Armbian pe tv box, un dispozitiv configurat în scop educațional

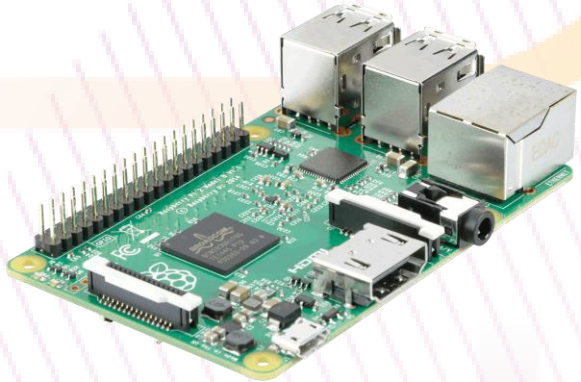
https://www.dualstore.ro/mediaplayere-9/tv-box-h96-max-v12-smart-media-player-4k-ram-4gb-ddr3-rom-32gb-android-12-rk3318-quad-core-airplay-miracast-dlna-wifi-dual-band.html

Trif Mihai,
Liceul Teoretic „Emil Racoviță”, Baia Mare

Consum curent...

40-70W

https://i.dell.com



4-7W

https://banner2.cleanpng.com

10-20W

https://png2.cleanpng.com/

4-7W

https://r7.hiclipart.com

Armbian...

Armbian este o distribuție de Linux destinată în special plăcilor de dezvoltare construite în jurul unor procesoroare ARM, microprocesoare de tip RISC (Reduced Instruction Set Computer)

Nu este singurul sistem de operare care rulează pe astfel de mini calculatoare, are interfață grafică intuitivă, dispune de documentație bună și este ușor de configurat pentru servere, IoT, programare, bun de folosit în scop educațional.

https://raw.githubusercontent.com/armbian/build/master/.github/armbian-logo.png

Tv-Box...

Este un mini pc pe care rulează sistemul de operare Android. Acest dispozitiv a apărut pe piață ca alternativă al televizoarele smart, fiind în special orientat spre redare conținut multimedia, jocuri și nu numai.

https://r7.hiclipart.com

Datorită faptului că modelele mai vechi nu mai primesc suport, rămân cu versiuni învechite de Android, devin lente și deoarece configurația lor permite utlizarea acestora în alt scop decât cel construit, putem **reutiliza** aceste dispozitive!

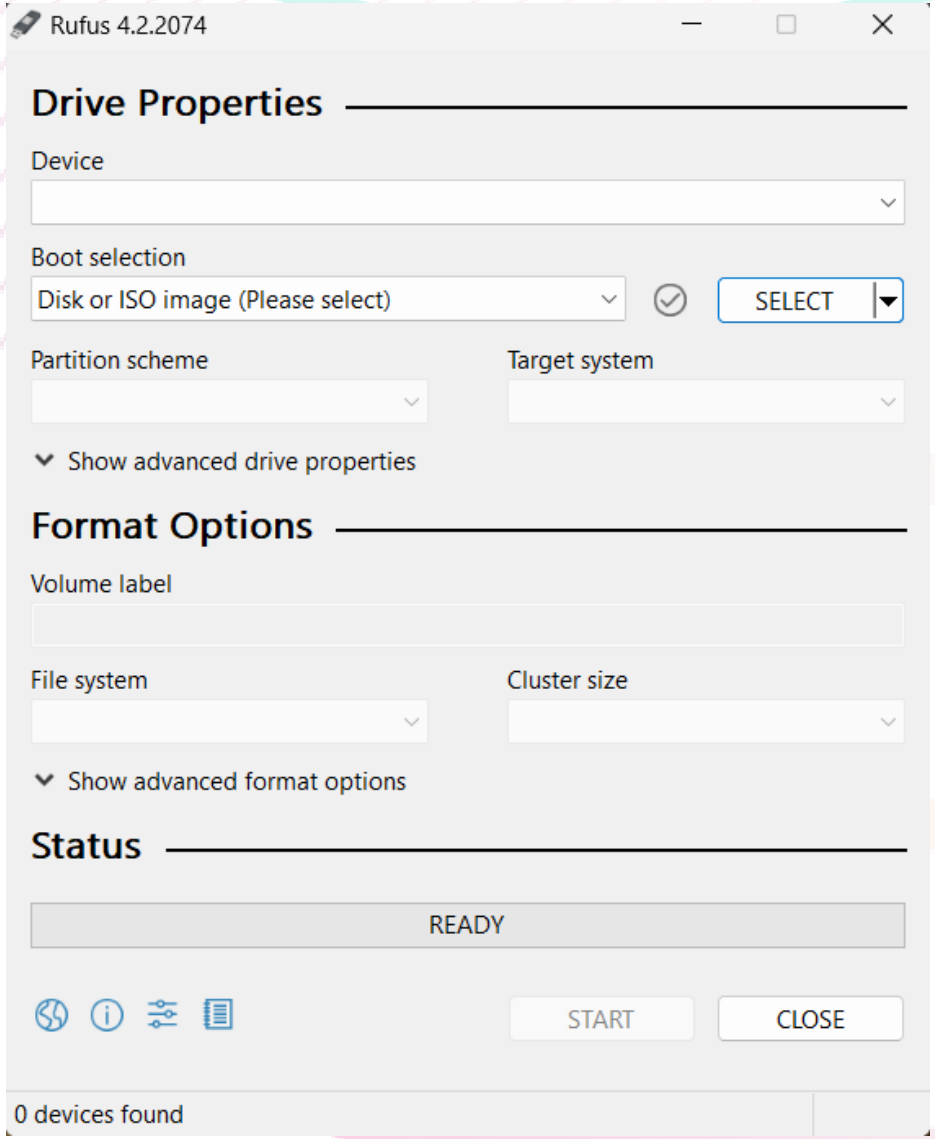
Pregătirea imaginii...

Rufus
– utilitar ce ajută la crearea drive-urilor bootabile

Link imagine
– https://github.com/armbian/community

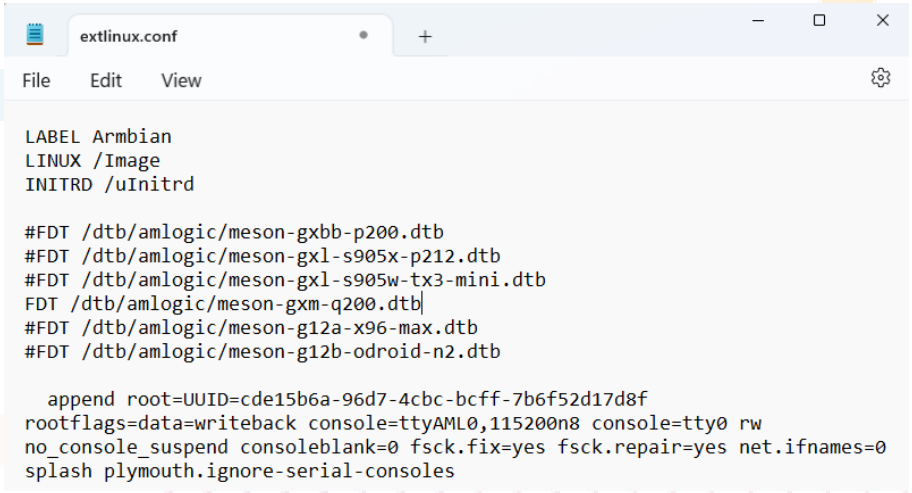
Card SD

blob:https://www.pngwing.com/9f79405c-db67-4464-88bb-49b797a2f289

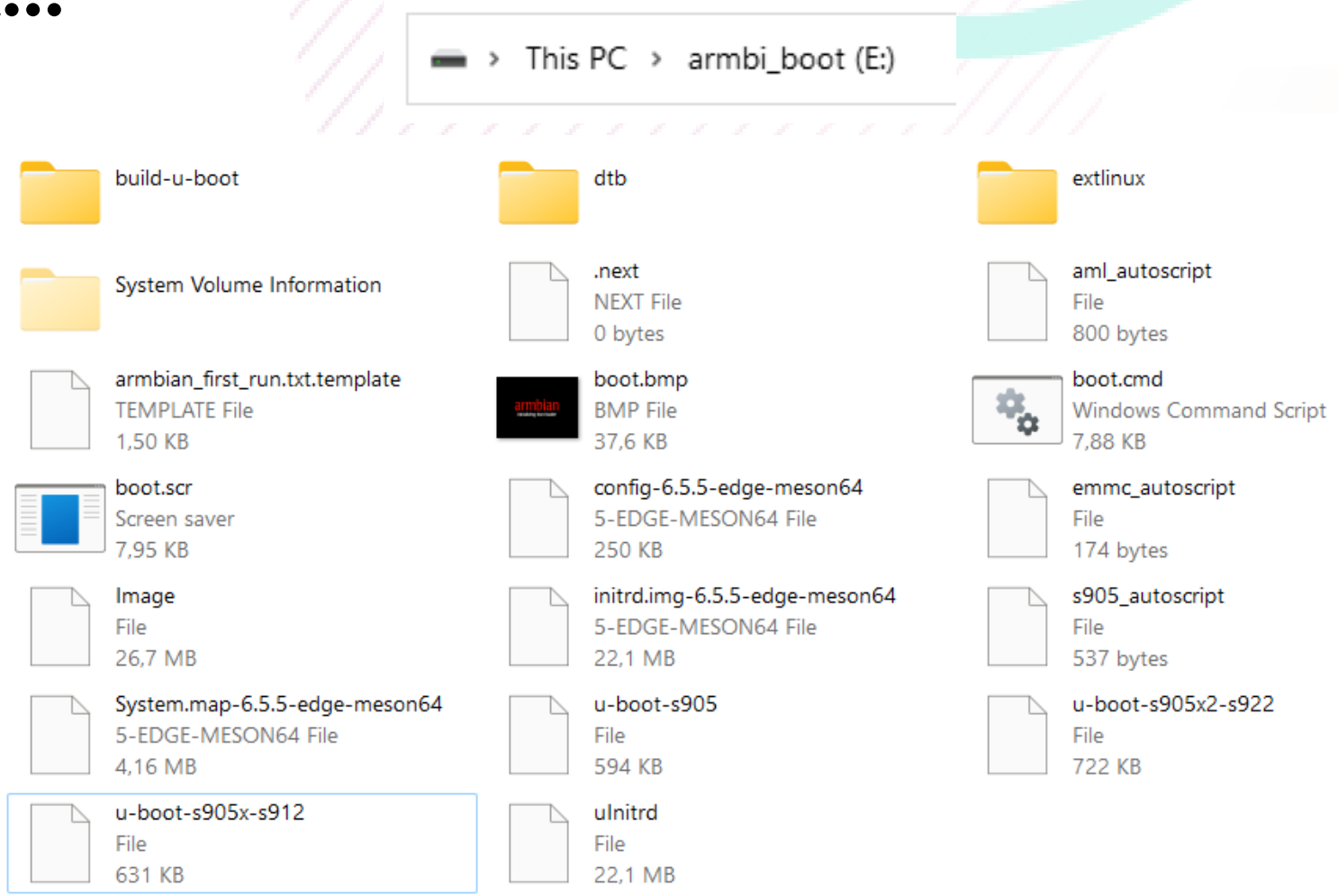


După scrierea imaginii...

- redenumire u-boot.ext

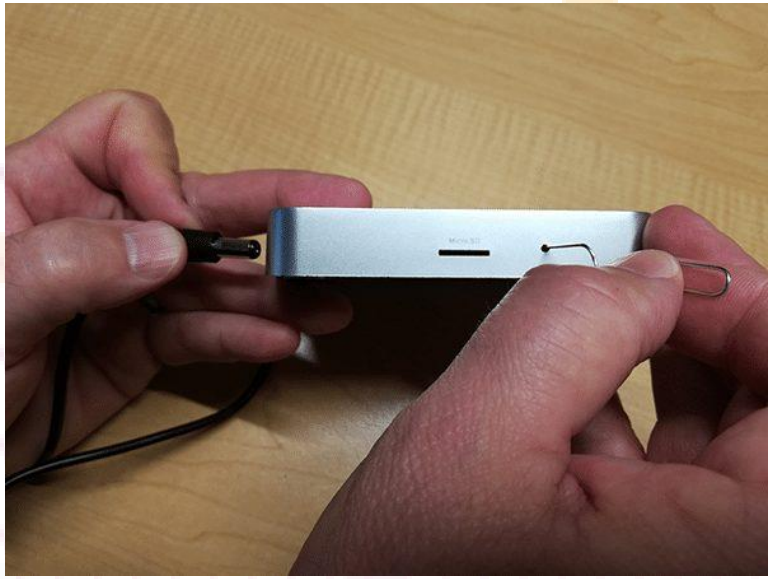


- editare extlinux.conf



Primul boot...

Unele dintre aceste dispozitive au butonul de reset situat în portul audio al dispozitivului, altele prezintă un mic orificiu.



https://troypoint.com/how-to-reset-android-tv-box/

https://troypoint.com/how-to-reset-android-tv-box/

XGEN R&D

Boot screen...

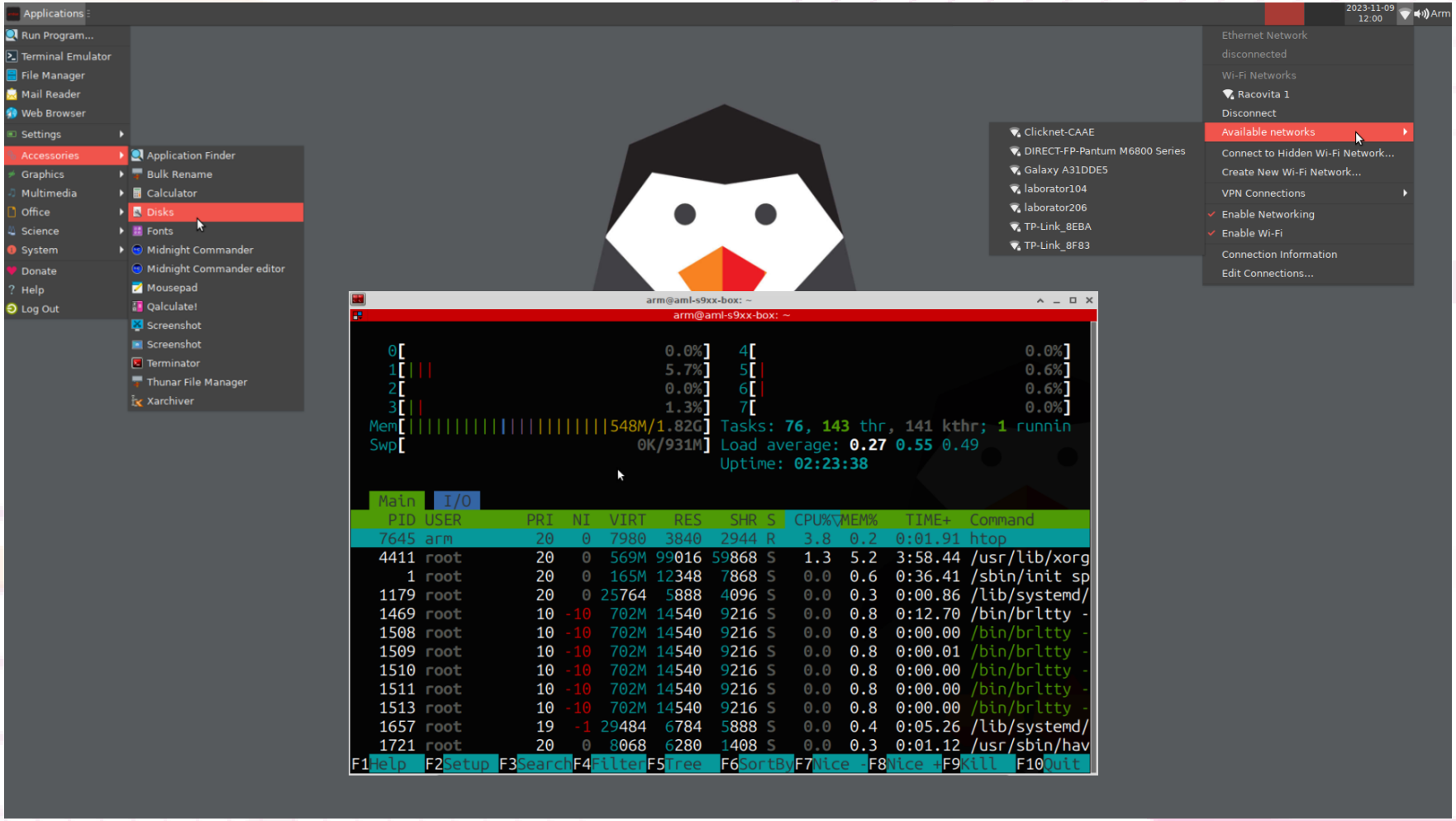
```
U-Boot 2015.10-rc5-armbian (Oct 14 2015 - 18:47:37 +0200) Allwinner Technology

CPU:   Allwinner A20 (SUN7I)
I2C:   ready
DRAM:  2 GiB
MMC:   SUNXI SD/MMC: 0
HDMI connected: Setting up a 1280x720 dvi console (overscan 10x5)
In:    serial
Out:   vga
Err:   vga
SCSI:  SUNXI SCSI INIT
SATA link 0 timeout.
AHCI 0001.0100 32 slots 1 ports 3 Gbps 0x1 impl SATA mode
flags: ncq stag pm led clo only pmp pio slum part ccc apst
Net:   eth0: ethernet@01c50000
starting USB...
USB0:   USB EHCI 1.00
USB1:   USB OHCI 1.0
USB2:   USB EHCI 1.00
USB3:   USB OHCI 1.0
scanning bus 0 for devices... 1 USB Device(s) found
scanning bus 2 for devices... 2 USB Device(s) found
Hit any key to stop autoboot:  0
6944 bytes read in 328 ms (20.5 KiB/s)
switch to partitions #0, OK
mmc0 is current device
Scanning mmc 0:1...
Found U-Boot script /boot/boot.scr
2065 bytes read in 363 ms (4.9 KiB/s)
## Executing script at 43100000
0 bytes read in 282 ms (0 Bytes/s)
28110 bytes read in 418 ms (65.4 KiB/s)
5468392 bytes read in 840 ms (6.2 MiB/s)
Kernel image @ 0x46000000 [ 0x000000 - 0x5370e8 ]
## Flattened Device Tree blob at 49000000
   Booting using the fdt blob at 0x49000000
   Using Device Tree in place at 49000000, end 49009dcd

Starting kernel ...
```

