####

The tools to configure the Mageia system

This manual was produced with the help of the Calenco CCMS [https://www.calenco.com].

########. # #### #### # ### ####
[https://wiki.mageia.org/en/Documentation_team]# ######.

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1. About the Manual for the Mageia Control Center

The Mageia Control Center (MCC) has eight different options or tabs to choose from in the left column, and even ten if the drakwizard package was installed. Each of these tabs gives a different set of tools that can be selected in the big right panel.

The ten following chapters are about those ten options and the related tools.

The last chapter is about some other Mageia tools, that cannot be chosen in any of the MCC tabs.

The titles of the pages will often be the same as the titles of the tool screens.

There is also a search bar available, which you can access by clicking on the "Search" tab in the left column.

2. #####

####. ## ### #### ### #####.
##

1. 2.1#. “##### ##(##### ## # ##)”
2. 2.2#. “Software Packages Update” = ### ####
3. 2.3#. “Configure updates frequency”
4. 2.4#. “Configure Media” = ## # ##### ## ### ## ##

2.1. ##### ##(##### ## # ##)

rpmdrake

2.1.1. rpmdrake

This tool[1], also known as drakrpm, is a program for installing, uninstalling and updating packages. It is the graphical user interface of URPMI. At each start up, it will check online package lists (called 'media') downloaded straight from Mageia's official servers, and will show you each time the latest applications and packages available for your computer. A filter system allows you to display only certain types of packages: you may display only installed applications (by default), or only available updates. You can also view only not installed packages. You can also search by the name of a package, or in the summaries of descriptions or in the full descriptions of packages or in the file names included in the packages.

To work, rpmdrake needs the repositories to be configured with 2.4#. “Configure Media” .

During the installation, the configured repository is the medium used for the installation, generally the DVD or CD. If you keep this medium, rpmdrake will ask it each time you want to install a package, with this pop-up window :

If the above message annoys you and you have a good internet connection without too strict download limit, it is wise to remove that medium and replace it by online repositories thanks to 2.4#. “Configure Media” .

Moreover, the online repositories are always up to date, contains much more packages, and allow to update your installed packages.

[1] ##### **rpmdrake**# ### #### # ### ### # ####.

2.1.2. ### ##

1. **### ## ##:**

   This filter allows you to display only certain types of packages. The first time you start the manager, it only displays applications with a graphical interface. You can display either all the packages and all their dependencies and libraries or only package groups such as applications only, updates only or backported packages from newer versions of Mageia.

   

   The default filter setting is for new entrants to Linux or Mageia, who probably do not want command line or specialist tools. Since you're reading this documentation, you're obviously interested in improving your knowledge of Mageia, so it is best to set this filter to "All".

2. ***### ## ##:***

   This filter allows you to view only the installed packages, only the packages that are not installed or all of the packages, both installed and not installed.

3. **## ##:**

   Click on this icon to search through the package names, through their summaries, through their complete description or through the files included in the packages.

4. **"Find" box:**

   Enter here one or more key words. If you want to use more than one keyword for searching use '|' between keywords, e.g. To search for "mplayer" and "xine" at the same time type 'mplayer | xine'.

5. **## ###:**

   This icon can erase in one click all the key words entered in the "Find" box .

6. **#### ##:**

   # ### ## ## ####### #### ### ### ## ### ######.

7. **## ##:**

   This panel displays the package's name, its summary and complete description. It displays many useful elements about the selected package. It can also show precise details about the package, the files included in the package as well as a list of the last changes made by the maintainer.

2.1.3. The status column

Once you correctly set the filters, you can find your software either by category (in area 6 above) or by name/summary/description using area 4. A list of packages fulfilling your query and, don't forget, the chosen medium is shown with different status markers according to whether each package is installed/not installed/ an update... To change this status, just check or uncheck the box before the package name and click on Apply.

###	Legend
	# #### ## #### ####
	# #### #####

###	Legend
	# #### ### # ####
	# #### #######.
	# #### #####

 # 1.

#:

- If I uncheck digikam (the green arrow tell us it is installed), the status icon will go red with an up arrow and it will be uninstalled when clicking on Apply.
- If I check qdigidoc (which is not installed, see the status), the orange with a down arrow status icon will appear and it will be installed when clicking on Apply.

2.1.4. The dependencies

Some packages need other packages called dependencies in order to work. They are for example libraries or tools. In this case, Rpmdrake displays an information window allowing you to choose whether to accept the selected dependencies, cancel the operation or get more information (see above). It may also happen that various packages are able to provide the needed library, in which case rpmdrake displays the list of alternatives with a button to get more information and another button to choose which package to install.

2.2. Software Packages Update

MageiaUpdate or drakrpm-update

This tool[2] is present in the Mageia Control Center under the tab **Software management.**

To work, MageiaUpdate needs the repositories to be configured with drakrpm-editmedia with some media checked as updates. If they are not, you are prompted to do so.

As soon as this tool is launched, it scans the installed packages and lists those with an update available in the repositories. They are all selected by default to be automatically downloaded and installed. Click on the Update button to start the process.

By clicking on a package, more information is displayed in the lower half of the window. The print > before a title means you can click to drop down a text.

When updates are available, an applet in the system tray warns you by displaying this red icon . Just click and enter the user password to update the system alike.

[2]You can start this tool from the command line, by typing **MageiaUpdate** or **drakrpm-update** as root.

2.3. Configure updates frequency

mgaapplet-config

This tool[3] is present in the Mageia Control Center under the tab **Software management**. It is also available by a right click / Updates configuration on the red icon in the system tray.

The first slider allows you to change how frequently Mageia will check for updates and the second the delay after booting before the first check. The check box gives you the option to be warned when a new Mageia release is out.

2.4. Configure Media

drakrpm-edit-media

First thing to do after an install is to add software sources (also known as repositories, media, mirrors). That means you must select the media sources to be used to install and update packages and applications. (see Add button below).

If you install (or upgrade) Mageia using an optical media (DVD or CD) or a USB device, there will be a software source configured to the optical media used. To avoid being asked to insert the media when you install new packages, you should disable (or delete) this media. (It will have the media type CD-Rom).

Your system is running under an architecture which may be 32-bit (called i586), or 64-bit (called x86_64). Some packages are independent of whether your system is 32-bit or 64-bit; these are called noarch packages. They don't have their own noarch directories on the mirrors, but are all in both the i586 and the x86_64 media.

Mageia ## ### ####.[4]

2.4.1. The columns

Column Enable:

The checked media will be used to install new packages. Be cautious with some media such as Testing and Debug, they could make your system unusable.

Column Update:

The checked media will be used to update packages, it must be enabled. Only media with "Update" in its name should be selected. For security reasons, this column isn't modifiable in this tool, you must open a console as root and type **drakrpm-edit-media --expert.**

Column medium:

Display the medium name. Mageia official repositories for final release versions contain at least:

- Mageia## #### #### ##### ### **Core**.

[3] ##### **mgaapplet-config**# ### #### # ### ### # ####.

[4] You can start this tool from the command line, by typing **drakrpm-edit-media** as root.

- ### ## ## ##### ### **Nonfree**
- **Tainted** free software for which there might be patent claims in some countries.

  # #### 4## ## ### ####:
- **Release** the packages as of the day the this version of Mageia was released.
- ## ## ## ### ## ### ## ##### #### **#######**. ## ## ### ##### ## ### # ### ##### ###.
- **Backports** some packages of new versions backported from Cauldron (the next version under development).
- ## #### QA ## ## ### ### # ### # ##### ## #### #### **######**.

2.4.2. ### ##

##:

To remove a medium, click on it and then on this button. It is wise to remove the medium used for the installation (CD or DVD for example) since all the packages it contains are in the official Core release medium.

##:

##(URL, #### # ###)# ### # ####.

