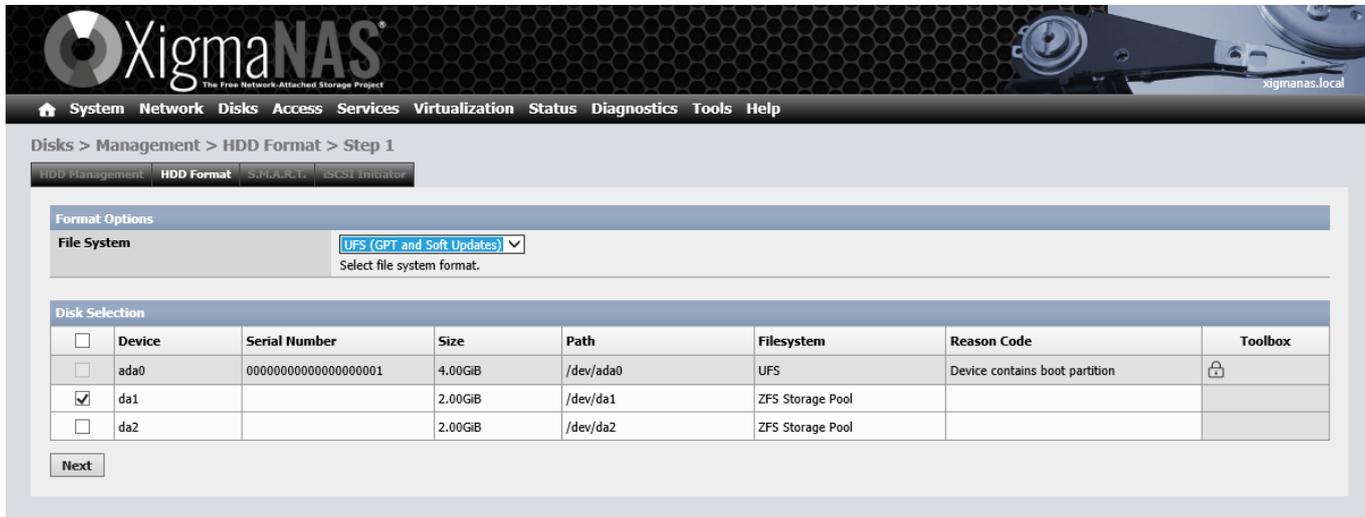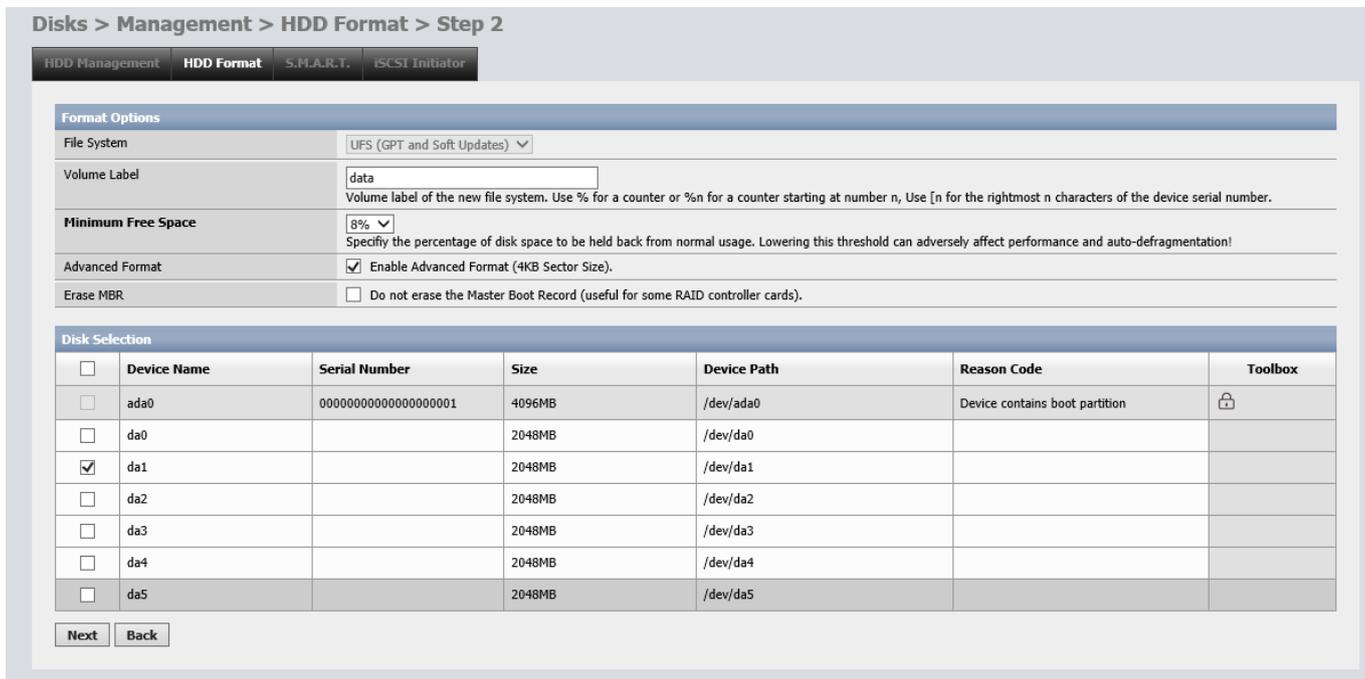# Disks|Management|HDD Format

