

Installation från ett LIVE-media

Mageias officiella dokumentation



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Installation från ett LIVE-media



Ingen kommer att se alla installerarens skärmbilder som du ser i den här handboken. Vilka skärmbilder som just du kommer att se beror på din hårdvara och vilka val du gör under installationen.

1. Välj och använd ISO-filer

1.1. Presentation

Mageia distribueras via ISO-avbilder. Den här sidan kommer att hjälpa dig att välja vilken avbild som bäst passar dina behov.

Det finns tre sorters installationsmedier:

- **Classical installer:** Booting with this media provides you with the maximum flexibility when choosing what to install, and for configuring your system. In particular, you have a choice of which Desktop environment to install.
- **LIVE media:** This option allows you to try out Mageia without having to actually install it, or make any changes to your computer. However, the Live media also includes an Installer, which can be started when booting the media, or after booting into the Live operating system itself.



The Live Installer is simpler compared to the Classical Installer - but you have fewer configuration options.



Live ISOs can only be used to create "clean" installations, they cannot be used to upgrade previously installed Mageia releases.

- **Net Install:** These are minimal ISO's containing no more than that which is needed to start the DrakX installer and find `DrakX-installer-stage2` and other packages that are needed to continue and complete the install. These packages may be on the PC hard disk, on a local drive, on a local network or on the Internet.

These media are very light (less than 100 MB) and are convenient if bandwidth is too low to download a full DVD, or if you have a PC without a DVD drive or is unable to boot from a USB stick.

More details are given in the next sections.

1.2. Media

1.2.1. Definition

Here, a medium (plural: media) is an ISO image file that allows you to install and/or update Mageia and, by extension, any physical medium (DVD, USB stick, ...) the ISO file is copied to.

Du kan hitta ISO-filer för Mageia [här](http://www.mageia.org/en/downloads/) [http://www.mageia.org/en/downloads/].

1.2.2. Klassiska installationsmedier

1.2.2.1. Vanliga funktioner

- De här ISO-filerna använder den klassiska installeraren som kallas DrakX
- They are used for performing clean installs or to upgrade a previously installed version of Mageia
- Olika media för 32 och 64-bitars arkitekturer
- Some tools are available in the Installer "Welcome" screen: *Rescue System*, *Memory Test*, and *Hardware Detection Tool*
- Varje DVD innehåller många tillgängliga skrivbordsmiljöer och språk
- You'll be given the choice during the installation to add non-free software

1.2.3. Live media

1.2.3.1. Vanliga funktioner

- Can be used to preview the Mageia operating system without having to install it
- Live-mediet inkluderar också en installerare.
- Varje ISO innehåller endast en skrivbordsmiljö (Plasma, GNOME eller Xfce)
- Olika media för 32 och 64-bitars arkitekturer
- De innehåller icke-fri mjukvara

1.2.3.2. Live DVD Plasma

- Endast skrivbordsmiljön Plasma
- Alla tillgängliga språk är närvarande
- endast 64-bitars arkitektur

1.2.3.3. Live DVD GNOME

- endast skrivbordsmiljön GNOME
- Alla tillgängliga språk är närvarande
- endast 64-bitars arkitektur

1.2.3.4. Live DVD Xfce

- endast skrivbordsmiljön Xfce
- Alla tillgängliga språk är närvarande
- 32 eller 64-bitars arkitekturer

1.2.4. Installationsmedia via nätverk

1.2.4.1. Vanliga funktioner

- Olika media för 32 och 64-bitars arkitekturer
- First steps are English language only

1.2.4.2. *netinstall.iso*

- Innehåller endast fri mjukvara, för de som föredrar att inte använda icke-fri mjukvara

1.2.4.3. *netinstall-nonfree.iso*

- Innehåller icke-fri mjukvara (mestadels drivrutiner, kodekar...) för de som behöver det

1.3. Laddar ner och kontrollerar media

1.3.1. Hämtar

Once you have chosen your ISO file, you can download it using either http or BitTorrent. In both cases, you are provided with some information, such as the mirror in use and an option to switch to an alternative if the bandwidth is too low.

If http is chosen you will also see some information regarding checksums.

`md5sum`, `sha1sum` and `sha512sum` (the most secure) are tools to check the ISO integrity. Copy one of the checksums (string of alphanumeric characters) for use in the next section.

