

FreeNAS® Mini

Configuration and Data Recovery

Version 1.0



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Migrating your data from an older FreeNAS Mini 2.0 to a newer FreeNAS Mini 3.0 can be accomplished by following this guide.

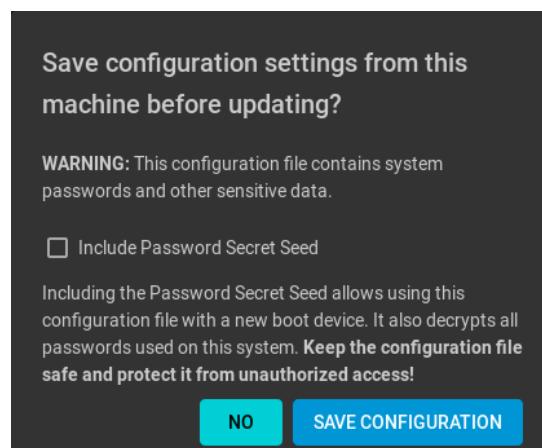
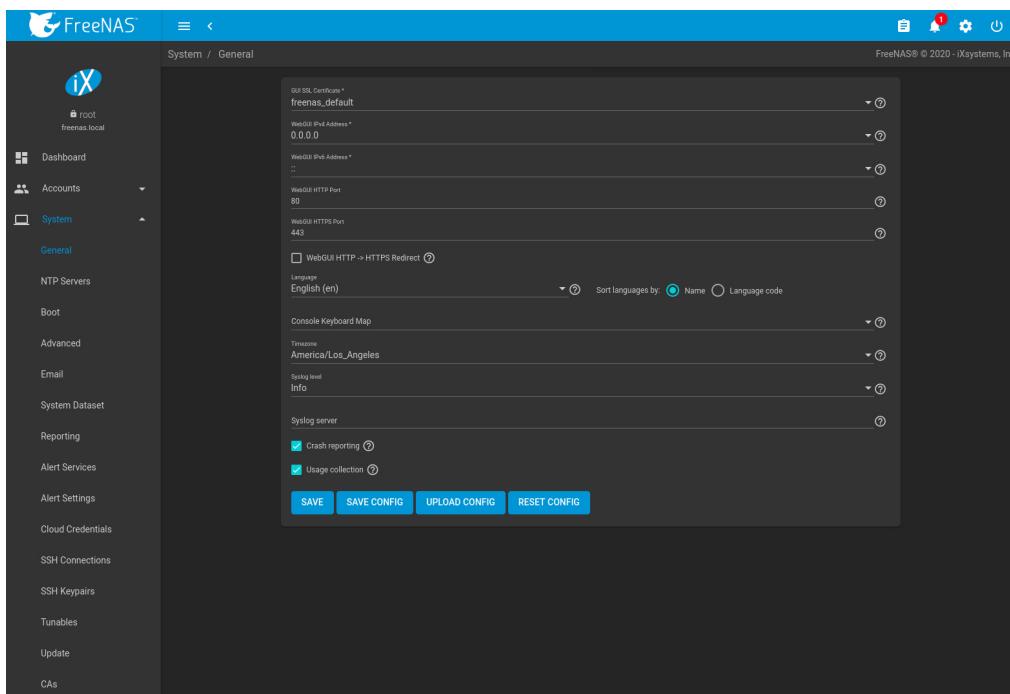
It is recommended to keep the Mini 2.0 system online and update it to the same version of FreeNAS that is installed on the Mini 3.0 system. This can help avoid database migration errors between versions of the software. When performing a recovery from a Mini 2.0 that cannot be accessed or updated, you might need to transfer the Mini 2.0 SataDOM to the Mini 3.0 system to download the previous system configuration.

Download the Mini 2.0 Configuration

When possible, update the system to the same version as installed on the Mini 3.0 and download your configuration file before disconnecting or removing the disks from the Mini 2.0.

Turn on the system and enter the BIOS by pressing the DEL key at the boot splash screen. Make sure the Boot Priority is the SataDOM boot device.

When the system is booted, log in to the web interface, go to **System > General**, and click **SAVE CONFIG**. Include the encryption keys and the password secret seed so that the configuration can be fully transferred to the Mini 3.0. Save the .tar file to a location on your local system and shut down the Mini 2.0.