This page Disks > Management > HDD Format > Step 1 is used to format or reformat a harddisks. Also it is used to update the Metadata. In the example below we wil format an single disk (da1) to UFS (Unix Filesystem), an native filesystem of XigmaNAS.

Step 2 in the format process where we can set the advanced format and the volume label for the drive.

Step 3 is the final page before we can start the format process, this is the last time we can abort the process in case you selected the wrong harddisk.

Disks > Management > HDD Format > Step 3

| HDD Management | **HDD Format** | S.M.A.R.T. | iSCSI Initiator |

Format Options

File System	UFS (GPT and Soft Updates) ⌄
Volume Label	data
Minimum Free Space	8% ⌄
Advanced Format	☑ Enable Advanced Format (4KB Sector Size).
Erase MBR	☐ Do not erase the Master Boot Record (useful for some RAID controller cards).

Disk Selection

☐	Device Name	Serial Number	Size	Device Path	Reason Code	Toolbox
☐	ada0	00000000000000000001	4096MB	/dev/ada0	Device contains boot partition	🔒
☐	da0		2048MB	/dev/da0		
☑	da1		2048MB	/dev/da1		
☐	da2		2048MB	/dev/da2		
☐	da3		2048MB	/dev/da3		
☐	da4		2048MB	/dev/da4		
☐	da5		2048MB	/dev/da5		

Format   Back

Step 4 we see the finish of the format process, press ok button to return to the first page if you want to format another disk.

Disks > Management > HDD Format > Step 4

| HDD Management | **HDD Format** | S.M.A.R.T. | iSCSI Initiator |

Format Options

File System	UFS (GPT and Soft Updates) ⌄
Volume Label	data
Minimum Free Space	8% ⌄
Advanced Format	☑ Enable Advanced Format (4KB Sector Size).
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☑	da1		2048MB	/dev/da1		
☐	da2		2048MB	/dev/da2		
☐	da3		2048MB	/dev/da3		
☐	da4		2048MB	/dev/da4		
☐	da5		2048MB	/dev/da5		

OK

```
Command output for disk /dev/da1 :
kern.geom.debugflags: 0 -> 16
Deleting MBR and partition table...
#/sbin/gpart destroy -F /dev/da1 1>/dev/null 2>&1
#/bin/dd if=/dev/zero of=/dev/da1 bs=512 count=8192 2>&1
8192+0 records in
8192+0 records out
4194304 bytes transferred in 0.279895 secs (14985303 bytes/sec)
#/bin/dd if=/dev/zero of=/dev/da1 bs=512 count=8192 oseek=4186112 2>&1
8192+0 records in
8192+0 records out
4194304 bytes transferred in 0.277312 secs (15124837 bytes/sec)
Creating partition...
da1 created
```

🛑 **Formating a disk will erase all your data - Double check if you select the correct drive!!!**

To format a disk following Information is needed:

Disk - Select the Disk you want to format

File system - Select the File system you want to use

- UFS - The native Files System of XigmaNAS
- FAT32 - Filesystem from Microsoft
- EXT2 - old Linux File System
- Software RAID - Choose this if you want to create a RAID-Array
- ZFS - storage pool device for creating a Zpool

Volume label - Enter the Name of your Drive or Volume

Minimum free Space - Diskspace reserved for The root user. This reserved space prevent user from overfilling the filesystem. A full filesystem can result in a unstable/unusable system. If unsure keep the settings as is. Default is 8%

Don't Erase MBR - By default XigmaNAS erase the complete Disk including the Master Boot Record. Some Hardware RAID-Controller don't like this so you can disabling erasing the MBR here. This setting is not necessary for formating a Software RAID.

*The shown settings may vary depending on the file system you selected above.

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