##:

Add the official repositories available on the Internet. These repositories contain only safe and well tested software. Clicking on the "Add" button adds the mirrorlist to your configuration, it is designed to make sure that you install and update from a mirror close to you. If you prefer to choose a specific mirror, then add it by choosing "Add a specific media mirror" from the drop-down "File" menu.

###:

Change the list order. When Drakrpm looks for a package, it reads the list in the displayed order and will install the first package found for the same release number - in the event of a version mismatch, the latest release will be installed. So if possible, put the fastest repositories at the top.

2.4.3.

-> ####:

#####. ##### ### #### #### ### #####.

-> ## ### ## ##:

Suppose you aren't happy with the actual mirror, because for example it's too slow or often unavailable, you can choose another mirror. Select all the actual media and click on Remove to take them out. Click on File -> Add a specific media mirror, choose between update only or the full set (if you do not know, choose the Full set of sources) and accept the contact by clicking on Yes. This window opens:

You can see, on the left, a list of countries, choose yours or one very close by clicking on the > symbol, this will display all the available mirrors in that country. Select one and click on OK.

-> ### ## ## ##:

It is possible to install a new media (from a third party for example) that isn't supported by Mageia. A new window appears:

Select the medium type, find a smart name that well define the medium and give the URL (or the path, according to the medium type)

-> ## ##:

This item allows you to choose when to "Verify RPMs to be installed" (always or never), the download program (curl, wget or aria2) and to define the download policy for information about the packages (on demand -by default-, update only, always or never).

-> # ##:

To guarantee a high level of security, digital keys are used to authenticate the media. It is possible for each medium to allow or disallow a key. In the window that appear, select a medium and then click on Add to allow a new key or to select a key and click on Remove to disallow that key.

Do this with care, as with all security-related questions

-> ###:

If you need to use a proxy server for internet access, you can configure it here. You only need to give the Proxy hostname and if necessary a Username and Password.

Mageia ## ### [https://wiki.mageia.org/en/Software_management]# ######.

3.

This screen and the one for *Network Services* are only visible if the *drakwizard* package is installed. You can choose between several tools to set up different servers. Click on a link below or on 4#. “#### ###”to learn more.
##

1. 3.1#. “FTP###....”
2. 3.2#. “Configure webserver”

3.1. FTP###....

drakwizard proftpd

This tool[5] can help you to set up an FTP server.

3.1.1. What is FTP?

File Transfer Protocol (FTP) is a standard network protocol used to transfer files from one host to another host over a TCP-based network, such as the Internet. (From Wikipedia)

3.1.2. Setting up an FTP server with drakwizard proftpd

Welcome to the FTP wizard. Buckle up.

1. ##

[5]You can start this tool from the command line, by typing **drakwizard proftpd** as root.

#####. ### #####.

2. ## ### ##: ## #### #/## ##

   Exposing the FTP server to the Internet has it's risks. Be ready for bad things.

3. **Server Information**

   Enter name the sever will use to introduce itself, someone to email complaints too and whether to allow root login access.

4. **Server Options**

   Set listening port, jailed user, allow resumes and/or FXP (File eXchange Protocol)

5. ####

   ## ### ### #### ### #####.

6. ##

   #######! ### #####.

3.2. Configure webserver

drakwizard apache2

##[6]# # ### #### # ### # # ####.

3.2.1. # ### #####?

########. (## #####)

3.2.2. drakwizard apache2# # ##

#####.

1. ##

   # ## #### #####. ### #####.

2. ## ### ##: ## #### #/## ##

   # ### #### ##### ## #####. ## ## ######.

3. ## ### ##

   #### ### #### ## # ####.

4. ### # #### ##

[6] You can start this tool from the command line, by typing **drakwizard apache2** as root.

#####.

5. ## ## ##

   # ## ## ### ## ### ### # ####.

6. ####

   ## ### ### #### ### #####.

7. ##

   #######! ### #####.

4. ####

This screen and the one for *Sharing* are only visible if the *drakwizard* package is installed. You can choose between several tools to set up different servers. Click on a link below or on 3#. “##”to learn more.
###

1. 4.1#. “DHCP ##”
2. 4.2#. “DNS ”
3. 4.3#. “### ”
4. 4.4#. “## ”
5. 4.5#. “##SSH ## ”

4.1. DHCP

drakwizard dhcp

Net ###### ## ### ## ### ## Mageia 4## #######.

##[7]# DHCP ### #### # ### # # ####. drakwizard# #### ## #### ## drakwizard# ## #####.

4.1.1. DHCP# #####?

####(DHCP)# ### ### ### IP ## # ## ### #### #### IP ###### #### #### #### #######. (# # #####)

4.1.2. drakwizard dhcp# DHCP ##

DHCP ## #### ## ## #####.

1. ##

   # ## #### #####. ### #####.

[7]##### **drakwizard dhcp**# ### #### # ### ### # ####.

2. **Selecting Adaptor**

   Choose the network interface, which is connected to the subnet, and for which DHCP will assign IP addresses, and then click Next.

3. **Select IP range**

   Select the beginning and ending IP addresses of the range of IPs you want the server to offer, along with the IP of the gateway machine connecting to some place outside the local network, hopefully close to the Internet, then click Next.

4. ####

   ## ### ### #### ### #####.

5. **Hold on...**

   This can be fixed. Click Previous a few times and change things around.

6. **Hours later...**

4.1.3. What is done

- ### ## ### dhcp-server# ##;
- Saving `/etc/dhcpd.conf` in `/etc/dhcpd.conf.orig;`
- Creating a new `dhcpd.conf` starting from `/usr/share/wizards/dhcp_wizard/scripts/dhcpd.conf.default` and adding the new parameters:
  - `hname`
  - `dns`
  - net
  - ip
  - `mask`
  - `rng1`
  - `rng2`
  - `dname`
  - `gateway`
  - `tftpserverip`
  - `dhcpd_interface`
- Also modifying Webmin configuration file `/etc/webmin/dhcpd/config`
- Restarting `dhcpd.`

4.2. DNS

drakwizard bind

This page hasn't been written yet for lack of resources. If you think you can write this help, please contact the Doc team. [https://wiki.mageia.org/en/Documentation_team] Thanking you in advance.

drakwizard bind# ### #### # ### ### # ####.

4.3.

drakwizard squid

This tool[8] can help you to set up a proxy server. It is a component of drakwizard which should be installed before you can access to it.

4.3.1. What is a proxy server?

A proxy server is a server (a computer system or an application) that acts as an intermediary for requests from clients seeking resources from other servers. A client connects to the proxy server, requesting some service, such as a file, connection, web page, or other resource available from a different server and the proxy server evaluates the request as a way to simplify and control its complexity. (From Wikipedia)

4.3.2. Setting up a proxy server with drakwizard squid

Welcome to the proxy server wizard.

1. ##

   # ## #### #####. ### #####.

2. **Selecting the proxy port**

   Select the proxy port browsers will connect through, then click Next.

3. **Set Memory and Disk Usage**

   Set memory and disk cache limits, then click Next.

4. **Select Network Access Control**

   Set visibility to local network or world, then click Next.

5. **Grant Network Access**

   Grant access to local networks, then click Next.

6. **Use Upper Level Proxy Server?**

   Cascade through another proxy server? If no, skip next step.

7. **Upper Level Proxy URL and Port**

   Provide upper level proxy hostname and port, then click Next.

8. ####

   ## ### ### #### ### #####.

[8] You can start this tool from the command line, by typing **drakwizard squid** as root.

9. **Start during boot?**

   Choose if the proxy server should be started during the boot time, then click Next.

10. ##

    #######! ### #####.

