With the introduction of SSD support in the Drobo B1200i, SSDs provide a faster tier of storage for data that is transactional in nature, the type of data that benefits from the faster write and access speeds SSDs provide. Follow the steps in this guide through the process of adding solid state drives (SSDs) to a Drobo B1200i to automatically accelerate transactional applications on the Drobo.
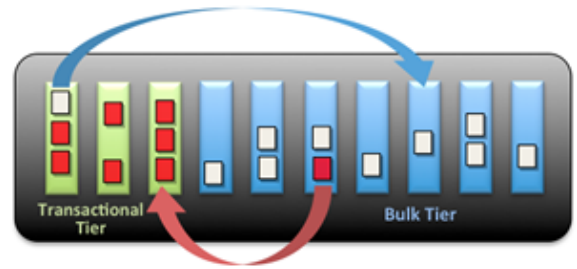
Topics

- What you will need
- Preparing to add SSDs
- Adding SSDs to enable Automated Data-Aware Tiering

What You Will Need

- Drobo B1200i SAN storage system
- 3 compatible enterprise SSDs*
- Drobo B1200i firmware 1.1.0 or higher
- Drobo Dashboard management software version 2.2.0 or higher

* Enterprise SSDs tested by Drobo as compatible for use in B1200i. More information @ http://support.drobo.com/app/answers/detail/a_id/655.

Preparing to Add SSDs

If you initially deployed a Drobo B1200i without SSDs, some preparations are required in order to install SSDs and enable Automated Data-Aware Tiering and performance acceleration.

STEP 1
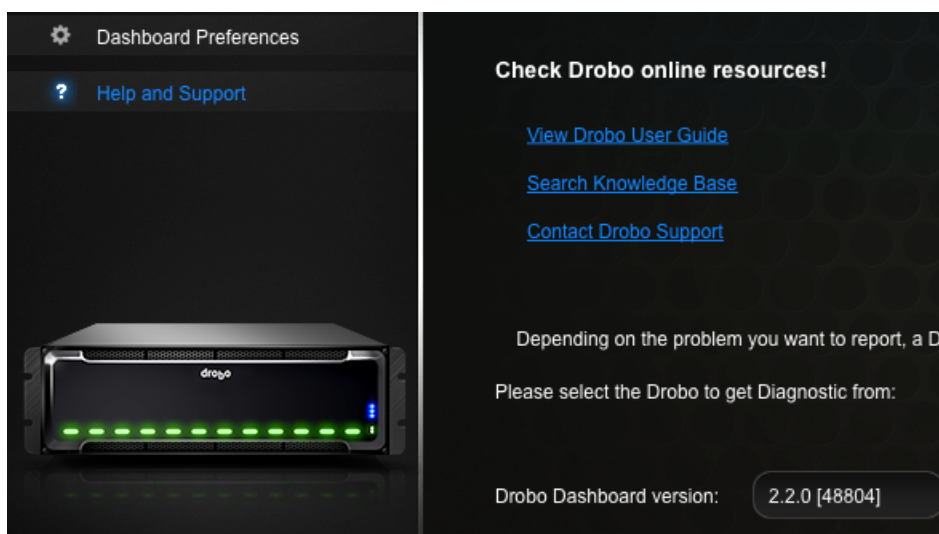
Verify that you are using **Drobo Dashboard version 2.2.0 or higher.**

Skip to Step 3 if your version of Drobo Dashboard is up to date.

STEP 2

The latest Drobo Dashboard software for the B1200i is posted @ http://www.drobo.com/support/updates.php. Download the version of Drobo Dashboard posted and install.

STEP 3

If the **B1200i is running firmware version 1.1.0 or higher**, skip to Step 5.
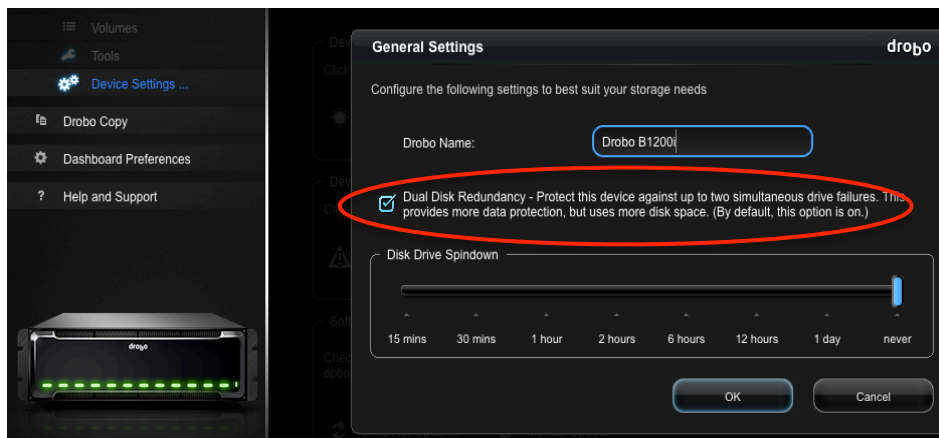
STEP 4