SataDOM Transfer

If your Mini 2.0 is no longer functional but is still physically accessible, the system configuration can be recovered by moving the SataDOM boot device to the Mini 3.0 and booting into it. This requires opening the case on the Mini 2.0 and 3.0 to remove the 2.0 SataDOM and add it to 3.0 motherboard.

Anti-Static Precautions

Static electricity can build up in your body and discharge when touching conductive materials. Electrostatic Discharge (ESD) is very harmful to sensitive electronic devices and components. Keep these safety recommendations in mind before opening the system case or handling system components:

1. Turn off the system and remove the power cable before opening the system case or touching any internal components.
2. Place the system on a clean, hard work surface like a wooden tabletop. Using an ESD dissipative mat can also help protect the internal components.
3. Touch the metal chassis of the Mini with your bare hand before touching any internal component, including components not yet installed in the system. This redirects static electricity in your body away from the sensitive internal components. Using an anti-static wristband and grounding cable is another option.
4. Store all system components in anti-static bags.

More details about ESD and preventative tips can be found at <https://www.wikihow.com/Ground-Yourself-to-Avoid-Destroying-a-Computer-with-Electrostatic-Discharge>

Locating the SataDOM

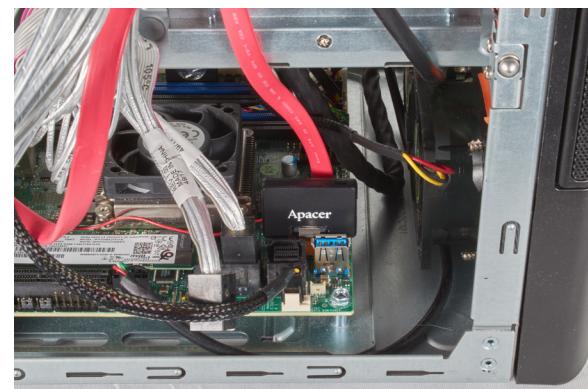
Remove the system case Locate the SataDOM boot device and Molex power cable. The SataDOM and its location in a Mini 2.0 system are pictured below.



The location of the SataDOM in the Mini E/E+ and the XL+ is pictured below.