4.3.3. What is done

- Installing the package squid if needed;
- Saving `/etc/squid/squid.conf` in `/etc/squid/squid.conf.orig;`
- Creating a new `squid.conf` starting from `squid.conf.default` and adding the new parameters:
  - `cache_dir`
  - `localnet`
  - cache_mem
  - http_port
  - `level` 1, 2 or 3 and `http_access` according to level
  - `cache_peer`
  - `visible_hostname`
- `squid` ## ##.

4.4.

drakwizard ntp

This tool[9] purpose is to set the time of your server synchronised with an external server. It isn't installed by default and you have to also install the drakwizard and drakwizard-base packages.

4.4.1. Setup a NTP server with drakwizard ntp

1. After a welcome screen (see above), the second one ask you to choose three time servers in the drop down lists and suggests to use pool.ntp.org twice because this server always points to available time servers.

2. The following screens allows to choose the region and the city and then, you arrive on a summary. If something is wrong, you can obviously change it using the Previousbutton. If everything is right, click on the Next button to proceed to the test. It may take a while and you finally get this screen below:

3. Click on the Finish button to close the tool

4.4.2. What is done

This tool executes the following steps:

- Installing the package `ntp` if needed

[9] You can start this tool from the command line, by typing **drakwizard ntp** as root.

- Saving the files `/etc/sysconfig/clock` to `/etc/sysconfig/clock.orig` and `/etc/ntp/step-tickers` to `/etc/ntp/step-tickers.orig`;
- Writing a new file `/etc/ntp/step-tickers` with the list of servers;
- Modifying the file `/etc/ntp.conf` by inserting the first server name;
- Stopping and starting `crond`, `atd` and `ntpd` services;
- Setting the hardware clock to the current system time with UTC reference.

4.5. ##SSH

drakwizard sshd

This tool[10] can help you to set up an SSH daemon.

4.5.1. SSH # #####?

Secure Shell (SSH) is a cryptographic network protocol for secure data communication, remote command-line login, remote command execution, and other secure network services between two networked computers that connects, via a secure channel over an insecure network, a server and a client (running SSH server and SSH client programs, respectively). (From Wikipedia)

4.5.2. Setting up an SSH daemon with drakwizard sshd

Welcome to the Open SSH wizard.

1. **Select Type of Configure Options**

   Choose Expert for all options or Newbie to skip steps 3-7, click Next.
2. #### ####

   Sets visibility and root access options. Port 22 is the standard SSH port.
3. **Authentication Methods**

   Allow a variety of authentication methods users can use while connecting, then click Next.
4. **Logging**

   Choose logging facility and level of output, then click Next.
5. **Login Options**

   Configure per-login settings, then click Next.
6. **User Login Options**

   Configure the user access settings, then click Next.
7. **Compression and Forwarding**

   Configure X11 forwarding and compression during transfer, then click Next.

[10] You can start this tool from the command line, by typing **drakwizard sshd** as root.

8. ####

   ## ### ### #### ### #####.

9. ##

   #######! ### #####.

5.

In this screen you can choose between several tools to configure your hardware. Click on a link below to learn more.

1. ####
   a. 5.1#. “Hardware configuration” = *Browse and configure hardware*
   b. 5.2#. “## ##”
2. ###
   a. 5.3#. “3D #### ##” = *Configure 3D Desktop effects*
   b. 5.4#. “### ## ##”
3. ###/###
   a. 5.5#. “Set up the Keyboard Layout”
   b. 5.6#. “### ## ##(###, ####)”
4. ###/###
   a. 5.7#. “### ## # ##” = *Set up the printer(s), the print job queues, ...*
   b. 5.8#. “### ##”
5. ##
   a. 5.9#. “Set up a UPS for power monitoring”

5.1. Hardware configuration

harddrake2

This tool[11] gives a general view of the hardware of your computer. When the tool is launched, it executes a job to look for every element of the hardware. For that, it uses the command `ldetect` which refers to a list of hardware in `ldetect-lst` package.

5.1.1. The window

The window is divided in two columns.

The left column contains a list of the detected hardware. The devices are grouped by categories. Click on the > to expand the content of a category. Each device can be selected in this column.

The right column displays information about the selected device. The Help -> Fields description gives some information about the content of the fields.

[11] You can start this tool from the command line, by typing **harddrake2** as root.

According to which type of device is selected, either one or two buttons are available at the bottom of the right column:

- Set current driver options: this can be used to parameterize the module which is used in relation to the device. This must used by experts only.
- Run config tool: access to the tool which can configure the device. The tool can often be accessed directly from the MCC.

5.1.2.

####

The options menu gives the opportunity to check boxes to enable automatic detection:

- modem
- Jaz devices
- Zip parallel devices

By default these detections are not enabled, because they are slow. Check the appropriate box(es) if you have this hardware connected. Detection will be operational the next time this tool is started.

5.2. ##

draksound

##[12]# **####** # ### Mageia ## ### ####.

Draksound deals with the sound configuration, PulseAudio options and troubleshooting. It will help you if you experience sound problems or if you change the sound card.

PulseAudio is a sound server. It receives all the sound inputs, mixes them according to the user preferences and sends the resulting sound to the output. See Menu ->Sound and video -> PulseAudio volume control to set these preferences.

PulseAudio# ## ### #### #### ### ## ## ####.

Glitch-Free# ## ###### PulseAudio# #####. ## #### ### ## ## ####.

The Troubleshooting button gives assistance with fixing any problems you may have. You will find it helpful to try this before asking the community for help.

#####.

5.3. 3D ####

drak3d

5.3.1.

##[13]# #### ## #### 3D #### ### ### # ####. 3D ### ##### ## ####.

[12] ##### **draksound**# ### #### # ### ### # ####.
[13] ##### **drak3d**# ### #### # ### ### # ####.

5.3.2.

To use this tool, you need to have the glxinfo package installed. If the package is not installed, you will be prompted to do so before drak3d can start.

After starting drak3d, you will be presented with a menu window. Here you can choose either No 3D Desktop Effects or Compiz Fusion. Compiz Fusion is part of a composite/window manager, which includes hardware-accelerated special effects for your desktop. Choose Compiz Fusion to turn it on.

If this is your first time using this program after a clean installation of Mageia, you will get a warning message telling you which packages need to be installed in order to use Compiz Fusion. Click on the Ok button to continue.

Once the appropriate packages are installed, you will notice that Compiz Fusion is selected in the drak3d menu, but you must log out and log back in for the changes to take effect.

After logging back in, Compiz Fusion will be activated. To configure Compiz Fusion, see the page for the ccsm (CompizConfig Settings Manager) tool.

5.3.3. Troubleshooting

5.3.3.1. Can't See Desktop after Logging in

If after turning on Compiz Fusion you attempt to log back into your desktop but can't see anything, restart your computer to get back to the log in screen. Once there, click on the Desktop icon and select drak3d.

When you log in, if your account is listed as an administrator, you will be prompted for your password again. Otherwise, use the administrator login with his/her account. Then you can undo any changes that may have caused the log in problem.

5.4. ### ##

XFdrake

Mageia ## ### ####. *### ## ### #####*. [14]

####.

##:

The graphic card currently detected is displayed and the matching server configured. Click on this button to change to another server, for example one with a proprietary driver.

The available servers are sorted under Vendor by manufacturer in alphabetical order and then by model also in alphabetical order. The free drivers are sorted by alphabetical order under Xorg.

In case of problems, *Xorg - Vesa* will work with most graphic cards and give you time to find and install the right driver while in your Desktop Environment.

If even Vesa doesn't work, choose *Xorg - fbdev*, which is used while installing Mageia, but doesn't allow you to change resolution or refresh rates.

[14] You can start this tool from the command line, by typing *XFdrake* as normal user or *drakx11* as root. Mind the capital letters.

If you made your choice for a free driver, you may be asked if you want to use a proprietary driver instead with more features (3D effects for example).