The latest firmware for the B1200i is posted @ http://www.drobo.com/support/updates.php.
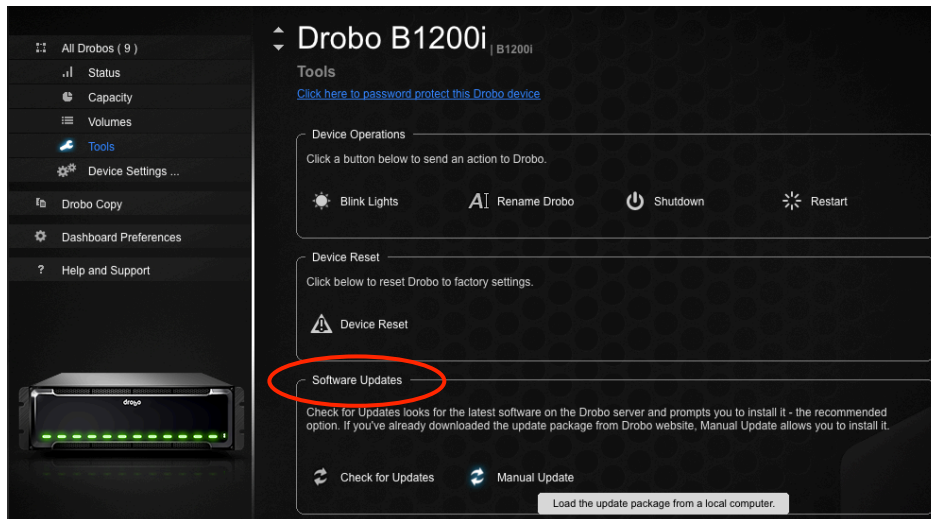
Start Drobo Dashboard and select the Drobo B1200i to update.

Choose **Tools > Software Updates** to upgrade the firmware, either automatically or manually using a previously downloaded file.
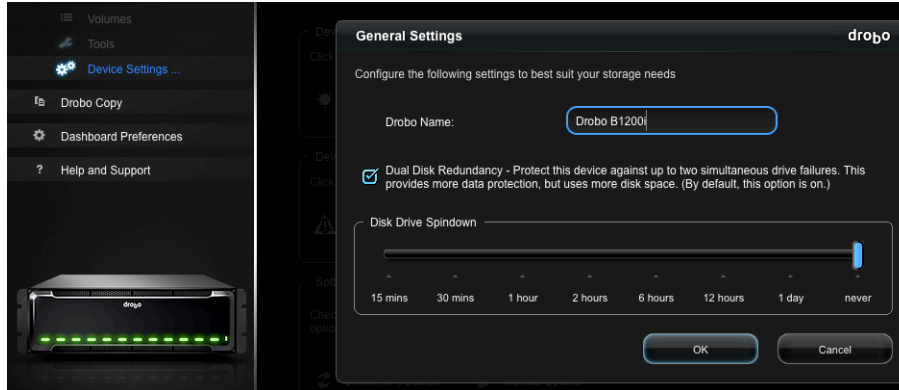
STEP 5

Verify that Dual-Disk Redundancy (DDR) is enabled before removing any drives.

Enable **Dual-Disk Redundancy** in the General Settings.

STEP 6

If you purchased the B1200i 24TB configuration with 12 x 2TB SAS drives, you must remove 3 drives to make room for the SSDs that will make up the transactional tier.

Remove one SAS drive from the Drobo and let the system rebuild. Then remove the second drive and repeat for the last drive. Any 3 drives can be removed, but for easier management, remove 3 drives from bays that are side-by-side and at the left or right side (drive bays 0,1, and 2 or drive bays 9, 10, and11).

When it's ready to receive the SSDs, the Data Protection progress bar disappears and the B1200i shows the remaining HDDs in green in Drobo Dashboard.

Adding SSDs to Enable Automated Data-Aware Tiering

When transactional data ("hot") enters the Drobo, it is written to the faster tier of SSDs, the transactional tier, a different approach to enterprise arrays with auto-tiering. Like other solutions, data residing on the slower bulk tier is promoted to the transactional tier if it becomes hot based on read access patterns.

After you add SSDs to the B1200i, you don't need to do anything further to configure the storage. Automated Data-Aware Tiering manages the hot and cold blocks of data, instantly boosting performance for all of the volumes in the Drobo.