In the meantime, a window to download the actual ISO will open:

Klicka på *Spara fil*, klicka sen på *OK*.

1.3.2. Kontrollerar integriteten på nerladdad media

The checksums referred to earlier, are digital fingerprints generated by an algorithm from the file to be downloaded. You may compare the checksum of your downloaded ISO against that of the original source ISO. If the checksums do not match, it means that the actual data on the ISO's do not match, and if that is the case, then you should retry the download or attempt a repair using BitTorrent.

Öppna en konsol för att generera kontrollsumman för din nerladdade ISO (inget behov av att vara root), och:

- För att använda md5-summan, skriv: **`md5sum genvägen/till/din/avbild.iso`**
- För att använda sha1-summan, skriv: **`sha1sum genväg/till/avbild.iso`**
- To use the sha512sum, type: **`sha512sum path/to/the/image/file.iso`**

Exempel:

```
[sam5@localhost ~]$ md5sum /home/sam5/Downloads/Mageia-4-RC-x86_64-DVD.iso
ec1ce42c4b003b5e9bea6911968195c8 /home/sam5/Downloads/Mageia-4-RC-x86_64-DVD.iso
[sam5@localhost ~]$ █
```

then compare the result (you may have to wait for a while) with the ISO checksum provided by Mageia.

1.4. Bränn eller dumpa ISO-filen.

The verified ISO can now be burned to a CD/DVD or "dumped" to a USB stick. This is not a standard copy operation, as a bootable medium will actually be created.

1.4.1. Att bränna ISO-filen till en CD/DVD

Whichever software you use, ensure that the option to burn an *image* is used. Burn *data* or *files* is NOT correct. See the [the Mageia wiki](https://wiki.mageia.org/en/Writing_CD_and_DVD_images) [https://wiki.mageia.org/en/Writing_CD_and_DVD_images] for more information.

1.4.2. Dumpa ISO:n till ett USB-minne

All Mageia ISOs are hybrids, which means you can dump them to a USB stick and then use that to boot and install the system.



Dumping an image onto a flash device destroys any previous file-system on the device and all existing data will be lost.



Also, the only partition on the flash device will then just be the Mageia ISO partition.

So, if an ISO of about 4GB is written to an 8GB USB stick, the stick will then only show up as 4GB. This is because the remaining 4GB is no longer formatted - hence not currently available for use. To recover the original capacity, you must reformat and repartition the USB stick.

1.4.2.1. Använda ett grafiskt verktyg i Mageia

Du kan använda ett grafiskt verktyg som t. ex. [IsoDumper](https://wiki.mageia.org/en/IsoDumper_Writing_ISO_images_on_USB_sticks) [https://wiki.mageia.org/en/IsoDumper_Writing_ISO_images_on_USB_sticks]

1.4.2.2. Använda ett grafiskt verktyg i Windows

Du kan prova:

- [Rufus](http://rufus.akeo.ie/?locale=en_US) [http://rufus.akeo.ie/?locale=en_US] using the "ISO image" option
- [Win32-diskavbildaren](http://sourceforge.net/projects/win32diskimager) [http://sourceforge.net/projects/win32diskimager]

1.4.2.3. Using the Command line within a GNU/Linux system



It is potentially *dangerous* to do this by hand. You risk overwriting potentially valuable existing data if you specify the wrong target device.

1. Öppna en konsol
2. Become a *root* (Administrator) user with the command **su -** (don't forget the -)

```
[sam5@localhost ~]$ su -  
Password:  
[root@localhost ~]#  
[root@localhost ~]#  
[root@localhost ~]# █
```


