How to Create a RAID volume on my EON?

Currently, as of Jan 2022, openmediavault doesn't support the creation of the RAID via USB, so you need to use terminal commands:

A great link with all information can be found here.

https://www.ricmedia.com/build-raspberry-pi3-raid-nas-server/#Setup_RAID-0_Volume

Connect to your PI unit via your preferred SSH or locally with a KB

Login to your devices and be sure to be as Root. As you are using root commands, it's easier to be a root user to start with.

```bash
sudo -i
```

Update your system and install `mdadm` to the latest build.

```bash
sudo apt-get update
sudo apt-get upgrade -y
sudo apt-get install mdadm -y
```

Now you can check what devices are detected on the USB using the `blkid` command

```bash
blkid
```

The first two entries below are the MicroSD Card system volumes.

```bash
/dev/mmcblk0p1: LABEL.FatBoot="boot" LABEL="boot" UUID="E183-6233" BLOCK_SIZE="512" TYPE="vfat" PARTUUID="f1b709c5-01"
/dev/mmcblk0p2: LABEL="roots" UUID="123a209-2596-48f0-a078-731d10b918ad" BLOCK_SIZE="4096" TYPE="ext4" PARTUUID="f1b709c5-02"
/dev/sda: UUID="9a87989d-4416-5a1f7ee35ec" UUID_SUB="bd60ae45-dc12-abb8-c9fa-86bc81889694" LABEL=raspberrypi:v01
```

Note: if you are booting your RPI via the internal USB header, the results may differ slightly from the above.

The EON has four connectors for HDDs, they should report to the system as /dev/sda, /dev/sdb, /dev/sdc & /dev/sdd

So, this means /dev/sda /dev/sdd are the 3.5in HDD slots, and /dev/sdb & /dev/sdc are the 2.5in HDD slots.

Note: if you have no UUID or have some volumes present, it's best to wipe the disk before trying to build an array.

So, I created a mirror for both sets of drives, and used the following commands.

```bash
mdadm --create --verbose /dev/md/vol1 --level=1 --raid-devices=2 /dev/sda /dev/sdd
mdadm --create --verbose /dev/md/vol2 --level=1 --raid-devices=2 /dev/sdb /dev/sdc
```

Note: You will be prompted for some confirmation prompts and even notice if the drives have existing data on them, then you need to clean the drives (see below)

```bash
mdadm: partition table exists on /dev/sdb
mdadm: partition table exists on /dev/sdb but will be lost or meaningless after creating array
mdadm: Note: this array has metadata at the start and may not be suitable as a boot device. If you plan to store '/boot' on this device please ensure that your boot-loader understands md/v1.x metadata, or use --metadata=0.90
mdadm: partition table exists on /dev/sdc
mdadm: partition table exists on /dev/sdc but will be lost or meaningless after creating array
mdadm: size set to 976630464K
```
mdadm: automatically enabling write-intent bitmap on large array
As soon as you create these, OpenVault media will pick up the volumes
Continue creating array? Y (you will be prompted here to accept the creation)
mdadm: Defaulting to version 1.2 metadata
mdadm: array /dev/md/vol2 started.

Check RAID Details via OMV:

Clean Drives which are not empty via OMV: