

Hard Drive Replacement for FreeNAS 9.2.x Systems

Hang this instruction sheet on your FreeNAS system for when you need it.

The purpose of this instruction sheet is to assist in replacing a failing hard drive, one of the routine maintenance items you will have to do.

Note: If the new hard drive is a WD RED series, ensure WDIDLE is performed and the timer is set to 300 seconds.

Identify Failed Drive(s)

- 1) Open an SSH window.
- 2) Type "smartctl -a /dev/ada0" and identify IDs 5, 197, 198, and 200 for any count above zero (0) and write down the serial number of that drive so you ensure you remove the correct drive.
- 3) Repeat step 2 while changing "ada0" for each additional drive.
- 4) If you have more than one failing drive, make a choice and replace only 1 at a time IAW the procedure below. Once the first drive has been resilvered a second drive can be replaced.

Replace a failed or failing hard drive in a pool

Note: If the pool is encrypted, refer to the User Manual before taking any action!

Note: The replacement hard drive must be the same size or larger.

- 1) GUI -> Storage -> Highlight Pool -> Select Volume Status (bottom of screen)
- 2) Highlight the drive to replace and select Offline.
- 3) If you cannot offline the drive due to the error message "no valid replicas", Scrub the pool and try to offline again.
- 4) Once the disk shows it is Offline, Shutdown your system.
- 5) Replace the failed drive ensuring the drive serial number is the same as previously identified, then power on the system.
- 6) Once the system reboots repeat step 1 above.
- 7) Highlight the OFFLINE drive and select Replace, select the new drive and select Replace Disk.
- 8) Ensure the new drive is ONLINE.
- 9) Open up an SSH window and type "zpool status [poolname]" and ensure resilvering is in progress. Do not do anything until this is shown as completed, and Pool State is ONLINE.
- 10) If the old drive still shows in the GUI, highlight the old drive entry and select Detach.