3. Plug in your USB stick - but do not mount it (this also means do not open any application or file manager that could access or read it)
4. Skriv kommandot **fdisk -l**

```
[root@localhost ~]# fdisk -l

Disk /dev/sda: 298.1 GiB, 320072933376 bytes, 625142448 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 4096 bytes
I/O size (minimum/optimal): 4096 bytes / 4096 bytes
Disklabel type: dos
Disk identifier: 0x000db4bf
Partition 3 does not start on physical sector boundary.

Device      Boot      Start          End      Blocks      Id System
/dev/sda1   *          2048      21256191   10627072    83 Linux
/dev/sda2             21256192   63528959   21136384    83 Linux
/dev/sda3             63530964   625137344  280803190+    5 Extended
/dev/sda5             63531008   84873215   10671104    83 Linux
/dev/sda6             84875264  127016959   21070848    83 Linux
/dev/sda7            127019008  135985151    4483072    82 Linux swap / Solaris
/dev/sda8            135987200  198598655   31305728    83 Linux
/dev/sda9            198600704  471588863  136494080    83 Linux
/dev/sda10           471590912  496777994   12593541+    83 Linux
/dev/sda11           496781312  504955079    4086884    82 Linux swap / Solaris
/dev/sda12           504958976  625137344   60089184+    83 Linux

Disk /dev/sdb: 7.5 GiB, 8011087872 bytes, 15646656 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: dos
Disk identifier: 0x15005631

Device      Boot Start          End      Blocks      Id System
/dev/sdb1   *           1      7598079   3799039+    17 Hidden HPFS/NTFS

[root@localhost ~]# █
```

5. Find the device name for your USB stick (by its size), for example /dev/sdb in the screenshot above, is an 8GB USB stick.

Alternatively, you can find the device name with the command **dmesg**. Towards the end of the following example, you can see the device name starting with **sd**, and in this case, **sdd** is the actual device. You can also see that its size is 2GB:

```
[72594.604531] usb 1-1: new high-speed USB device number 27 using
xhci_hcd
[72594.770528] usb 1-1: New USB device found, idVendor=8564,
idProduct=1000
[72594.770533] usb 1-1: New USB device strings: Mfr=1, Product=2,
SerialNumber=3
[72594.770536] usb 1-1: Product: Mass Storage Device
[72594.770537] usb 1-1: Manufacturer: JetFlash
[72594.770539] usb 1-1: SerialNumber: 18MJTWLMPUCC3SSB
```

```
[72594.770713] usb 1-1: ep 0x81 - rounding interval to 128 microframes,
ep desc says 255 microframes
[72594.770719] usb 1-1: ep 0x2 - rounding interval to 128 microframes,
ep desc says 255 microframes
[72594.771122] usb-storage 1-1:1.0: USB Mass Storage device detected
[72594.772447] scsi host8: usb-storage 1-1:1.0
[72595.963238] scsi 8:0:0:0: Direct-Access      JetFlash Transcend 2GB
1100 PQ: 0 ANSI: 4
[72595.963626] sd 8:0:0:0: [sdd] 4194304 512-byte logical blocks: (2.14
GB/2.00 GiB)
[72595.964104] sd 8:0:0:0: [sdd] Write Protect is off
[72595.964108] sd 8:0:0:0: [sdd] Mode Sense: 43 00 00 00
[72595.965025] sd 8:0:0:0: [sdd] No Caching mode page found
[72595.965031] sd 8:0:0:0: [sdd] Assuming drive cache: write through
[72595.967251]  sdd: sdd1
[72595.969446] sd 8:0:0:0: [sdd] Attached SCSI removable disk
```

6. Skriv kommandot: **dd if=genväg/till/ISO of=/dev/sdX bs=1M**

Där X=namnet på din enhet t.ex: /dev/sdd

Example: `dd if=/home/user/Downloads/Mageia-6-x86_64-DVD.iso of=/dev/sdd bs=1M`



It might be helpful to know that **if** stands for input file and **of** stands for output file

7. Skriv kommandot: **sync**
8. Det här är slutet av processen, och du kan nu dra ut din USB-sticka.

2. Starta Mageia som ett Live-system

2.1. Startar upp mediat

Du kan starta upp direkt från en Live-DVD eller USB. Vanligtvis så behöver du bara sätta in USB-enheten eller placera DVD-skivan i disken och startar om datorn.

If the computer does not automatically boot from the USB or DVD you may need to reconfigure your BIOS Boot Disk priority. Alternatively, you might try accessing the boot device menu to select a device from which the computer will boot.



För att komma åt BIOS eller uppstartsmenyn när datorn startar så kan du trycka antingen **F2**, **Del** eller **Esc** för BIOS, eller **Esc**, **F8**, **F10** eller **F11** för enhetens uppstartsmeny. Dessa (vanligt förekommande) tangenter är dock bara ett urval av möjliga alternativ.