###:

In the same way as above, the monitor currently detected is displayed and you can click on the button to change to another one. If the desired monitor isn't in the Vendor list, choose in the Generic list a monitor with the same features.

Resolution:

This button allows the choice of the resolution (number of pixels) and the colour depth (number of colours). It displays this screen:

When you change the color depth, a multi-colored bar will appear next to the second button and show a preview of what the selected color depth looks like.

The first button shows the currently resolution, click to change for another one. The list gives all the possible choices according to the graphic card and the monitor, it is possible to click on Other to set other resolutions, but bear in mind that you can damage your monitor or select an uncomfortable setting.

#####. #### ## #### ### # ####.

Depending on the chosen resolution, it may be necessary to logout and restart the graphical environment for the settings to take effect.

###:

Once the configuration done, it is recommended to do a test before clicking on OK because it is easier to modify the settings now than later if the graphical environment doesn't work.

In case of a non working graphical environment, type Alt+Ctrl+F2 to open a text environment, connect as root and type XFdrake (with the caps) to to use XFdrake's text version.

######. ##### ## #### ## ### #### #### ## ## ### ### ######.
##:

1. ## ##: *Ctrl-Alt-Backspace ##### #### # ##* Ctrl+Alt+Backspace ## #### X ### ## ### # ####.
2. *### ## ##*: ### ### ## # ## ## ### ###### ##### # ####.
3. Graphical interface at startup: Most of the time, *Automatically start the graphical interface (Xorg) upon booting* is checked to make the boot switch to graphical mode, it may be unchecked for a server.

After a click on the Quit button, the system will ask you to confirm. There is still time to cancel everything and keep the previous configuration, or to accept. In this case, you have to disconnect and reconnect to activate the new configuration.

5.5. Set up the Keyboard Layout

keyboarddrake

5.5.1.

The keyboarddrake tool[15] helps you configure the basic layout for the keyboard that you wish to use on Mageia. It affects the keyboard layout for all users on the system. It can be found in the Hardware section of the Mageia Control Center (MCC) labelled "Configure mouse and keyboard".

5.5.2. Keyboard Layout

Here you can select which keyboard layout you wish to use. The names (listed in alphabetical order) describe the language, country, and/or ethnicity each layout should be used for.

5.5.3. Keyboard Type

This menu lets you select the type of keyboard you are using. If you are unsure of which to choose, it is best to leave it as the default type.

5.6. ### ## ##(###, ####)

mousedrake

##[16]# #### # ### Mageia ## ### ####.

Mageia# ##### #### ### ## ### ## #### ## Drakinstall# ## #######. # ### #### ## #### ### # ####.

The mice are sorted by connection type and then by model. Select your mouse and click on OK. Most of the time "Universal / Any PS/2 & USB mice" is suitable for a recent mouse. The new mouse is immediately taken into account.

5.7. ### ## #

system-config-printer

5.7.1.

Printing is managed on Mageia by a server named CUPS. It has its own configuration interface [http://localhost:631] which is accessible via an Internet browser, but Mageia offers its own tool for installing printers called system-config-printer which is shared with other distributions such as Fedora, Mandriva, Ubuntu and openSUSE.

You should enable the non-free repository before proceeding with the installation, because some drivers may only be available in this way.

Printer installation is carried out in the Hardware section of the Mageia Control Centre. Select the Configure printing and scanning tool[17].

MCC# # ## ### ### ### ####:

task-printing-server

task-printing-hp

###. ## 230MB# #### #####.

To add a printer, choose the "Add" printer button. The system will try to detect any printers and the ports available. The screenshot displays a printer connected to a parallel port. If a printer is detected, such as a

[15] You can start this tool from the command line, by typing **keyboarddrake** as root.
[16] ##### **mousedrake**# ### #### # ### ### # ####.
[17] You can start this tool from the command line, by typing *system-config-printer*. The root password will be asked for.

printer on a USB port, it will be displayed on the first line. The window will also attempt to configure a network printer.

5.7.2. ## ###

This usually refers to USB printers. The utility automatically finds the name of the printer and displays it. Select the printer and then click "Next". If there is a known driver associated for the printer, it will be automatically installed. If there is more than one driver or no known drivers, a window will ask you to select or furnish one, as explained in the next paragraph. Continue with 5.7.4#. “## #### ##”

5.7.3. #### ### ###

When you select a port, the system loads a driver list and displays a window to select a driver. The choice can be made through one of the following options.

- ######## ### ##
- PPD ## ##
- ##### #### ##

By selecting from the database, the window suggests a printer manufacturer first, and then a device and a driver associated with it. If more than one driver is suggested, select one which is recommended, unless you have encountered some problems with that one before, in this case select the one which know to work.

5.7.4. ## ####

After the driver selection, a window requests some information which will allow the system to designate and discover the printer. The first line is the name under which the device will appear in applications in the list of available printers. The installer then suggests printing a test page. After this step, the printer is added and appears in the list of available printers.

5.7.5. ####

Network printers are printers that are attached directly to a wired or wireless network, that are attached to a printserver or that are attached to another workstation that serves as printserver.

Often, it is better to configure the DHCP server to always associate a fixed IP address with the printer's MAC-address. Of course that should be the same as the IP address the printer of printserver is set to, if it has a fixed one.

The printer's Mac-address is a serial number given to the printer or printserver or computer it is attached to, that can be obtained from a configuration page printed by the printer or which may be written on a label on the printer or printserver. If your shared printer is attached to a Mageia system, you can run `ifconfig` on it as root to find the MAC-address. It is the sequence of numbers and letters after "HWaddr".

The discovering of network printer uses some protocols to be enabled. One of them is `zeroconf` provided by `avahi`. The firewall stops by default the discovering. Thus you have to configure the firewall to allow `zeroconf` and `Network printer/scanner autodiscovery` for Canon printer.

You can add your network printer by choosing the protocol it uses to talk to your computer over the network. If you don't know which protocol to choose, you can try the Network Printer - Find Network Printer option in the Devices menu and give the IP address of the printer in the box on the right, where it says "host".

If the tool recognises your printer or printserver, it will propose a protocol and a queue, but you can choose a more appropriate one from the list below it or give the correct queue name if it isn't in the list.

Look in the documentation that came with your printer or printserver to find which protocol(s) it supports and for possible specific queue names.

5.7.6. #### ##

One current technique is one developed by Hewlett-Packard and known as JetDirect. It allows access to a printer directly connected to the network via an Ethernet port. You must know the IP-address at which the printer is known on the network. This technique is also used inside some ADSL-routers which contain an USB port to connect the printer. In this case, the IP-address is that of the router. Note that the tool "Hp Device manager" can manage dynamically configured IP-adress, setting an URI like *hp:/net/<name-of-the-printer>* . In this case, fixed IP-adress is not required.

Choose the option AppSocket/HP JetDirect as the protocol and set the address in Host:, do not change the Port Number, unless you know that it needs to be changed. After the selection of the protocol, the selection of the driver is the same as above.

####:

- *Internet Printing Protocol (ipp)*: a printer which can be accessed on a TCP/IP network via the IPP protocol, for example a printer connected to a station using CUPS. This protocol may also be used also by some ADSL-routers.
- *Internet Printing Protocol (https):* the same as ipp, but using http transport and with TLS secured protocol. The port has to be defined. By default, the port 631 is used.
- *### ## ####(ipps):* ipp# ##### TLS ## ##### #####.
- *LPD/LPR host or Printer*: a printer which can be accessed on a TCP/IP network via the LPD protocol, for example a printer connected to a station using LPD.
- *SAMBA# ## Windows ###*: Windows ## SMB ### #### ##### #### #### ###.