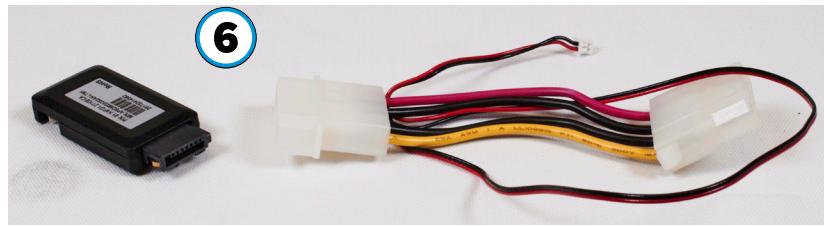
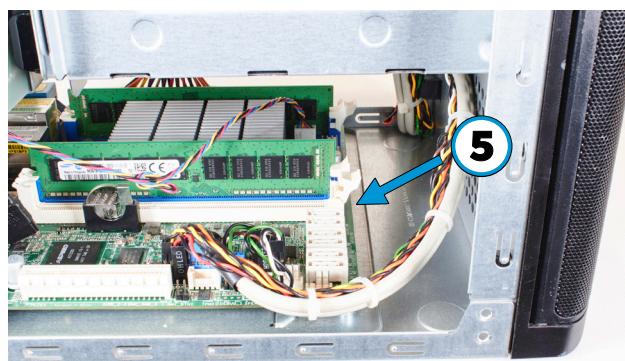
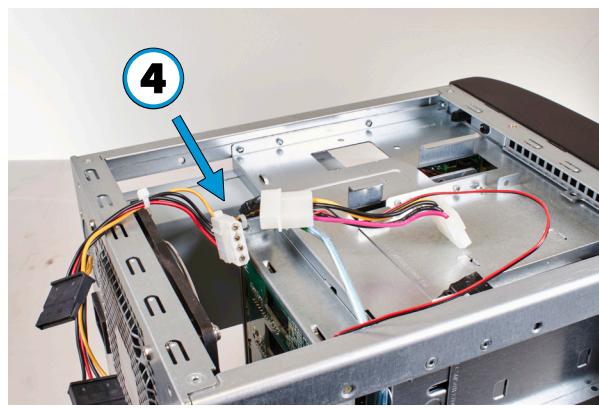
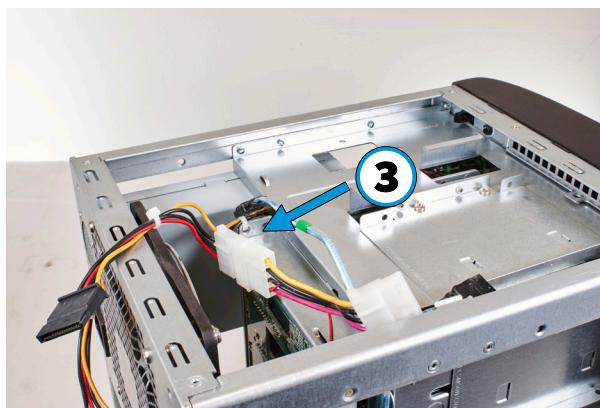
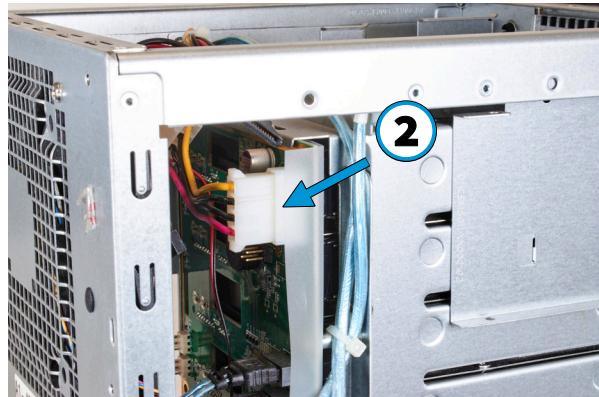
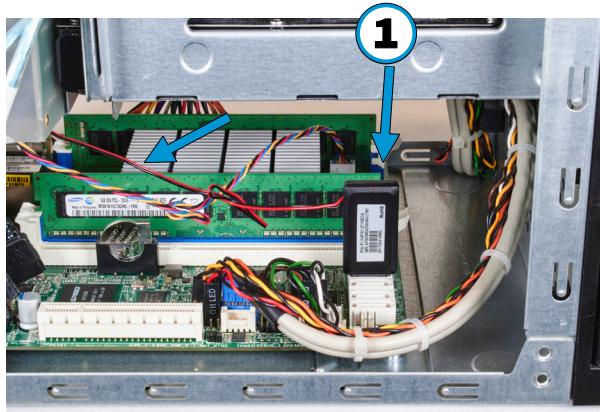
E and E+



XL+

Remove the Mini 2.0 SataDOM

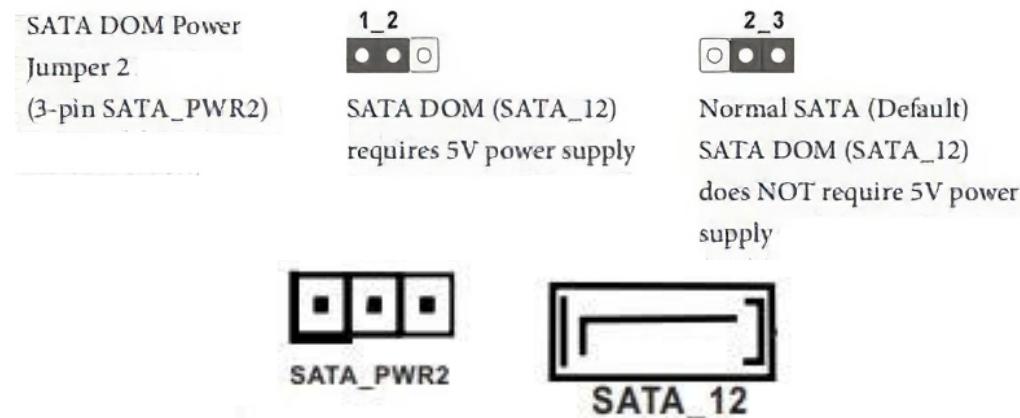
Locate the SataDOM and the connected power cable (1). Unplug the Molex plug from the backplane (2). Locate the other end of the power cable (3). Disconnect the passthrough Molex plug (4). Gently squeeze the SataDOM retention clip to remove it and the connected power cable from the system (5). The cable might become disconnected from the SataDOM during removal (6).