The actual screen that you will first see when booting from the Live media will depend on whether your computer motherboard is of the Legacy (BIOS) or UEFI type.

2.2. I BIOS/CSM/Legacy-läge



Den första skärmen när du startar i BIOS-läge

Meny

- **Starta Mageia**

This option will boot the Mageia Live system from the connected DVD/USB media (expect a very slow system compared to an installed OS).

När uppstarten är gjord så kan du fortsätta med installationen.

– + **använd icke-fria grafik-drivrutiner (startar långsammare)**

Starta Mageia Live-systemet med icke-fria grafik-drivrutiner

- **Installera Mageia**

Det här alternativet kommer att installera Mageia till en hårddisk.

– + **använd icke-fria grafik-drivrutiner (startar långsammare)**

Installera Mageia med icke-fria grafik-drivrutiner

- **Minnestest**

Test the installed RAM by performing multiple read and write operations. Reboot to end the test.

- **F2 Språk**

Press **F2** to have the installer use a specific language during the installation. Use the arrow keys to select the language then press **Enter**.

2.3. I UEFI-läge



Första skärmen när du startar upp i UEFI-läge

Meny

- **Starta Mageia**

This option will boot the Mageia Live system from the connected DVD/USB media (expect a very slow system compared to an installed OS). Once the boot is done, you can proceed to the installation

- **Installera Mageia**

Det här alternativet kommer att installera Mageia till en hårddisk.

- **F2 Språk**

Press **F2** to have the installer use a specific language during the installation. Use the arrow keys to select the language then press **Enter**.



If you booted from a USB stick, you will see the above menu options duplicated, and in this case, you should choose from the menu pair that will be suffixed with "USB".

3. Välj språk

- Select your preferred language. Mageia will use this selection during the installation and for your installed system.

- Mageia uses UTF-8 (Unicode) support by default. This may be disabled in the *Multiple languages* screen if you know that it is inappropriate for your language. Disabling UTF-8 applies to all installed languages.
- You can change the language for your system post-installation in the Mageia Control Center # System # localization for your system.

4. Anteckningar för licens och utgåvan

4.1. Licensavtal

- Läs igenom licensvillkoren ordentligt innan du installerar Mageia.
- Villkoren gäller hela Mageias distribution, och måste accepteras innan du kan fortsätta.
- Vänligen välj *Acceptera* och klicka sedan på *Nästa* för att fortsätta

Om du beslutar dig för att inte acceptera de här villkoren så tackar vi dig för ditt intresse för Mageia. Att klicka på *Avsluta* kommer att starta om din dator.

4.2. Versionsinformation

Viktig information om den här specifika Mageia-utgåvan kan läsas genom att klicka på knappen *Anteckningar för utgåvan*.

5. Ställ in din tidszon

- Välj din tidszon genom att välja ditt land eller en stad nära dig i samma tidszon.

På nästa skärm så kan du välja att ställa in din hårdvaruklocka till lokal tid eller till GMT, också känd som UTC.



Om du har mer än ett operativsystem i din dator så se till att de är inställda på lokal tid eller till UTC/GMT.

6. Inställningar för klocka

Här kan du välja om din dators interna klocka är inställd på lokal tid eller UTC-tid.

In the *Advanced* tab, you can enable automatic time synchronization and specify an NTP server.

7. Välj tangentbord

Here you can set the keyboard layout you wish to use with Mageia.

A suggested keyboard layout (highlighted), has been chosen for you based upon your previously selected language and timezone choices.

8. Testar Mageia som ett Live-system

8.1. Live-läge

This is the screen you will see if you selected the **Boot Mageia** option from the Live media menu.

8.1.1. Testar hårdvara

One of the aims of using the Live mode is to test that your hardware is correctly managed by Mageia. You can check if all devices have a driver in the Hardware section of the Mageia Control Center:

- nätverksgränssnitt: konfigurera det med net_applet
- grafikkort: om du ser den föregående skärmen så är det redan OK.
- ljud: en jingel har redan spelats upp
- printer: configure your printer/s and print a test page
- skanner: skanna ett dokument från ...

If everything is satisfactory, you can proceed with the installation. If not, you can use the *Quit* button to exit.



The configuration settings you apply here are carried over if you decide to proceed with the installation.