URI# ## ### ## ####. ### URI# #### ### ## # ## ####:

- Appsocket

  ```
  socket://ip-address-or-hostname:port
  ```

- ### ## ####(IPP)

  ```
  ipp://ip-address-or-hostname:port-number/resource
  ```

  ```
  http://ip-address-or-hostname:port-number/resource
  ```

- ## ### ##(LPD) ####

  ```
  lpd://username@ip-address-or-hostname/queue
  ```

CUPS ## [http://www.cups.org/documentation.php/doc-1.5/network.html]## ## # ####.

5.7.7. ##

You can access the properties of the device. The menu allows access to parameters for the CUPS server. By default a CUPS server is launched on your system, but you can specify a different one with the Server | Connect... menu, another window which gives access to the tuning of other specific parameters of the server, following Server | Settings.

5.7.8. Troubleshoot

You can find some information on occurring errors during printing by inspecting `/var/log/cups/error_log`

You can also access to a tool to diagnose problems using the Help | Troubleshoot menu.

5.7.9. Specifics

It is possible that some drivers for specific printers are not available in Mageia or are not functional. In this case, have a look at the openprinting [http://openprinting.org/printers/] site to check if a driver for your device is available. If yes, check if the package is already present in Mageia and in this case install it manually. Then, redo the installation process to configure the printer. In all cases, report the problem in bugzilla or on the forum if you are comfortable with this tool and furnish the model and driver information and whether the printer works or not after installation. Here are some sources to find other up-to-date drivers or for more recent devices.

Brother printers

This page [http://welcome.solutions.brother.com/bsc/public_s/id/linux/en/download_prn.html] give a list of drivers provided by Brother. Search the driver for your device, download the rpm(s) and install.

You should install Brother drivers before running the configuration utility.

Hewlett-Packard ### # ### ##

These devices use the hplip tool. It is installed automatically after the detection or the selection of the printer. You can find other information here [https://developers.hp.com/hp-linux-imaging-and-printing/features]. The tool "HP Device Manager" is available in the System menu. Also view configuration [https://developers.hp.com/hp-linux-imaging-and-printing/install/manual/hp_setup] for the management of the printer.

A HP All in one device must be installed as a printer and the scanner features will be added. Note that sometimes, the Xsane interface doesn't allow to scan films or slides (the lighting slid can't operate). In this case, it is possible to scan, using the standalone mode, and save the picture on a memory card or USB stick inserted in the device. Afterwards, open your favourite imaging software and load your picture from the memory card which is appeared in the /media folder.

###

Xerox ## #### ## # #### QPDL ##### ##### ##### [http://foo2qpdl.rkkda.com/].

Epson ### # ###

Drivers for Epson printers are available from this search page [http://download.ebz.epson.net/dsc/search/01/search/?OSC=LX]. For the scanner part, you must install the "iscan-data" package first, then "iscan" (in this order). A iscan-plugin package can also be available and is to install. Choose the *rpm* packages according to your architecture.

It is possible that the iscan package will generate a warning about a conflict with sane. Users have reported that this warning can be ignored.

###

For Canon printers, it may be advisable to install a tool named turboprint available here [http://www.turboprint.info/].

5.8. ###

scannerdrake

5.8.1.

This tool [18] allows you to configure a single scanner device or a multifunction device which includes scanning. It also allows you to share local devices connected to this computer with a remote computer or to access remote scanners.

####:

"#### ##### SANE #### #### ###.

SANE #### ########?"

######. ## #### ## ## `scanner-gui` # `task-scanning`# #####.

If your scanner is identified correctly, so if in the above screen you see the name of your scanner, the scanner is ready for use with, for instance, *XSane* or *Simple Scan*.

In that case, you might now want to want to configure the *Scanner sharing* option. You can read about it in the 5.8.2#. “Scannersharing”.

The discovering of network scanner uses some protocols to be enabled. One of them is `zeroconf` provided by `avahi`. The firewall stops by default the discovering. Thus you have to configure the firewall to allow `zeroconf` and `Network printer/scanner autodiscovery` for Canon devices.

If your scanner hasn't been correctly identified, and checking its cable(s) and power switch and then pressing *Search for new scanners* doesn't help, you'll need to press *Add a scanner manually*.

#####.

######.

Please check whether your scanner is supported on the SANE: Supported Devices [http://www.sane-project.org/lists/sane-mfgs-cvs.html] page and ask for help in the forums [http://forums.mageia.org/en/].

1. ##

You can leave this setting to *Auto-detect available ports* unless your scanner's interface is a parallel port. In that case, select */dev/parport0* if you have only one.

#####.

5.8.4#. “## ## ##”# #####.

5.8.2. Scannersharing

Here you can choose whether the scanners connected to this machine should be accessible by remote machines and by which remote machines. You can also decide here whether scanners on remote machines should be made available on this machine.

Scanner sharing to hosts : name or IP address of hosts can be added or deleted from the list of hosts allowed to access the local device(s), on this computer.

[18] ##### **scannerdrake**# ### #### # ### ### # ####.

Usage of remote scanners : name or IP address of hosts can added or deleted from the list of hosts which give access to a remote scanner.

##: #### ### # ####.

##: ### #### ##### ## ## ### #####.

"## ## ##"# ## #### #### # ####.

saned #### ## #### ## ## #### ## #####.

##, ### ## ### #####:

/etc/sane.d/saned.conf

/etc/sane.d/net.conf

/etc/sane.d/dll.conf to add or comment the directive "net"

It will also configure *saned* and *xinetd* to be started on boot.

5.8.3. Specifics

- Hewlett-Packard

  Most HP scanners are managed from *HP Device Manager* (hplip) which also manages printers. In this case, this tool does not allow you to configure it and invites you to use *HP Device Manager*.

- Epson

  Drivers are available from this page [http://download.ebz.epson.net/dsc/search/01/search/?OSC=LX]. When indicated, you must install the *iscan-data* package first, then *iscan* (in this order). It is possible that the *iscan* package will generate a warning about a conflict with *sane*. Users have reported that this warning can be ignored.

5.8.4. ## ##

It is possible that after selecting a port for your scanner in the ## 1. “## ##” screen, you need to take one or more extra steps to correctly configure your scanner.

- In some cases, you're told the scanner needs its firmware to be uploaded each time it is started. This tool allows you to load it into the device, after you installed it on your system. In this screen you can install the firmware from a CD or a Windows installation, or install the one you downloaded from an Internet site of the vendor.

  When your device's firmware needs to be loaded, it can take a long time at each first usage, possibly more than one minute. So be patient.

- Also, you may get a screen telling you to adjust the */etc/sane.d/"name_of_your_SANE_backend".conf file.*
- Read those or other instructions you get carefully and if you don't know what to do, feel free to ask for help in the forums [http://forums.mageia.org/en/].

5.9. Set up a UPS for power monitoring

drakups

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You can start this tool from the command line, by typing **drakups** as root.

6. #####

####. ## ### #### ### #####.

1. #### ##
   a. 6.1#. “#### ##”
   b. 6.2#. “### #### ##### ##(#, ISDN, ADSL, ...)”
   c. 6.3#. “## ##”
2. #### ###/
   a. 6.4#. “###”
   b. 6.5#. “## #### ### ### ####”
   c. Section 6.6, “## #### #### ##”
   d. 6.7#. “Configure VPN Connection to secure network access”
3. ##
   a. 6.8#. “Hosts definitions”

6.1. ####

draknetcenter

This tool[19] is found under the Network & Internet tab in the Mageia Control Center labelled "Network Center"

6.1.1.

When this tool is launched, a window opens listing all the networks configured on the computer, whatever their type (wired, wireless, satellite, etc.). When clicking on one of them, three or four buttons appear, depending on the network type, to allow you to look after the network, change its settings or connect/ disconnect. This tool isn't intended to create a network, for this see Set up a new network interface (LAN, ISDN, ADSL, ...) in the same MCC tab.

