

OpenMandriva Lx 4.3rc Release Notes

The OpenMandriva Lx teams are pleased to announce the availability of **OpenMandriva Lx 4.3rc**.

Available Media

This release is available as a live media DVD or USB flash drive (memory stick), downloadable in ISO format. These are available on our [downloads page](#). USB flash drive installation is usually noticeably faster. As always speed depends on many factors. Live media means you are able to run OpenMandriva Lx straight from a DVD or memory stick (see below) and try it before installing it. You may also install the system to hard disk either from the running live image or from the boot manager.

Available ISO files are:

- x86_64 [KDE Plasma](#) desktop full featured (includes the most common used functionalities, multimedia and office software).
- znver1 Plasma: we have also built a version specifically for current AMD processors (Ryzen, ThreadRipper, EPYC) that outperforms the generic (x86_64) version by taking advantage of new features in those processors.

znver1 is for the listed processors (Ryzen, ThreadRipper, EPYC) only, do not install on any other hardware.

Installable images are offered for the Pinebook Pro, Raspberry Pi 4B, Raspberry Pi 3B+, Synquacer, Cubox Pulse and generic UEFI compatible devices (such as most aarch64 server boards)

System requirements

OpenMandriva Lx 4.3 requires at least 2048 MB of memory and at least 10 GB of hard drive space (see below for known issues with partitioning).

Important Note: Graphics Hardware:

The KDE Plasma Desktop requires a 3D graphics card that supports OpenGL 2.0 or above.

We recommend using AMD, Intel, Adreno or VC4 graphics chips.

Internet Connection

Calamares Installer checks if an Internet connection is available, but OpenMandriva Lx will install just fine even without. It is perfectly OK to simply install as you normally would and proceed to use your new system as normal.

Updating such a system would require being temporarily connected to the internet or downloading the packages elsewhere and transferring them to the installed system and installing the updated packages. But as you are not connected to the internet you could simply use the system and not update for how ever long you see fit.

Virtual Machines

At this time the only virtualization software that OMLx ISOs are tested on is VirtualBox.

The same hardware requirements apply when running in virtual machines.

For VirtualBox you must **always** have at least 2048 MB of memory or OpenMandriva Lx will fail to boot.

Also for VirtualBox it is advisable to install to a fresh virtual machine, as trying to install to an existing one may occasionally fail.

Calamares installer

Calamares is an installer framework.

By design it is very customizable, in order to satisfy a wide variety of needs and use cases.

It aims to be easy, usable, beautiful, pragmatic, inclusive and distribution-agnostic.

Calamares includes an advanced partitioning feature, with support for both manual and automated partitioning operations.

It is the first installer with an automated "Replace Partition" option, which makes it easy to reuse a partition over and over for distribution testing.

Many Linux distros use Calamares installer and each has its own implementation and standards. The user may notice some small differences but it does not mean this is a bug.

Partitioning

At this time partitioning LVM and Raid setups with Calamares installer are not supported.

This applies to all partitioning, all installation on hardware: If you have a UEFI/EFI computer and your BIOS offers a choice when you boot installation media between for example:

USB some Flash Drive

UEFI USB some Flash Drive

or

some DVD optical_device

UEFI some DVD optical_device

You have to choose the UEFI option and boot that. But know also that not all computers will do this. Some with more spartan BIOS will offer only the one option and almost always it is the correct one. So for instance if on a notebook you don't see the above choice no worries.

If you have multiple storage drives enabled they all need to have the same partition table type. They either need to all be gpt or all mbr for everything to work properly.

On UEFI computers in multi-boot situation with multiple storage drives if you already have an existing `/boot/efi` partition you have to use that. The partitioner will not create another `/boot/efi` with proper flags and installation will result in error with no bootloader installed. Do not format you just set the mount point to `/boot/efi`. One can have many different boot loaders for different operating systems in the same `/boot/efi` partition. If there is any need to switch boot loaders that is done in BIOS settings.

NVME SSDs

Some NVME SSDs may not be recognized by OMLx 4.3 Live ISO.

The Live ISO has 2 different workarounds for this under "Troubleshooting" in the Grub2 Menu. They are `(PCIE ASPM=OFF)` and `(NVME APST=OFF)`. We hope this works for most peoples hardware. Problem is known and being worked on by OpenMandriva developers and upstream developers. See more in [Errata/NVME SSDs](#).

Hardware recognition for nvme SSDs should be considerably improved. It is known that some Samsung nvme SSDs that were not previously recognized are now with this kernel version. This issue is of course very hardware specific.

Installer and EFI Support

This release of OpenMandriva Lx supports booting and installation with and without [UEFI](#). Note that secure boot is NOT supported.