8.1.2. Påbörja installationen

To launch the installation of the Live DVD to a hard disk or SSD drive, simply click the *Install on Hard Disk* icon on the Live desktop. You will then see this screen, followed by the [Partitioning](#) step.

9. Partitionering

9.1. Föreslagen partitionering

In this screen you can see the content of your hard drive(s) along with the DrakX partitioning proposals for where to install Mageia.

The actual options available from those shown below will vary according to the layout and content of your particular hard drive(s).

Huvudsakliga alternativ

- **Använd befintliga partitioner**

Om det här alternativet är tillgängligt så har kompatibla Linux-partitioner hittats och kan användas för installation.

- **Använd oanvänt utrymme**

Om du har ledigt utrymme på din hårddisk kommer det här alternativet att använda det för att installera Mageia.

- **Använd oanvänt utrymme i en Windows-partition**

If you have unused space on an existing Windows partition, the installer may offer to use it. This can be a useful way of making room for your new Mageia installation but see the warning below.

With this option, the installer displays the remaining Windows partition in light blue and the proposed Mageia partition in dark blue with their intended sizes just underneath. You have the option to modify these sizes by clicking and dragging the gap between both partitions. See the following screenshot:



This involves shrinking the size of the Windows partition, and therefore is a risky operation, so you should make sure you have backed up all important files before proceeding.



The partition must be "clean", meaning that Windows must have closed down correctly the last time it was used. It must also have been defragmented, although this is not a guarantee that all files in the partition have been moved out of the area that is about to be used for Mageia.

- **Radera och använd hela hårddisken**

Det här alternativet kommer att allokeras hela disken för Mageia



This will erase ALL data on the selected hard drive. Take care! If you intend to use part of the disk for something else, or you already have data on the drive that you are not prepared to lose, then do not use this option.

- **Anpassad diskpartitionering**

Detta ger dig fullständig kontroll över placeringen av installationen på din/a disk/ar.

If you are not using the *Custom disk partitioning* option, then the installer will allocate the available space according to the following rules:

- If the total available space is less than 50 GB, then only one partition is created. This will be the / (root) partition.
- Om det totala tillgängliga utrymmet är större än 50 GB så skapas tre partitioner
 - 6/19 of the total available place is allocated to / with a maximum of 50 GB
 - 1/19 är allokerat till **swap** maximalt 4 GB
 - the rest (at least 12/19) is allocated to /home

This means that from 160 GB or greater available space, the installer will create three partitions:

- 50 GB för /
- 4 GB för **swap**
- och det som återstår till /home



If you are using a UEFI system, the ESP (EFI System Partition) will be automatically detected - or created if it does not exist yet - and mounted on `/boot/EFI`. The *Custom disk partitioning* option is the only one that allows to check it has been correctly done.

If you are using a Legacy (also known as BIOS) system with a GPT partitioned disk, you need to create a BIOS boot partition if it doesn't already exist. It should be about 1 MiB with no mount

point. It can be created with the Installer, under *Custom disk partitioning*, like any other partition. Be sure to select "BIOS boot partition" for filesystem type.

Se [DiskDrake](#) för information om hur du fortsätter.



Some newer drives are now using 4096 byte logical sectors, instead of the previous standard of 512. Due to lack of available hardware, the partitioning tool used in the installer has not been tested with such a drive.

Some SSD devices now use an erase block size over 1 MB. If you have such a device we suggest that you partition the drive in advance, using an alternative partitioning tool like `gparted`, and to use the following settings:

- *Justera till* = MiB
- *Free space preceding (MiB)* = 2

Also make sure all partitions are created using an even number of megabytes.

9.2. Välj monteringspunkter

Här kan du se Linux- partitionerna som har upptäckts i din dator. Om du inte håller med om förslagen från DrakX så kan du ändra monteringspunkterna själv.

- To the left of the drop-down menus is a list of available partitions. For example: `sda` is a hard drive - and `5` is a *partition number*, followed by the (*capacity, mount point, filesystem type*) of the partition.
 - If you have several partitions, you can choose various different *mount points* from the drop down menu, such as `/`, `/home` and `/var`. You can even make your own mount points, for instance `/video` for a partition where you want to store your films, or perhaps `/Data` for all your data files.
 - For any partitions that you don't need to make use of, you can leave the mount point field blank.
-



Om du gör några ändringar här, försäkra dig om att du fortfarande har en `/` (root)-partition.