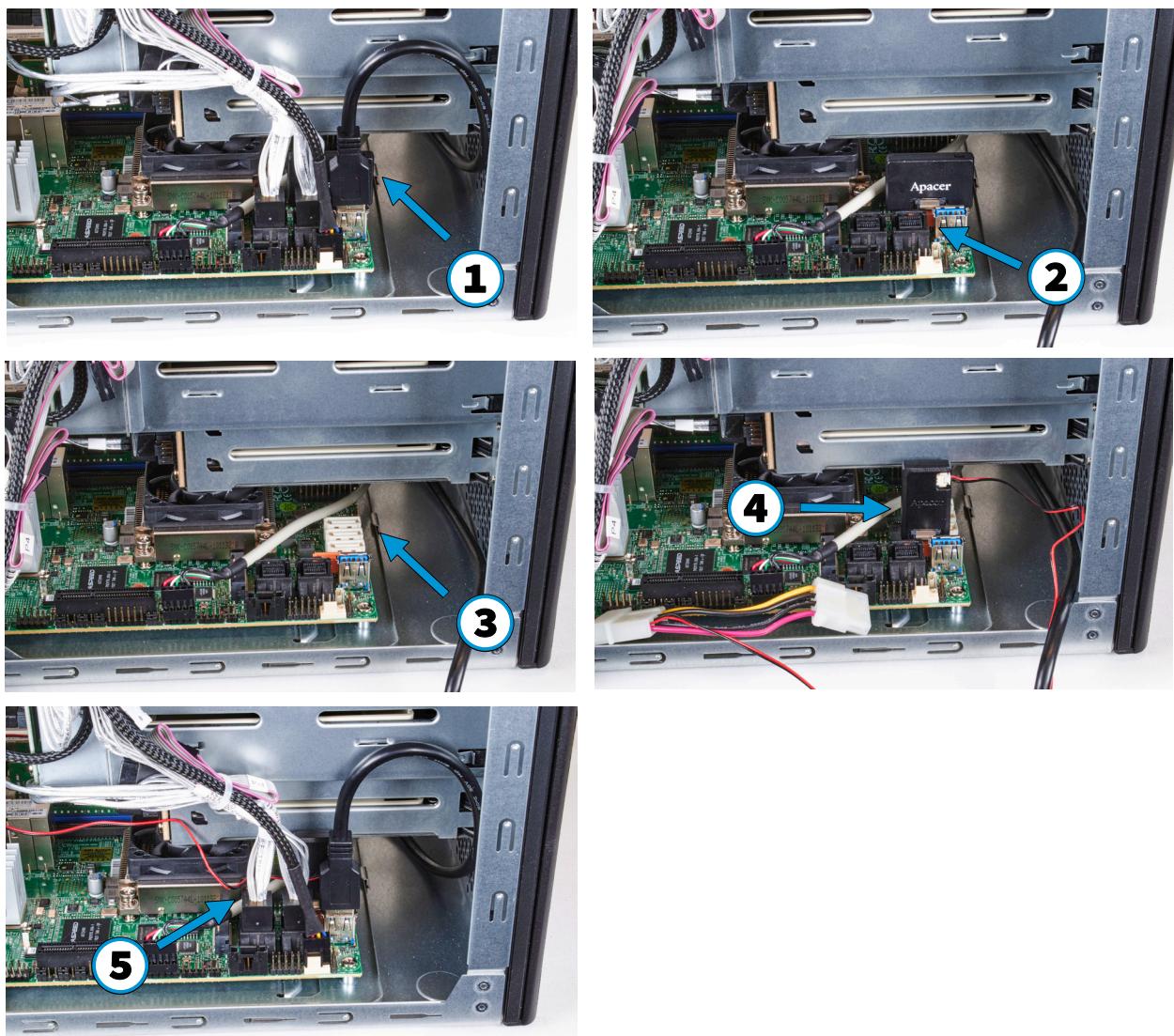
Installing the 2.0 SataDOM in a 3.0 Mini

WARNING:

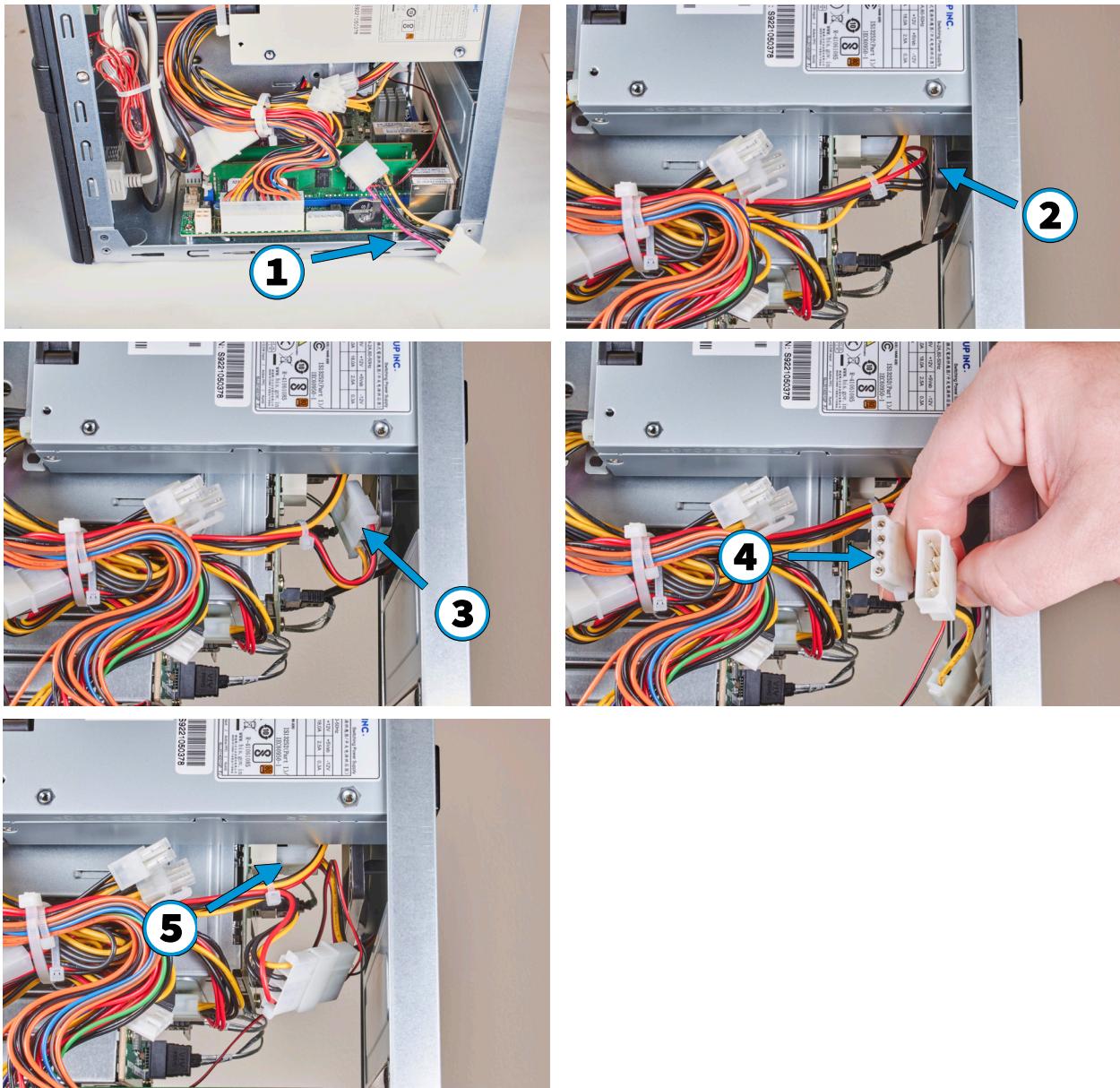
To avoid a short in the Mini E or E+ models, you must move the power jumper on the E/E+ motherboard. When adding a Mini 2.0 SataDOM to a Mini XL+, no jumpers need to be moved.