In the screenshot below, given as example, we can see two networks, the first one is wired and connected, recognizable by this icon (this one is not connected) and the second section shows wireless networks, not connected recognizable by this icon and this one if connected. For the other network types, the colour code is always the same, green if connected and red if not connected.

In the wireless part of the screen, you can also see all the detected networks, with the SSID, the Signal strengh, if they are encrypted (in red) or not (in green), and the Operating mode. Click on the chosen one and then either on Monitor, Configure or Connect. It is possible here to go from a network to another one. If a private network is selected, the Network Settings window (see below) will open and ask you for extra settings (an encryption key in particular).

########.

[19] ##### **draknetcenter**# ### #### # ### ### # ####.

6.1.2. The Monitor button

This button allows you to watch the network activity, downloads (toward the PC, in red) and uploads (toward the Internet, in green). The same screen is available by right clicking on the Internet icon in the system tray -> Monitor Network.

There is a tab for each network (here eth0 is the wired network, lo the local loopback and wlan0 the wireless network) and a tab connection which gives details about connection status.

At the bottom of the window is a title Traffic accounting, we will look at that in the next section.

6.1.3. ##

A - ## ##### ##

It is possible to change all the settings given during network creation. Most of the time, checking Automatic IP (BOOTP/DHCP) will do, but in case of problems, manual configuration may give better results.

For a residential network, the IP address always looks like 192.168.0.x, Netmask is 255.255.255.0, and the Gateway and DNS servers are available from your providers website.

Enable traffic accounting if checked this will count the traffic on a hourly, daily or monthly basis. The results are visible in the Network monitor detailed in the previous section. Once enabled, you may have to reconnect to the network.

Allow interface to be controlled by Network Manager:

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The button Advanced:

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B - ## ##### ##

#####.

##:

Select Managed if the connection is via an access point, there is an **ESSID** detected. Select Ad-hoc if it is a peer to peer network. Select **Master** if your network card is used as the access point, your network card needs to support this mode.

#:

###.

WEP uses a password and is weaker than WPA which uses a passphrase. WPA Pre-Shared Key is also called WPA personal or WPA home. WPA Enterprise is not often used in private networks.

Allow access point roaming:

Roaming is a technology which enables allows computer to change its access point while remaining connected to the network.

The button Advanced:

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6.1.4. The Advanced Settings button

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6.2. ### #### ##### ##(#, ISDN, ADSL, ...)

drakconnect

6.2.1.

This tool[20] allows to configure much of local network or Internet access. You have to know some information from your access provider or your network administrator.

#####.

6.2.2. ### ## ##(###)

1. # ## ### ## ### ###### #####. ### ### #####.
2. # #### ## ## ## IP ## ### ### #####.
3. ## IP
   a. *Ethernet/IP settings*: you have to select if DNS servers are declared by the DHCP server or are manually specified, as explained below. In the last case, the IP address of DNS servers has to be set. The HOSTNAME of the computer can be specified here. If no HOSTNAME is specified, the name `localhost.localdomain` is attributed by default. The Hostname can also be provided by the DHCP server with the option *Assign host name from DHCP server*. Not all DHCP servers have such a function and if you're setting up your PC to get an IP address from a domestic ADSL router, it is unlikely.

   b. ## ### ### ### # ## ### #####:
      - ## ###(DHCP #### ### ## #### # ##)
      - DHCP #####
      - DHCP ## ##
      - DHCP## YP ## ####(##### ###): NIS ### #####.
      - DHCP## NTPD ## ####(## ###)
      - the HOSTNAME required by DHCP. Only use this option if the DHCP server requires the client to specify a hostname before receiving an IP address. This option is not dealt by some DHCP servers.
   c. ## # ## ## ### #### ### ### #####: 6.2.11#. “Ending the configuration”

[20] ##### **drakconnect**# ### #### # ### ### # ####.

4. ## ##

    a. *Ethernet/IP settings*: you need to declare what DNS servers to use. The HOSTNAME of the computer can be specified here. If no HOSTNAME is specified, the name `localhost.localdomain` is attributed by default.

    For a residential network, the IP address usually looks like *192.168.x.x*, Netmask is *255.255.255.0*, and the Gateway and DNS servers are available from your service provider's website.

    In advanced settings, you can specified a *Search domain*. It would usually be your home domain, i.e. if your computer is called "splash", and it's full domain name is "splash.boatanchor.net", the Search Domain would be "boatanchor.net". Unless you specifically need it, it's ok not to define this setting. Again, domestic ADSL would not need this setting.

    b. ## ### 6.2.11#. “Ending the configuration”# #####.

6.2.3. ### ## ##(DVB)

This section hasn't been written yet for lack of resources. If you think you can write this help, please contact the Doc team. [https://wiki.mageia.org/en/Documentation_team] Thanking you in advance.

6.2.4. ### ### ##

1. # ## ### ## ### ###### #####. ### ### #####.
2. # #### ## ## ## IP ## ### ### #####.
3. ## ### #### ###:
    - ##
    - BPALogin(Telstra# ##). # ## ### ### ### #### ###.
4. ## IP

    a. *Cable/IP settings*: you have to select if DNS servers are declared by the DHCP server or are manually specified, as explained below. In the last case, the IP address of DNS servers has to be set. The HOSTNAME of the computer can be specified here. If no HOSTNAME is specified, the name `localhost.localdomain` is attributed by default. The Hostname can also be provided by the DHCP server with the option *Assign host name from DHCP server*. Not all DHCP servers have such a function and if you're setting up your PC to get an IP address from a domestic ADSL router, it is unlikely.

    b. ## ### ### ### # ## ### #####:
        - ## ###(DHCP #### ### ## #### # ##)
        - DHCP #####
        - DHCP ## ##
        - DHCP## YP ## ####(##### ###): NIS ### #####.
        - DHCP## NTPD ## ####(## ###)
        - the HOSTNAME required by DHCP. Only use this option if the DHCP server requires the client to specify a hostname before receiving an IP address. This option is not dealt by some DHCP servers.

    c. ## # ## ## ### #### ### ### #####: 6.2.11#. “Ending the configuration”
5. ## ##

    a. *Cable/IP settings*: you need to declare what DNS servers to use. The HOSTNAME of the computer can be specified here. If no HOSTNAME is specified, the name `localhost.localdomain` is attributed by default.

For a residential network, the IP address usually looks like *192.168.x.x*, Netmask is *255.255.255.0*, and the Gateway and DNS servers are available from your service provider's website.

In advanced settings, you can specified a *Search domain*. It would usually be your home domain, i.e. if your computer is called "splash", and it's full domain name is "splash.boatanchor.net", the Search Domain would be "boatanchor.net". Unless you specifically need it, it's ok not to define this setting. Again, domestic connection would not need this setting.

b. ## ### 6.2.11#. “Ending the configuration”# #####.

6.2.5. ### DSL

1. If the tool detects network interfaces, it offers to select one and to configure it.
2. A list of providers is proposed, classified by countries. Select your provider. If it is not listed, select the option Unlisted and then enter the options your provider gave.
3. ## ### #### # ### ######:
   - DHCP
   - ## TCP/IP ##
   - PPP over ADSL (PPPoA)
   - #### ## PPP(PPPoE)
   - ### # ### ### ####(PPTP)
4. ### ##
   - ### ##(####)
   - ## ##
   - (##) ## ## ID (VPI)
   - (##) ## ## ID (VCI)
5. ## ### 6.2.11#. “Ending the configuration”# #####.

