ves-ves-vds2249r-MXE3000043CHA007-mgr1:/usr/bin# ip addr show eth0  
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast qlen 1000  
    link/ether 00:09:3d:0c:4e:d5 brd ff:ff:ff:ff:ff:ff  
    inet 10.220.13.101/20 brd 10.220.15.255 scope global dynamic eth0  
        valid_lft 44801sec preferred_lft 44801sec  
    inet6 fe80::209:3dff:fe0c:4ed5/64 scope link  
        valid_lft forever preferred_lft forever
```

Record the ES24N IOM1 IP address for the next steps, then close the **Shell**.

3 Retrieve the ES24N IOM2 IP Address

Re-open the **Shell** on the F-Series and enter:

```
curl -k -u 'Admin:PASSWORD' https://IP/redfish/v1/Managers/IOM2/EthernetInterfaces/1
|jq .IPv4Addresses
```

Where:

- **PASSWORD** is your ES24N IPMI/BMC password
- **IP** is the ES24N IOM1 IP address you got in step 2

Example Output:

```
root@f60-161a[~]# curl -k -u 'Admin:MXE3000043CHA007' https://10.220.13.101/redfish/v1/
Managers/IOM2/EthernetInterfaces/1|jq .IPv4Addresses
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           %         0         0             0      0 --:--:-- --:--:-- --:--:--  7288
[
  {
    "Address": "10.220.13.102",
    "AddressOrigin": "DHCP",
    "Gateway": "10.220.0.1",
    "SubnetMask": "255.255.240.0"
  }
]
```

Record the ES24N IOM2 IP address for the next steps, then close the **Shell**.

ⓘ Important - Serial Cable

Remove the serial cable from the F-Series and ES24N before continuing.

4 Add the ES24N to TrueNAS

Log into your TrueNAS webUI and go to **System Settings > Enclosure**.

Click on **NVME-OF Expansion Shelves** to access the **NVME-oF Expansion Shelves** screen.

The screenshot shows the 'View Enclosure' page in TrueNAS. The page is dark-themed and features a header with 'System' and 'View Enclosure'. A red box highlights the 'NVMe-OF Expansion Shelves' link in the top right corner. Below the header, there is a 'Disks on F60 (0)' section with an 'EDIT LABEL' button. The main area is titled 'Pools' and shows a rack of drives with a 'Choose a Disk' prompt. A legend indicates 'tank' (blue dot) and 'Unassigned' (grey dot). Below this is a 'Disks Overview' section with two cards: 'Pools in Enclosure' (0) and 'Failed Disks' (0). The 'Pools in Enclosure' card has a 'SHOW POOLS' button, and the 'Failed Disks' card has a 'SHOW STATUS' button. On the right side, there are two expansion shelf slots labeled 'F60 (0)' and 'ES24N (1)'.

Click **Add** in the upper-right corner to configure an ES24N.

The screenshot shows the 'NVMe-oF Expansion Shelves' page in TrueNAS. The page is dark-themed and features a header with 'System > View Enclosure' and 'NVMe-oF Expansion Shelves'. A red box highlights the 'Add' button in the top right corner. Below the header, there is a search bar and a table with columns for 'Description', 'IPs', and 'Username'. The table is currently empty, with a message 'No records have been added yet' in the center. At the bottom right, there is a pagination control showing 'Items per page: 50' and '0 of 0'.

4. Fill out the **Add Expansion Shelf** form and click **Save**.

Add Expansion Shelf

Description *

IP* ?

Optional IP ?

Username* ?

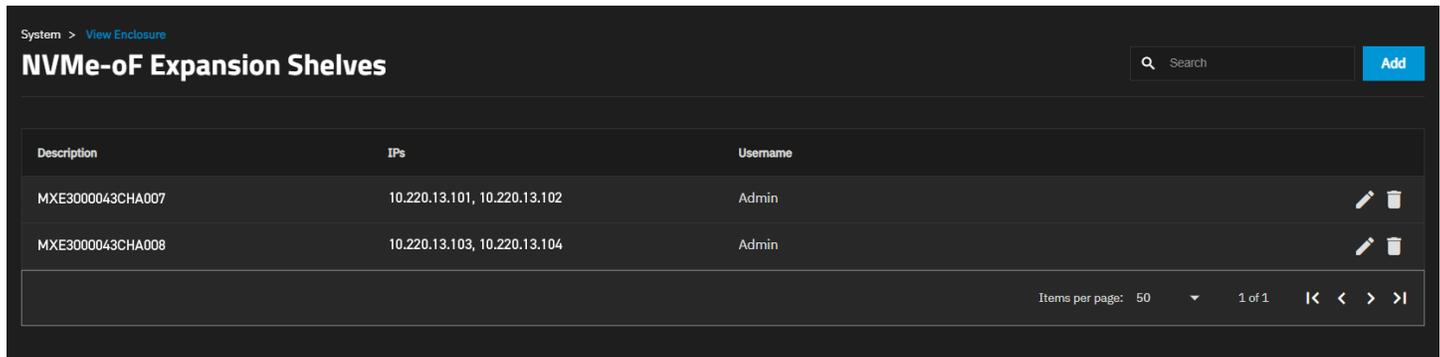
Password* ?

Save

Setting	Description
Description	The name you want TrueNAS to display for the shelf.
IP	The IOM1 IP address (obtained from step 2 if you did not already have it).
Optional IP	The IOM2 IP address (obtained from step 3 if you did not already have it).
Username	Admin
Password	SB-327 IPMI/BMC password (chassis serial number). Ex. MXE3000043CHA007

5 Managing ES24N Shelves

After adding ES24N shelves to the system, TrueNAS lists them in the **NVMe-OF Expansion Shelves** screen. You can edit them by clicking the pencil icons or delete them by clicking the trashcan icons.



Description	IPs	Username	
MXE3000043CHA007	10.220.13.101, 10.220.13.102	Admin	 
MXE3000043CHA008	10.220.13.103, 10.220.13.104	Admin	 

6 Additional Resources

ES24N User Manual



ES24N Resources



iX Support



ES24N User Manual: <https://www.truenas.com/docs/files/ES24NPUM.pdf>

ES24N Resources: <https://www.truenas.com/docs/hardware/expansionshelves/#es24n-resources>

7 Contact iXsystems

Having issues? Please contact TrueNAS Enterprise Support to ensure a smooth resolution.

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: 1-855-473-7449 option 2• Local and international: 1-408-943-4100 option 2
Telephone	Telephone After Hours (24x7 Gold Level Support only): <ul style="list-style-type: none">• US-only toll-free: 1-855-499-5131• International: 1-408-878-3140 (International calling rates will apply)