Open the case on the 3.0 Mini and locate the SataDOM (1). If necessary, remove other wiring connections that are in the way (2). Gently squeeze the SataDOM retention clip and remove the SataDOM from the motherboard (3). Install the Mini 2.0 SataDOM in the same location (4). Route the Mini 2.0 SataDOM power cable behind the nearby plugs and connect the Molex plug to an open cable from the Mini 3.0 power supply (5). Ensure the SataDOM power cable is fully connected to the SataDOM Module.



Feed the SataDOM power cable to the other side of the system (1). Locate the Molex plug on the backplane (2). Unplug the Molex connector (3). Connect the SataDOM Molex to the Molex that was unplugged from the backplane (4). Plug the other end of the SataDOM power cable into the backplane (5).



For Mini E or E+ systems, double check that Position 2_3 is set on the motherboard power jumper before attempting to boot the Mini. Turn on the system, enter the BIOS by pressing the DEL key and make sure the Boot Priority is set to the Mini 2.0 SATA DOM boot device. Follow the procedure in “[Download the Mini 2.0 Configuration](#)” (page 2) to download the Mini 2.0 configuration file to your local system.

Remove the 2.0 SATA DOM and reinstall the Mini 3.0 SATA DOM. Verify the power jumper for the SATA DOM is back in Position 1_2 and the additional Molex power cable is removed.

Upload the Mini 2.0 System Configuration

Turn on the system and enter the BIOS by pressing the DEL key. Make sure the Boot Priority is the SATA DOM boot device.

The SATA DOM that is shipped the Mini 3.0 is pre-loaded with the latest version of FreeNAS. When the system is booted, log in to the web interface, go to **System > General**, and click **UPLOAD CONFIG**. Upload the system configuration .tar file that was previously downloaded.

Test and Adjust the Configuration

Because the network interfaces were updated for the Mini 3.0 generation, they have to be reconfigured after restoring the Mini 2.0 system configuration.

To reconfigure your interfaces, please refer to the Configuring Networking section of the TrueNAS® Documentation Hub: <https://www.truenas.com/docs/hub/initial-setup/networking/>

When the network interfaces are reconfigured, verify the rest of the system configuration transferred correctly by opening the different screens in the web interface and confirming that previously saved tasks, shares, and general system settings are available. If the configuration transfer was successful, power down the system and prepare to move the data storage disks into the Mini 3.0.

Transfer Storage Drives

The drive trays are interchangeable between the 2.0 and 3.0 FreeNAS Mini generations. Move the trays from the Mini 2.0 into the Mini 3.0. Instructions on handling drive trays can be found in the Basic Setup Guide that shipped with the Mini or are found at https://www.ixsystems.com/blog/knowledgebase_category/freenas/.

When all drives are installed, power on the system and log in to the web interface. Go to **Storage > Pools** and verify the stored data is available on the system. If the pools are not visible, **Add a pool** and select the **pool import** option. Select the storage pools and import them into the system.

Migrating Data between Disks (Optional)

There are several ways to migrate data off the original storage disks and onto new disks. One migration method that is recommended for being fast and effective is to set up a local replication to snapshot the original data and store the snapshots in a different storage pool on the system. To do this, install both the original and new disks in the system, power on the system, log in to the TrueNAS web interface, and go to **Tasks > Replication Tasks** to add a new replication. For more details about configuring a replication, see this [Local Replications how-to](#) on the TrueNAS Documentation Hub.

Additional Resources

The TrueNAS User Guide has complete software configuration and usage instructions. It is available by clicking **Guide** in the TrueNAS web interface or going directly to:

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

Additional guides, datasheets, and knowledge base articles are also found in the iX Information Library at:

<https://www.ixsystems.com/library/>

The TrueNAS forums provide an opportunity to interact with other TrueNAS users and to discuss their configurations. The forums are available at:

<https://ixsystems.com/community/forums/>

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: • 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): • US-only toll-free: 855-499-5131 • International: 408-878-3140 (International calling rates will apply)