If you wish to perform an EFI installation on an existing MBR disk it will be necessary to convert the disk partition table to the newer GPT partitioning scheme. To do this you need to use the `gdisk` tool. A typical invocation would be `gdisk /dev/sda`: the existing partition table will be converted in memory to the GPT scheme. Warnings will be issued about potential data loss, the disk will not be altered until you write the partition table by pressing **w**. You are advised to back up any important data.

There may be occasions where the conversion cannot be performed, this will usually be due to insufficient space at the beginning or end of the disk to write the partition table. It may be necessary to delete or resize a partition to create the needed space, `gparted` is your friend in these circumstances.

There is still a need to create an efi partition to contain the boot equipment and this must be created while running the Calamares installer. When the installer reaches the partitioning stage the `/` (root) partition should be removed and a small (330 MB) FAT16 or FAT32 partition created at the start of the drive. If disk space is critical then a smaller partition may be used, but be sure to set it as FAT16 or FAT32 in Calamares otherwise the installation will fail.

If you fail to observe these steps the installation of the boot loader will fail. Subsequently partition the disk in the normal way.

Please share your experiences on the forums so that we may improve this aspect of the installation.

If you are installing beside Windows 8, 8.1, 10 or similar EFI booted OS as a precaution please ensure that you have recovery disks and you have backed up any important data. Our testing has been limited with this configuration, but successful installations have been performed with no issues.

We would welcome any feedback in this area.

Changing Partition Type

Please note that Calamares cannot convert one partition type to another and preserve partition data.

If you run Calamares from the live image it is not possible to change an existing partition type. Trying to do this generates an error message.

In order to do this you must first delete the partition and recreate it as the type that you wish.

Booting from USB

It is also possible to boot this release from an USB storage device. To transfer the live/installation image you may:

- Use rosa-imagewriter available from our repos

```
sudo dnf --refresh install rosa-imagewriter
```

Or, if you do not have OpenMandriva Lx yet, you can get rosa-imagewriter download links at [this page](#).

At least 4 GB of flash drive capacity is recommended. Persistent storage is not necessary. Note that this **will erase** everything on your USB!

Please do not use other usb-writing tools as some Windows tools (e.g. Rufus) truncate the volume name. This breaks the boot process.

- Via dd

You may alternatively dd the image to your USB stick:

```
$ sudo dd if=<iso_name> of=<usb_drive> bs=4M
```

Replace `<iso_name>` with the path to the ISO and `<usb_drive>` with the device node of the USB drive, i.e. `/dev/sdb`.

SUSE Studio ImageWriter has also been tested and works for burning ISO images to USB storage device.

About Repositories

We have now the [om-repo-picker](#) aka Software Repository Selector to select additional repositories for more package availability.

Do not mix the repositories from different release versions/update channels. This means, as an example, **do not use Cooker repositories on a Rock system**. If you use Rock, use Rock repositories only.

This is explained in more detail in [OpenMandriva Release Plan and Repositories](#).

If you mix different release/update channel repositories and you break your computer the solution is to do a fresh install. After that fresh install do not do this again.

How to install new packages

While graphical tools (Discover, dnfdragora, etc.) are useful to find out available extra software, we strongly suggest to install packages from command line:

```
$ sudo dnf --refresh install <package_name>
```

New Features and Major Changes

In order to keep current with latest changes in Linux, computer security issues, and computer code writing there are major changes in OMLx 4.3rc.

Major changes:

- The kernel has been updated to 5.12.4
- KDE products have been updated: Frameworks 5.82.0, Plasma Desktop 5.21.5, KDE Gear 21.04.1
- Qt 5.15.3 with all patches proposed by KDE
- Mesa 21.1.0
- FFmpeg to 4.4

Upgraded also some cool stuff not on the ISO but available in our repositories:

- AMDVLK 2021.Q2.1 official AMD Vulkan driver. It is an alternative driver and can be installed at same time with RADV. It can be used to improve performance or stability in some games on Linux
- OBS-Studio 27.0.0 rc1 software for video recording and live streaming; it finally supports wayland session. It also supports recording h264 with VA-API (hardware accelerated video encoding) and we also patched it to support HEVC-x265 with HW VA-API
- Blender 2.92.0
- GIMP 2.10.24
- Audacity 3.0.2
- Firefox 88.0
- Steam 1.0.0.70
- LXQt 0.17

Clang compiled kernel

OpenMandriva provides a clang compiled kernel. Users can install same version of kernel-release-desktop and kernel-release-desktop-clang for comparison.

OpenMandriva Lx 4.3rc Errata-Known Issues

As with any release, there are still issues and bugs that may not have been resolved. This page documents those that may cause inconvenience and where possible details how they may be worked around.