If you are not sure what to choose, click *Previous* to go back and then tick *Custom disk partitioning*, where you can click on a partition to see its type and size.

If you are sure the mount points are correct, click on *Next*, and choose whether you only want to format the partition suggested by DrakX, or more.

9.3. Bekräfta hårddisken som ska formateras

- Klicka på *Föregående* om du är osäker på ditt val.
-

- Click on *Next* to proceed if you are sure that it is OK to erase **every** partition, **every** operating system and **all data** that might be on that hard disk.

9.4. Anpassad diskpartitionering med DiskDrake

- Modify the layout of your disk(s) here. You can remove or create partitions, change the filesystem or size of a partition and even view their details before you start.
- There is a tab at the top for every detected hard disk (or other storage device, like a USB key), for example: `sda`, `sdb`, `sdc` etc.
- For all other actions: click on the desired partition first. Then view it, or choose a filesystem and a mount point, resize it or wipe it. *Expert mode* provides more options such as to label (name) a partition, or to choose a partition type.
- Continue until you have adjusted everything to your satisfaction, then click *Done* when you're ready.



1. Take care with the *Clear all* option, use it only if you are sure you want to wipe all partitions on the selected storage device.
2. If you wish to use encryption on your `/` partition you must ensure that you have a separate `/boot` partition. The encryption option for the `/boot` partition must NOT be set, otherwise your system will be unbootable.



- If you are installing Mageia on a UEFI system, check that an ESP (EFI System Partition) is present and correctly mounted on `/boot/EFI`. See Figure 1 below.
 - If you are installing Mageia on a Legacy/GPT system, check that a BIOS boot partition is present and of the correct type. See Figure 2 below.
-

Figur 1. EFI systempartition

Figur 2. Uppstartspartition för BIOS

9.5. Formatering

Here you can choose which partition(s) you wish to format. Any data on partitions *not* marked for formatting will be preserved.

Usually, at least the partitions that DrakX selected need to be formatted.

Click on *Advanced* to choose the partitions you want to check for so-called *bad blocks*



If you're not sure you have made the right choice, you can click on *Previous*, again on *Previous* and then on *Custom* to get back to the main screen, where you can choose to view details of your partitions.

When you are confident about the selections, click on *Next* to continue.

10. Behåll eller radera oanvänt material

In this step, the installer looks for unused locales packages and unused hardware packages and you are then given an opportunity to delete them.

If you do not foresee a case where your installation may need to run on different hardware, or that you might need additional localization files then you might wish to accept this proposal.

Clicking *Advanced* will list the unused hardware and localization files that will be removed if you proceed.



The next step is the copying of files to hard disk. This process should just take a little while to complete. When it is finishing you will briefly get a blank screen - this is normal.

11. Starthanterare

11.1. Available Bootloaders

11.1.1. Grub2

Grub2 on Legacy MBR/GPT systems

- GRUB2 (with or without graphical menu) will be used exclusively as the bootloader for a Legacy/MBR or Legacy/GPT system.
- By default, a new bootloader will be written into either the MBR (Master Boot Record) of your first hard drive or in the BIOS boot partition.

Grub2-efi on UEFI systems

- GRUB2-efi or rEFInd may be used as the bootloader for a UEFI system.

- By default, a new bootloader (Grub2-efi) will be written into the ESP (EFI System Partition).

If there are already UEFI-based operating systems installed on your computer (Windows 8 for example), the Mageia installer will detect the existing ESP created by Windows and add grub2-efi to it. If no ESP exists, then one will be created. Although it is possible to have several ESPs, only one is required, whatever the number of operating systems you have.

11.1.2. rEFInd

rEFInd on UEFI systems

- rEFInd has a nice graphical set of options, and can auto-detect installed EFI bootloaders. See: <http://www.rodsbooks.com/refind/>



Please note that in order to be able to use the rEFInd option, an installed EFI System Partition must match your system architecture: if you have a 32bit EFI System Partition installed on a 64bit machine for instance, then the rEFInd option will not be displayed/available to you.

