Using External Storage with Batocera

To enable external storage, follow these steps:

1. Open the **Main Menu** with [START] and navigate to **SYSTEM SETTINGS > STORAGE DEVICE**.

   ![Main Menu Screenshot]

2. Select your storage device. Selecting “AnyExternal” will use the first external storage device that connects. How does your system decide what the first external storage device is when there is more than one connected? I'd like to know too.
In most cases, using a second USB hard drive to host your ROMs separately from the Batocera system should be completely transparent when this method is used to enable it. According to Batocera, it will just appear as if though the roms folder on your external drive is actually on your /userdata partition. Here's more info on what symlinks are, in case you're curious.

Batocera will automatically create the folder structure it needs on the drive you select.

Batocera has a built-in tools to format drives. **BE ULTRA CAREFUL WHEN USING THIS, AS YOU CAN DESTROY ALL DATA WITH IT!** You can prepare the drive in the right format by using **Main Menu > System Settings > Developer > Format a Disk.**

However, when tinkering with the systems, things can go wrong. The following is here to help you troubleshoot and fix those cases.

**Manual external storage configuration with batocera-boot.conf**

If the above steps aren't sufficient for your purposes, you can set up the external drive manually. This will be done by editing the /boot/batocera-boot.conf file in the boot partition and providing the information of the partition that hosts the ROMs.

The list of UUIDs of all drives connected to the system can be printed with the **blkid** command. It will output something similar to the following:

```
/dev/sdb2: LABEL="SHARE" UUID="12e46ca9-xxxx-xxxx-xxxx-xxxxxxxxxx" TYPE="ext4"
/dev/sdb1: LABEL="BATOCERA" UUID="zzzz-zzzz" TYPE="vfat"
/dev/sda1: LABEL="SHARE" UUID="2efa1068-yyyy-yyyy-yyyy-yyyyyyyyyy" TYPE="ext4"
```

In this example, /dev/sda1 is the partition on the drive hosting my ROM files. /dev/sdb1 is the Batocera boot partition and /dev/sdb2 is the rest of the Batocera USB pendrive (that I don't want to use).
Open the `/boot/batocera-boot.conf` file. Change the `sharedevice` to `DEV [UUID of the desired partition]`. For example:

```
sharedevice=INTERNAL
```

would be replaced with

```
sharedevice=DEV 2efa1068-yyyy-yyyy-yyyy-yyyyyyyyyy
```

If the drive is empty, the folder structure for the ROM files will be created on next reboot.

If you are using an external hard drive and it is not recognized correctly after doing this, then it might be that your external hard drive needs more time to spin up while Batocera boots. In those cases you have to edit the `/boot/batocera-boot.conf` file and add the line: `sharewait=15` underneath the aforementioned line (if it still does not work, try with a higher number like `sharewait=20` for example).