NOTE: It is recommended that you insert or remove SSDs one at a time.

STEP 1
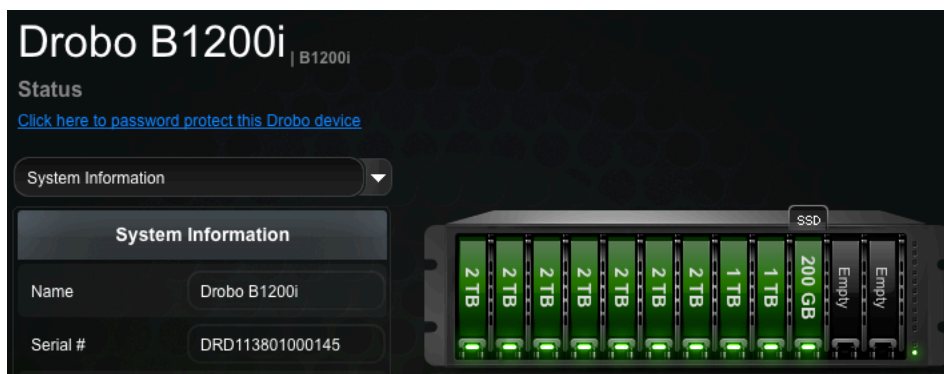
Insert an SSD into any of the empty drive bays.

STEP 2

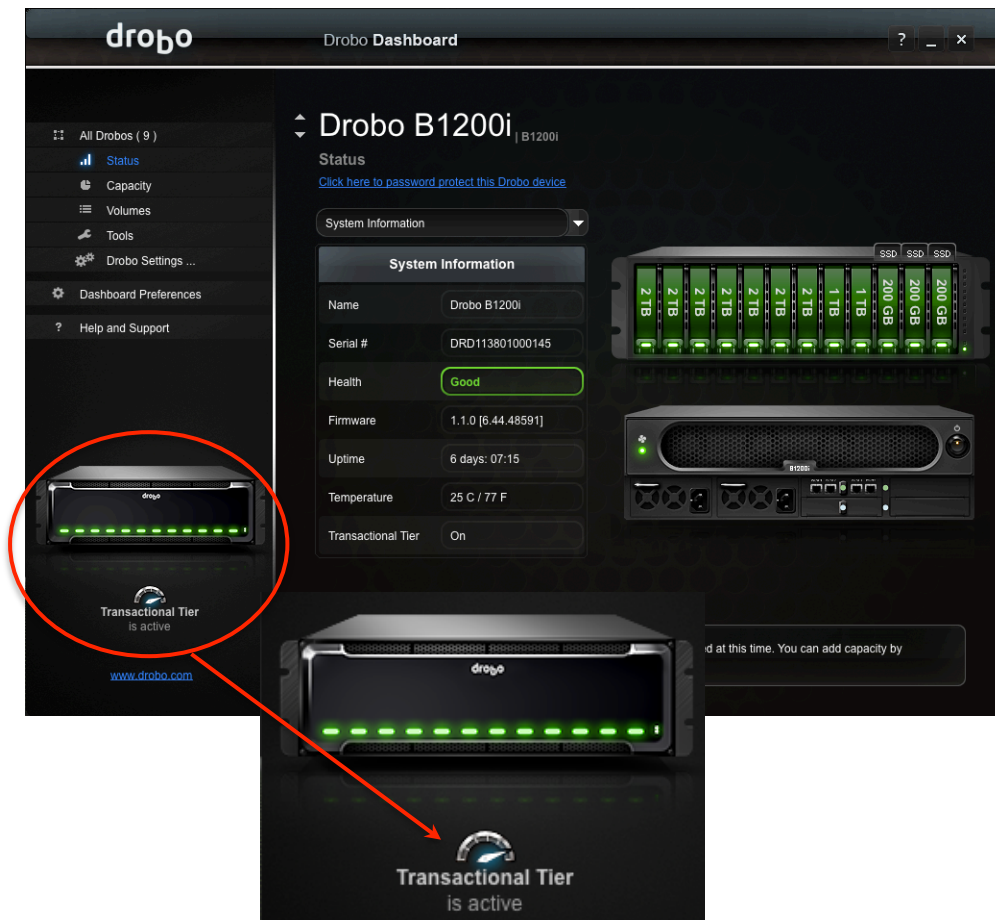Insert the second SSD into another empty drive bay.

STEP 3

Insert the third SSD into another the remaining empty drive bay.

After all SSD's have been installed, Automated Data-Aware Tiering dynamically begins to reconfigure the B1200i and a notification icon displays when the feature is enabled.