11.2. Bootloader Setup

11.2.1. Huvudalternativ för startshanteraren

- **Uppstartshanterare att använda**
 - GRUB2 (with either a graphical or a text menu), can be chosen for both Legacy MBR/BIOS systems and UEFI systems.
 - rEFInd (with a graphical menu) is an alternative option solely for use with UEFI systems.
- **Boot device**



Don't change this unless you really know what you are doing.



There is no option to write GRUB to the boot sector of a partition (e.g: sda1), as this method is considered unreliable.

When using UEFI mode, then the Boot device will be listed as EFI System Partition.

- **Fördröj innan standard-avbilden startas**

This text box lets you set a delay, in seconds, before the default operating system is started up.

- **Säkerhet**

This allows you to set a password for the bootloader. This means a username and password will be required when booting in order to select a booting entry or change settings. This is optional, and most people are not likely to have a need for it. The username is `root` and the password is the one chosen hereafter.

- **Lösenord**

Välj ett lösenord för uppstartshanteraren (valfritt)

- **Lösenordet (igen)**

Retype the password and DrakX will check that it matches with the one set above

Avancerad

- *Aktivera ACPI*

ACPI (Advanced Configuration and Power Interface) is a standard for power management. It can save energy by stopping unused devices. Deselecting it could be useful if, for example, your computer does not support ACPI or if you think the ACPI implementation might cause some problems (for instance random reboots or system lockups).

- *Aktivera SMP*

This option enables/disables symmetric multiprocessing for multi-core processors

- *Aktivera APIC*

Enabling this gives the operating system access to the Advanced Programmable Interrupt Controller. APIC devices permit more complex priority models, and Advanced IRQ (Interrupt Request) management.

- *Aktivera Lokal APIC*

Here you can set Local APIC, which manages all external interrupts for a specific processor in an SMP system

11.2.2. Konfiguration av starthanterare

If, in the previous section you selected `rEFInd` as the bootloader to use, you would then be presented with the options shown in the screenshot directly below. Otherwise, please instead move on to the subsequent screenshot for your options.

Your `rEFInd` configuration options:

- **Install or update rEFInd in the EFI system partition.**
- **Install in /EFI/BOOT.**

This option installs the bootloader in the `/EFI/BOOT` directory of the ESP (EFI System Partition). This can be useful when:

(a) Installing onto a removable drive (e.g. a USB stick) that can be removed and plugged into a different machine. If the bootloader is stored in `/EFI/BOOT`, UEFI BIOS's will detect it and allow you to boot from that drive.

(b) As a workaround where, due to a buggy UEFI BIOS, the newly written bootloader for Mageia will not be recognized at end of the installation.

If you did not select `rEFInd` as the bootloader to use in the previous section, then your bootloader configuration options are shown below:

- **Standard**

The operating system to be started up by default.

- **Fäst**

This option lets you pass information to the kernel or tell the kernel to give you more information as it boots.

- **Undersök främmande OS**

If you already have other operating systems installed, Mageia attempts to add them to your new Mageia boot menu. If you don't want this behaviour, then untick the Probe Foreign OS option.

- **Install in /EFI/BOOT.** (Note: this menu option only becomes available where the installer detects that a machine is in UEFI mode).

This option installs the bootloader in the /EFI/BOOT directory of the ESP (EFI System Partition). This can be useful when:

(a) Installing onto a removable drive (e.g. a USB stick) that can be removed and plugged into a different machine. If the bootloader is stored in /EFI/BOOT, UEFI BIOS's will detect it and allow you to boot from that drive.

(b) As a workaround where, due to a buggy UEFI BIOS, the newly written bootloader for Mageia will not be recognized at end of the installation.

Avancerad

- *Grafikläge*

This sets the screen size and colour depth to be used by the boot menu. If you click the down-triangle you will be offered other size and colour depth options.

- *Rör inte ESP eller MBR*

Select this option if you don't want a bootable Mageia, but would rather chain-load it from another OS. You will get a warning that the bootloader is missing. Click Ok only if you are sure you understand the implications, and wish to proceed.



Chain-loading via legacy bootloaders (GRUB Legacy and LiLo) is no longer supported by Mageia as it is likely to fail when attempting to boot this resulting installation of Mageia. If you use anything other than GRUB2 or rEFInd for this purpose, then you do so at your own risk!