6.2.6. ### ISDN

1. #### ### ### ####:
   - ## ##(## ISDN ##)
   - ## ISDN ##
2. #### # ###### ### #### ### #####. ### #####.
3. ## ### #### # ### ######:
   - ### ### ### ### ## ####(DHCP)
   - ## ####(EDSS1)
4. A list of providers is then offered, classified by countries. Select your provider. If it is not listed, select the option Unlisted and then enter the options your provider gave you. Then it is asked for parameters:
   - ## ##
   - ## ##
   - ### ID
   - ## ##
   - Authentication method

5. After that, you have to select if you get the IP address by automatic or manual method. In the last case, specify IP address and Subnet mask.
6. The next step is to choose how DNS servers address are obtained, by automatic or manual method. In the case of manual configuration, you have to put:
   - ### ##
   - # ## # # ## DNS ##
   - Select if the hostname is set from IP. This option is to select only if you are sure that your provider is configured to accept it.
7. The next step is to choose how the gateway address is obtained, by automatic or manual method. In the case of manual configuration, you have to enter the IP address.
8. ## ### 6.2.11#. “Ending the configuration”# #####.

6.2.7. ### ## ##(WiFi)

1. A first window lists the interfaces which are available and an entry for Windows driver (ndiswrapper). Select the one to configure. Use ndiswrapper only if the other configuration methods did not work.
2. # #### ### ### ## ### ### ### #####.
3. Specific parameter for the wireless card are to provide:

   - ## ##:

     ### To access to an existing access point (the most frequent).

     Ad-Hoc To configure direct connection between computers.
   - #### ##(ESSID)
   - Encryption mode: it depends of how the access point is configured.

     WPA/ WPA2 # ### ### ###### #### ## #### ####.

     WEP Some old hardware deals only this encryption method.
   - ### #

     It is generally provided with the hardware which give the access point.
4. At this step, the choice is given between an automatic IP address or a manual IP address.
5. ## IP
   a. *IP settings*: you have to select if DNS servers are declared by the DHCP server or are manually specified, as explained below. In the last case, IP address of DNS servers has to be set. The HOSTNAME of the computer can be specified here. If no HOSTNAME is specified, the name localhost.localdomain is attributed by default. The Hostname can also be provided by the DHCP server with the option *Assign host name from DHCP server*
   b. ## ### ### ### # ## ### #####:
      - ## ###(DHCP #### ### ## #### # ##)
      - DHCP #####
      - DHCP ## ##
      - Get YP server from DHCP (checked by default): specify the NIS servers
      - DHCP## NTPD ## ####(## ###)
      - the HOSTNAME required by DHCP. Only use this option if the DHCP server requires the client to specify a hostname before receiving an IP address. This option is not dealt by some DHCP servers.

c. After accepting the configuration the step, which is common to all connection configurations, is explained: 6.2.11#. “Ending the configuration”

6. ## ##

a. *IP settings*: you have to declare DNS servers. The HOSTNAME of the computer can be specified here. If no HOSTNAME is specified, the name `localhost.localdomain` is attributed by default.

For a residential network, the IP address always looks like *192.168.x.x*, Netmask is *255.255.255.0*, and the Gateway and DNS servers are available from your providers website.

In advanced settings, you can specified a *Search domain*. It must seem to your hostname without the first name, before the period.

b. ## ### 6.2.11#. “Ending the configuration”# #####.

6.2.8. ### GPRS/Edge/3G

1. ### ## ###### #### ### #### ##### #####.
2. PIN# ####. PIN# #### ## ## ## ####.
3. #### ##### #####. #### ### ### ## ### ######.
4. A list of providers is proposed, classified by countries. Select your provider. If it is not listed, select the option Unlisted and then enter the options your provider gave.
5. Provide access settings
   - ### ### ##
   - ### ##(####)
   - ## ##
6. ## ### 6.2.11#. “Ending the configuration”# #####.

6.2.9. A new Bluetooth Dial-Up Networking connection

This section hasn't been written yet for lack of resources. If you think you can write this help, please contact the Doc team. [https://wiki.mageia.org/en/Documentation_team] Thanking you in advance.

6.2.10. A new Analog telephone modem connection (POTS)

1. #### ### ### ####:
   - ## ##
   - Detected hardware, if any.
2. ## ### #####. ### ######.
3. If not yet installed, it will be suggested that you install the package *kppp-provider*.
4. A list of providers is proposed, classified by countries. Select your provider. If it is not listed, select the option Unlisted and then enter the options your provider gave. Then it is asked for Dialup options:
   - *## ##*
   - *## ##*
   - *### ###*
   - *####*
   - *Authentication*, choose between:
     – PAP/CHAP

- #### ##
- PAP
- ### ##
- CHAP

5. ## ### 6.2.11#. “Ending the configuration”# #####.

6.2.11. Ending the configuration

####:

- *Allow users to manage the connection*
- *Start the connection at boot*
- *Enable traffic accounting*
- *Allow interface to be controlled by Network Manager*
- In the case of a wireless connection, a supplemental box is *Allow access point roaming* which give the possibility to switch automatically between access point according to the signal strength.

With the advanced button, you can specify:

- Metric (10 by default)
- MTU
- #### ####
- IPv6-IPv4 ## ###

The last step allows you to specify if the connection is to start immediately or not.

6.3. ##

drakconnect --del

[21]# ### # ####.

#####.

#####.

6.4.

drakproxy

If you have to use a proxy server to access to the internet, you can use this tool[22] to configure it. Your net administrator will give you the information you need. You can also specify some services which can be accessed without the proxy by exception.

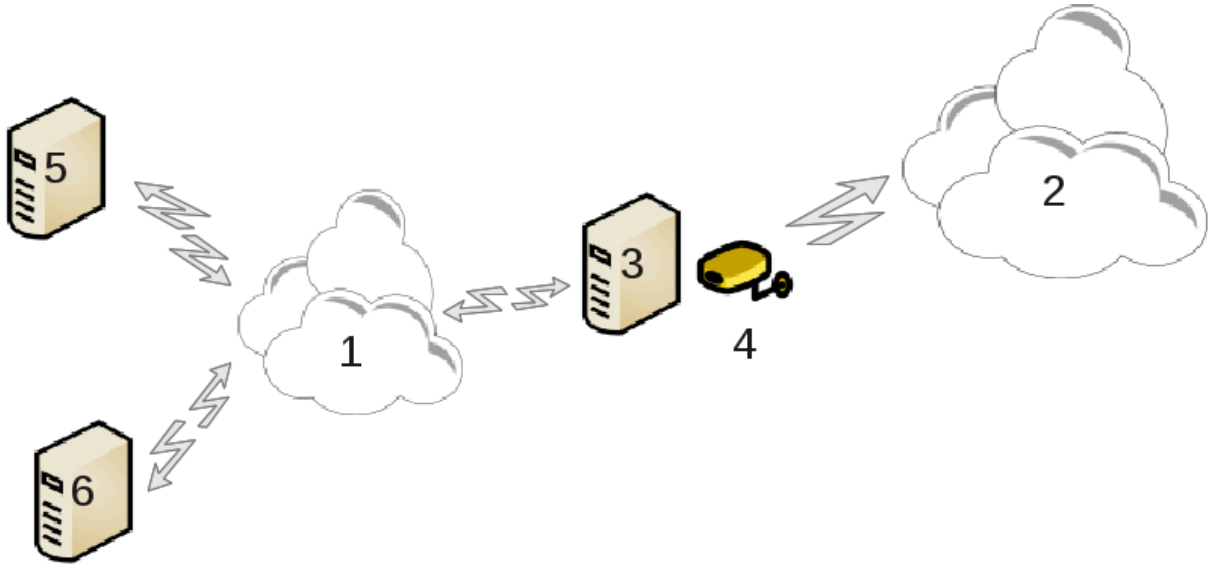
From Wikipedia, on 2012-09-24, article Proxy server: In computer networks, a proxy server is a server (a computer system or an application) that acts as an intermediary for requests from clients seeking resources from other servers. A client connects to the proxy server, requesting some service, such as a file, connection, web page, or other resource available from a different server. The proxy server evaluates the request as a way to simplify and control their complexity.

