v.0.0.1

itadOS

Guides

Karl-Markus Oismann
7-15-2025

Contents

Prerequisites:

- Note: itadOSv.X.X.X/config.sh file contains various settings.
- Computer or Virtual machine with Debian
    - The following dependencies installed:
        - nvme-cli
        - lshw
        - dd (coreutils)
        - hdparm
        - rtcwake (util-linux)
        - Mmc-utils
        - whiptail
        - shred (coreutils)
        - Smartmontools
        - Pciutils
        - fop
        - xsltrpoc
        - live-build

Helpful links for live-build:
https://debian-install-notes.pages.dev/netinstall/live-build#3

https://manpages.debian.org/testing/live-build/lb_config.1.en.html

Create ISO file

Step 1 – Create a directory

Create a directory.

Step 2 – Create live-build config folder

Go into the folder using terminal and enter the following command:

Note: this command may need to be written in one line, removing '/'.

```
sudo lb config \
--distribution bookworm \
--architectures amd64 \
--archive-areas "main contrib non-free non-free-firmware" \
--binary-images iso-hybrid \
--bootloader grub-efi \
--debian-installer none \
--bootappend-live "boot=live components username=root toram quiet splash"
```

Step 3 – Insert itadOS into live-build

Insert itadOS to /config/includes.chroot

ItadOS directory would look something like this (Replace X's with correct version figures):

```
/config/includes.chroot/itadOSv.X.X.X
```

Step 4 – Add the dependencies

Create a file:

`/config/package-lists/my.list.chroot`

Insert the following to my.list.chroot:

```
nvme-cli
lshw
hdparm
mmc-utils
fop
xsltproc
smartmontools
pciutils
```

Step 5 – Start itadOS on boot

Create path and file .bashrc:

`/config/includes.chroot/root/.bashrc`

Insert the following line into .bashrc:

`/itadOSv.X.X.X/main.sh`

Step 6 – Allow laptop lid to be closed

Create path and file:

`config/includes.chroot/etc/systemd/logind.conf`

Add the following to logind.conf:

```
[Login]
HandleLidSwitch=ignore
HandleLidSwitchDocked=ignore
HandleLidSwitchExternalPower=ignore
```

Step 7 – Legacy boot

Create path and file:

```
config/includes.binary/isolinux/isolinux.cfg
```

Insert the following to isolinux.cfg:

```
UI vesamenu.c32
PROMPT 0
MENU TITLE itadOS Boot Menu
TIMEOUT 5
DEFAULT live

LABEL live
  MENU LABEL Boot itadOS (Live)
  KERNEL /live/vmlinuz-6.1.0-37-amd64
  APPEND initrd=/live/Initrd.img-6.1.0-37-amd64 boot=live toram
```

Also add required binaries from syslinux:

```
cp /usr/lib/ISOLINUX/isolinux.bin config/includes.binary/isolinux/


cp /usr/lib/syslinux/modules/bios/*.c32 config/includes.binary/isolinux/
```

Step 8 – UEFI boot

Create path and file:

```
config/includes.binary/boot/grub/grub.cfg
```

Insert the following to grub.cfg:

```
set default=0
set timeout=5

menuentry "Boot itadOS (Live)" {
    linux /live/ vmlinuz-6.1.0-37-amd64 boot=live toram
    initrd /live/ Initrd.img-6.1.0-37-amd64
}
```

Step 9. – Build ISO

Return to the folder where 'config' resides.

Enter the following command:

```
sudo lb build
```

Modify itadOS

Must complete '*Create ISO file*' before continuing.

Step 1 – Clean config

Using terminal, go into the directory created *here* containing 'config' directory and insert the following command:

```
sudo lb clean –purge
```

Step 2 – Modify itadOS settings

Go into itadOS directory:

```
/config/includes.chroot/itadOSv.X.X.X
```

Modify config.sh settings.

Step 3 – Create new ISO

Return to the folder where 'config' resides.

Enter the following command:

```
sudo lb build
```

Create itadOS USB disk

Step 1 – Get flashing software

Install Rufus (windows) or other alternative software.

Step 2 – Flash USB disk

Using the selected software, select the iso called 'live-image-amd64.hybrid.iso' from directory created *here*.

Choose the usb disk and start the process.

When using rufus, name the disk ITADOS, or use other methods to do the same. This name is used to filter boot disk by itadOS.