armbian
universal operating system

Interfața... Explorare...



Server http...


```
sudo apt install apache2 -y
```


```
sudo apt install php -y
```


```
sudo apt install mariadb-server php-mysql -y
```


```
sudo apt install phpmyadmin -y
```

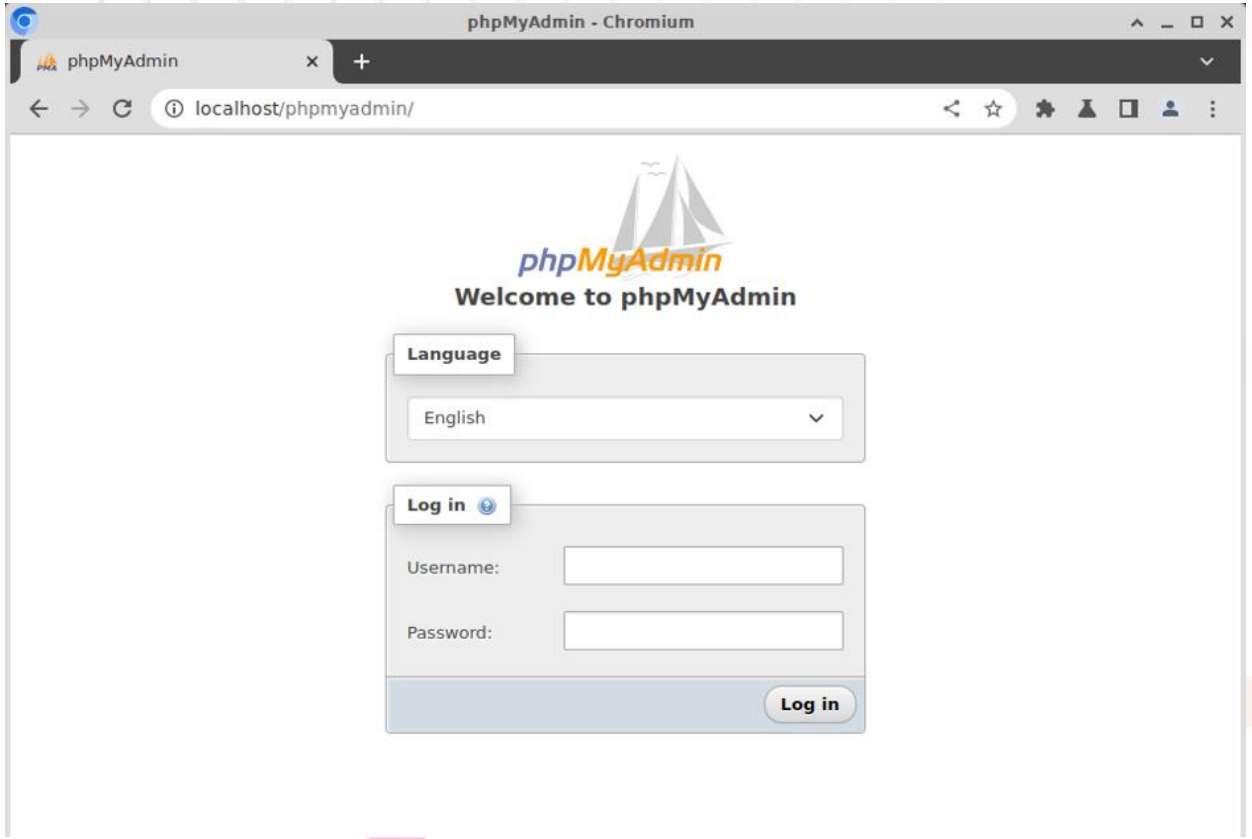
Interfața PhpMyAdmin...

