

# OpenMandriva Lx 4.1 Release Notes

The OpenMandriva Lx teams are pleased to announce the availability of **OpenMandriva Lx 4.1**.

## Available Media

This release is available as a live media DVD, downloadable in ISO format. These are available on our [downloads page](#).

*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:

[KDE Plasma](#) desktop only full featured (includes the most common used functionalities, multimedia and office software).

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.

## Recommended Hardware

OpenMandriva Lx 4.1 requires at least 2.0 of memory and at least 10 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 4 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, however, you must **always** have at least 2048 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.

## Partitioning

At this time partitioning LVM and Raid setups with Calamares (the installer) is NOT supported.

## NVME SSD's

Some NVME SSD's may not be recognized by OMLx 4.0 *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.

The OM Lx 4.1 includes kernel 5.5.0 and hardware recognition for nvme SSD's should be considerably improved. It is known that some Samsung nvme SSD's 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 ) 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 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 the ROSA Image Writer available from our repos

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

Or, if you do not have OpenMandriva Lx yet, you can get ROSA Image Writer download links at [this page](#). At least 4 of flash drive capacity is recommended. Persistent storage is not necessary. Note that this will **erase** everything on your USB!

**Warning:** 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.

## Booting from ISO file

Grub2 entry ( to be added in `/boot/grub2/grub.cfg` ) .

```
submenu "OpenMandriva (64 bit)" {
  set isofile=/home/user/OpenMandrivaLx.4.1-plasma.x86_64.iso
  set isoname=OpenMandrivaLx_4.1
  loopback loop $isofile

  menuentry "OpenMandriva" {
    linux (loop)/boot/vmlinuz0 root=live:LABEL=${isoname} iso-scan/filename=${isofile}
rd.live.image toram --
    initrd (loop)/boot/liveinitrd.img
  }
}
```

## 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. And after that fresh install don't do this again.

## **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 4.1.

Major changes:

- The kernel has been updated to 5.5.0
- Qt has been updated to 5.14.1
- Plasma has been updated: Frameworks 5.66, Plasma Desktop 5.17.5, Applications 19.12.1
- Zypper as alternative package manager
- More alternative desktops are available

OpenMandriva brand-name applications:

- Desktop Presets (om-feeling-like): Tool to customize the appearance of your OpenMandriva Plasma desktop to look and feel similar to other systems you may be used to
- Update Configuration (om-update-config): Tool for configuring automatic updates

## **OpenMandriva Lx 4.1 Errata**

### **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 SSD's**

There is a well known problem with some (especially newer) NVME SSD's and PCIE devices where the SSD may not be recognized. For our 'Live' ISO there is a workaround described in Release Notes.

Problem is known and being worked on by OpenMandriva developers and upstream developers. The OM Lx 4.1 RC release includes kernel 5.4.1 and hardware recognition for nvme SSD's should be considerably improved. It is known that some Samsung nvme SSD's 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 don't understand on our [forum](#).

## **GEOIP**

Installer automatically GEOIP setting may not set the timezone correctly.



## **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!