

Application

Backup & Re

Backup & Restore

Cloud Service

Collaboration

Compatibility List

File Sharing

General

High Availability

Installation

Mobile

Multimedia

Network

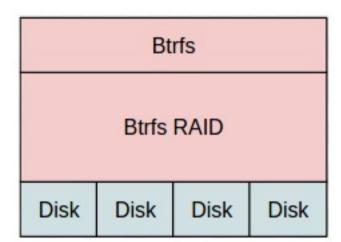
Printer

Storage Virtualization

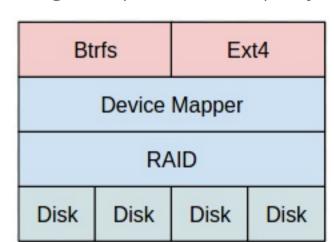
What is the RAID implementation for Btrfs File System on Synology NAS?

To secure stored data, Synology has verified Btrfs File System in the way that has been confirmed to be the most stable for business use. Some concerns have been raised in regards to systems with Btrfs RAID potentially encountering issues with parity calculation errors, resulting in unrecoverable data loss. You can read about it here.

The below diagram illustrates that Btrfs RAID takes over the entire communication between Btrfs file system layer and the disks.



However, it is known that Btrfs RAID is unstable and not suitable for production environments. For this reason, Synology chose Linux RAID over Btrfs RAID. The following diagram explains the concept - Synology has implemented the layers in between to ensure that we have full control of the communication for the highest stability.



Although Btrfs RAID has some advantages, including automatic corruption detection and correction, we are already developing these features when Btrfs and Linux RAID are used.

Note:

■ For more information on the applied Synology NAS models of the **Btrfs** file system, please refer to **here**.

Was this article helpful? Yes / No



NAS Selector



Where to Buy



NVR Selector



RAID Calculator

Compatibility

HDD/SSD

IP Camera

Surveillance Devices

Router

Network Card

Other Devices

Support

Knowledge Base

Download Center

Security Advisory

Developers

Synology Account

Company

About Synology

Newsroom

Media Coverage

Customer Stories

Synology Blog

Contact us

Resources

Beta Program

Bounty Program

Synology Community

Copyright © 2018 Synology Inc. All rights reserved. Terms & Conditions | Privacy

② English - US