http://127.0.0.1/phpmyadmin

http://localhost/phpmyadmin

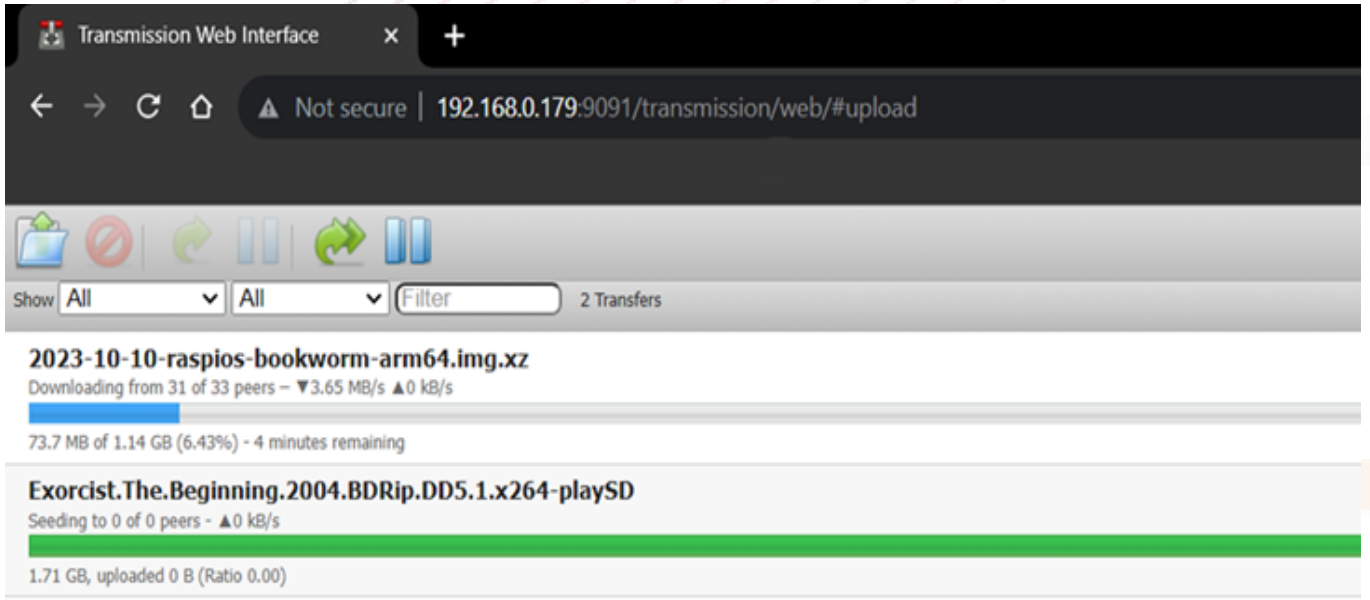
http://192.168.1.100/phpmyadmin/

http://demo.home.ro



Minidlna... transmission...

```
sudo apt-get install minidlna
```



```
sudo apt install transmission
```

Altele...


```
sudo apt install libreoffice -y
```

```
sudo apt install codeblocks -y
```

```
sudo apt install idle3 -y
```

XGEN R&D

Mulțumesc pentru atenție...

Tutorialul complet se află la **http://demo.home.ro** unde, puteți testa live cum rulează un server http pe un **Tv box**!

XGEN R&D

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