11.3. Fler alternativ

11.3.1. Använder en befintlig startshanterare

The exact procedure for adding Mageia to an existing bootloader is beyond the scope of this documentation. However, in most cases it will involve running the relevant bootloader installation program, which should detect Mageia and automatically add an entry for it in the bootloader menu. See the documentation for the relevant operating system.

11.3.2. Installera utan en uppstartshanterare

While you can opt to install Mageia without a bootloader (see section 2.1 Advanced), this is not recommended unless you absolutely know what you are doing, as without some form of bootloader your operating system will be unable to start.

11.3.3. Lägg till eller ändra en post i bootmenyn

To do this you need to manually edit /boot/grub2/custom.cfg or use the software **grub-customizer** tool instead (available in the Mageia repositories).



For more information, see: https://wiki.mageia.org/en/Grub2-efi_and_Mageia

12. Starta om

Once the bootloader has been installed, you will be prompted to halt your computer, remove the live DVD/USB stick and restart the computer.



Ensure that you follow these shut-down and restart instruction steps in the **same** order.

Tryck på *Avsluta* när du är redo.

When you restart, you will see a succession of download progress bars. These indicate that the software media lists are being downloaded (see *Software Management*).

13. Användarhantering

13.1. Ställ in ett administratörs (root) -lösenord:

It is advisable for all Mageia installations to set a `superuser` (Administrator) password, usually called the `root` password in Linux. You need to repeat the same password in the box underneath, to check that the first entry was not mistyped.



As you type a password into the top box a shield will change from red-to-yellow-to-green depending on the strength of the password. A green shield shows you are using a strong password.

All passwords are case-sensitive. It is best to use a mixture of letters (upper and lower case), numbers and other characters in a password.

13.2. Lägg till en användare

Add a User here. A regular user has fewer privileges than the `superuser` (root), but enough to use the Internet, office applications or play games and anything else the average user might use a computer for.

- **Ikon**

Klicka på den här knappen om du vill ändra på användarens ikon

- **Fullständigt namn**

Klistra in användarens riktiga namn i den här textrutan

- **Inloggningsnamn**

Enter the user login name or let DrakX use a version of the user's real name. **The login name is case-sensitive.**



The login entered here should be different to any login currently in use for your /home directory. Some user parameters will be written in the user space, and some can overwrite actual data such as Firefox, Thunderbird or Kmail data...

- **Lösenord**

Skriv in användarens lösenord (kommer ihåg rådet i den ovanstående anteckningen).

Password (again): Retype the user password. DrakX will check that you have not mistyped the password.



Any users added while installing Mageia, will have a home directory that is both read and write protected (umask=0027)

You can add any extra needed users in the *Configuration - Summary* step during the install. Choose *User management*.

Rättigheterna för åtkomst kan också ändras efter installationen.

14. Inloggningskärm

Inloggningskärm för SDDM

Finally, you will come to the desktop login screen.

Enter your user name and user password, and in a few seconds you will find yourself with a loaded KDE Plasma or GNOME desktop, depending on which live medium you used. You can now start using and enjoying your Mageia installation.

You can find further documentation in [the Mageia wiki](https://wiki.mageia.org/en/Main_Page) [https://wiki.mageia.org/en/Main_Page].

15. Avinstallera Mageia

Om Mageia inte övertygade dig eller om du inte kan installera det korrekt - kort sagt så vill du göra dig av med det - det är din rätt och Mageia ger dig också möjlighet att avinstallera. Så är det inte för varje operativsystem.

After backing up your data, reboot your Mageia installation DVD and select *Rescue system*, then *Restore Windows boot loader*. At the next boot, you will only have Windows, with no option to choose your Mageia operating system.

In Windows, to recover the space used by Mageia partitions: click on Start # Control Panel # Administrative Tools # Computer Management # Storage # Disk Management. You will recognise a Mageia partition because they are labeled *Unknown*, and also by their size and place on the disk. Right-click on each of these partitions and select *Delete* to free up the space.

If you are using Windows XP, you can create a new partition and format it (FAT32 or NTFS). It will then get a partition letter.

If you have Vista or 7, you have one more possibility, you can extend the existing partition that is at the left of the freed space. There are other partitioning tools that can be used, such as **gparted**, available for both Windows and Linux. As always, when changing partitions, be very careful to back up anything important to you.