NVIDIA Graphics Cards

This release includes the reverse engineered nouveau driver, which gives moderately good support for most NVIDIA cards. For some dual-screen work it is actually better than NVIDIA binary driver as it supports screen rotation on a second monitor useful for monitors with rotatable screens.

Users may use drivers from nvidia web site but they are not supported by OpenMandriva. These can not be supported by OpenMandriva for a number of reasons.

Installing and maintaining any proprietary nVidia drivers is solely the users option and responsibility.

NVME SSDs

There is a well known problem with some (especially newer) NVME SSDs and PCIE devices where the SSD may not be recognized.

Problem is known and being worked on by OpenMandriva developers and upstream developers.

Hardware recognition for nvme SSDs should be considerably improved.

It is known that some Samsung nvme SSDs that were not previously recognized are now with this kernel version. This issue is of course very hardware specific.

On installed system user may wish to add that workaround to `/etc/default/grub` and run `update-grub2` to make workaround global. You would use the one that you found to work on the Live ISO.

If `(PCIE ASPM=OFF)` worked for you then add:

```
pcie=aspm=off
```

to the lines:

```
GRUB_DECLINE_LINUX_DEFAULT  
GRUB_DECLINE_LINUX_RECOVERY
```

in

```
/etc/default/grub
```

and then run:

```
$ sudo update-grub2
```

If `(NVME APST=OFF)` worked then add instead:

```
nvme_core.default_ps_max_latency_us=0
```

As always users are encouraged to ask questions about anything you do not understand on our [forum](#).

GEOIP

Installer automatically GEOIP setting may not set the timezone correctly.

How to configure printer

Turn your printer on and see if it is automatically configured. Pay attention to whether the right driver was installed. If printer was auto configured and you have correct driver then great, you are all set.

If it was not, turn off your printer. Open Printer Settings aka `system-config-printer` and remove your printer.

If the correct driver was not installed by default we will need to add a software package. The next step is to determine what software to add for your printer.

In OpenMandriva Lx this is most likely to be a 'task-printing' package specific to your printer brand. The packages are:

- task-printing-canon
- task-printing-epson
- task-printing-hp
- task-printing-lexmark
- task-printing-okidata
- task-printing-misc

Install the package that matches your brand or the misc package if none do. Example using okidata:

```
$ sudo dnf install task-printing-okidata
```

Now turn printer on again and it should then automatically configure itself (sometimes you might need to reboot for auto config to work).

If not seek help [here](#)

Discover

If you want to explore also additional repositories packages you will need to enable them by mean of [Software Repository Selector](#) and to refresh cache.

Multiboot

In the 'real world' multiboot works well most of the time but when there are problems sometimes the solution is a workaround rather than a fix. These are just realities of multiboot.

Also it is not currently possible for OpenMandriva QA to test our bootloader with every file system type on every Linux distro, or even on "Top 10" Linux distros. The fact is that whether multi-booting with Windows or other Linux distros we rely exclusively on users' reports to know what does and what does not work regarding multi-booting.

One known problem encountered with OMLx bootloader is that OpenMandriva grub2 does not create boot entries for openSUSE systems that use btrfs file system. OMLx grub2 does work with openSUSE systems that use ext4 file system.

This is because openSUSE uses custom syntax for their btrfs patches for openSUSE os-prober and grub2 packages that are not compatible with OMLx code. It is not presently known if OMLx bootloader does/does not work with openSUSE with any other file system types such as XFS or F2FS.

The workaround is for users to switch boot-loaders in UEFI firmware settings or BIOS. Alternative may be to use openSUSE bootloader if it recognizes your OpenMandriva system.

As users report multiboot issues we will fix what we are able to. Issues we are unable to fix we will report in Errata for our OMLx Releases.

Zypper

The package zypper-needs-restarting may conflict with dnf-utils if installed.

As a workaround remove dnf-utils.

Bluetooth

For bluetooth devices user may need to enable systemd bluetooth.service. Open Konsole and run:

```
$ sudo systemctl start bluetooth ; sudo systemctl enable bluetooth
```



Helping the project

The OpenMandriva development teams (Cooker & QA) are always looking for new contributors to assist in creating and maintaining packages and to assist bugfixing and testing. You are welcome to join us and help us in this work which is not only rewarding but also tremendous fun!

If you feel that your talents do not lie in the realm of software, then the OpenMandriva Workshop group, which is made up from the artwork, documentation, translation and Communication teams, is always open for the submissions of artwork and translations. New contributors who would like to help with these wide-ranging tasks should see the wiki for more details, and to learn how to join! Alternatively you may use our [Forum](#).

It also costs time and money to keep our servers up and running. If you can, please [donate](#) to keep the lights on!