[21]##### **drakconnect --del**# ### #### # ### ### # ####.
[22]You can start this tool from the command line, by typing **drakproxy** as root.

6.5. ## #### ### ###

drakgw

6.5.1. Principles



This is useful when you have a computer (3) which has Internet (2) access and is connected also to a local network (1). You can use computer (3) as a gateway to give that access to other workstations (5) and (6) in the local network (1). For this, the gateway must have two interfaces; the first one such as an ethernet card must be connected to the local network, and the second one (4) connected to the Internet (2).

6.1#. “#### ##”# ### ## ##### ### #### ###### #### ####.

6.5.2. #####

###[23]# ### ## ## ### #####:

- If the wizard does not detect at least two interfaces, it warns about this and asks to stop the network and configure the hardware.
- specify the interface used for the Internet connection. The wizard automatically suggests one of the interfaces, but you should verify that what is proposed is correct.
- specify which interface is used for the Lan access. The wizard also proposes one, check that this is correct.
- The wizard proposes parameters for the Lan network, such as IP address, mask and domain name. Check that these parameters are compatible with the actual configuration. It is recommended that you accept these values.
- specify if the computer has to be used as a DNS server. If yes, the wizard will check that `bind` is installed. Otherwise, you have to specify the address of a DNS server.
- specify if the computer is to be used as a DHCP server. If yes, the wizard will check that `dhcp-server` is installed and offer to configure it, with start and end addresses in the DHCP range.
- specify if the computer is to be used as a proxy server. If yes, the wizard will check that `squid` is installed and offer to configure it, with the address of the administrator (admin@mydomain.com), name of the proxy (myfirewall@mydomaincom), the port (3128) and the cache size (100 Mb).
- ### ##### ##### ### #### #### ### #### ### # ####.

[23] ##### **drakgw**# ### #### # ### ### # ####.

#####.

6.5.3. Configure the client

If you have configured the gateway machine with DHCP, you only need to specify in the network configuration tool that you get an address automatically (using DHCP). The parameters will be obtained when connecting to the network. This method is valid whatever operating system the client is using.

If you must manually specify the network parameters, you must in particular specify the gateway by entering the IP-address of the machine acting as the gateway.

6.5.4. Stop connection sharing

If you want to stop sharing the connection on the Mageia computer, launch the tool. It will offer to reconfigure the connection or to stop the sharing.

6.6. ## #### ####

Draknetprofile

6.6.1.

Each network interface of a Mageia system is initially configured with a fix set of parameters. This corresponds to what is expected by a user of a desktop computer, but may not be adequate when the system is moved between various network environments: having the system run in different network environments will require that multiple configurations co-exist for a given network device - otherwise the interface might need to be re-configured each time the network environment changes.

6.6.1.1.

Linux provides support for multiple configurations of network devices as a standard feature. The notion of a **"network profile"** refers to a set of configurations of network devices, defined for a specific network environment. Each network profile has a **name** - the initial configuration that comes out of system generation has the name *"default"*; when a new profile is created, a name must be specified which is different from all already existing profile names.

6.6.1.2. Draknetprofile

Draknetprofile is a - very simple - component of the Mageia Control Center (MCC), it provides a Graphical User Interface (GUI) for managing profiles. This GUI allows to

- ### # ## - # "## ###"# ### ## #### ######.
- ### ## ### ##,
- ### ### #### #### #####.

6.6.2. Draknetprofile

6.6.2.1. ### ##, ###

Defining/modifying profiles concerns the entire Linux system and all its users. Running draknetprofile therefore requires root privileges. Normally, launching is achieved from within MCC (which already runs as root):

1: Mageia ## ##: #### & ###

1. launch the MCC by hitting the MCC icon in one of the panels of your desktop,

2. "#### & ###" ## ####,
3. hit "Manage different network profiles" in the "Personalize and Secure your network" Section (solid red contour in Figure 1).

Draknetprofile can also be launched by a command-line instruction from a terminal emulator with root privileges (this may be helpful when standard-output or error-output from draknetprofile needs to be consulted - for instance for debugging). Simply type:

```
draknetprofile
```

Draknetprofile# ## #### #####.

2: Draknetprofile# ##

####. ## #### ### ## ### ### ####:

- "###" ... ### ###(## ## ##)# ## #### #####(### ## #### ## ##);
- "## ###" ... # #### ####;
- "##" ... ### ### #### ### #### #####;
- "##" ... Draknetprofile## #####.

Before hitting the "Activate" or the "Delete" button, you have to select a profile from the list: select it by a left-button click on the name of the target profile.

Hitting the "New" button will launch an auxiliary window where you can type the name of the profile you want to create; this name must be different from any already existing profile. This profile will be created as a precise copy of the currently active profile and immediately activated as the current profile. You will probably then need to specify its properties (modify the automatically created configuration) in a second, independent action:

- Draknetprofile## ###("##" ## ###),
- back in the "Network & Internet" tab, you select the tab "Set up a new network interface (...)" (marked with dashed red contour in Figure 1),
- you then go through the steps for configuring the interface; they are similar to those you did for configuring the original interface during system generation - as documented in the Drakconnect manual.

The middle zone of the window is normally hidden, hit the "Advanced" button to make it visible. It should display the list of names of Draknetprofile **"modules"** (such as "network", "firewall", "urpmi"), each with a check-button next to the name; these check-buttons determine whether the properties controlled by that module are included into the profile or not.

6.6.2.2. # ### #### ## ### ##

In a system where several profiles are defined, an additional user interaction is required when the system boots: at the very end of the bootstrapping activities - just before the Desktop Environment starts - you will get a message like

```
Select network profile: (1) default (2) roaming*
```

Type 1 or 2 to select the "default", respectively the "roaming" profile, or carriage-return to select the profile that is marked with an asterisk (the profile that was active when the system had been shut down).

Presently (Mageia-5) there appears to be an intermittent problem: it happens that the system becomes unresponsive after soliciting the user to select a profile. The only way out of this situation is to launch another boot. This problem is under investigation.

6.6.3. Appendix: Files relevant to Draknetprofile

The configuration data of network interfaces are stored in the directory */etc/sysconfig/network-scripts/*, in files with names like *ifcfg-xxx*.

/etc/netprofile/current #### ## #####.

6.7. Configure VPN Connection to secure network access

drakvpn

6.7.1.

This tool[24] allows to configure secure access to a remote network establishing a tunnel between the local workstation and the remote network. We discuss here only of the configuration on the workstation side. We assume that the remote network is already in operation, and that you have the connection information from the network administrator, like a .pcf configuration file .

6.7.2.

Cisco VPN Concentrator ## OpenVPN# #####.

#####.

VPN ### ## ## ### #####.

- For Cisco VPN

- For openvpn. The openvpn package and its dependencies will be installed the first time the tool is used.

  Select the files that you received from the network administrator.

  Advanced parameters:

  ## ### ###### IP ### ####.

VPN ### #### ###

This VPN connection can be set to start automatically with a network connection. To do this, reconfigure the network connection to always connect to this VPN.

6.8. Hosts definitions

drakhosts

If some systems on your network grant you services, and have fixed IP-addresses, this tool[25] allows to specify a name to access them more easily. Then you can use that name instead of the IP-address.

##

With this button, you add the name for a new system. You will get a window to specify the IP-address, the host name for the system, and optionally an alias which can be used in the same way that the name is.

[24] You can start this tool from the command line, by typing **drakvpn** as root.
[25] ##### **drakhosts**# ### #### # ### ### # ####.

##

####. ## ## #####.

7.

####. ## ### #### ### #####.

1. ### ###
   a. 7.1#. “### ##”
   b. 7.2#. “Manage system services by enabling or disabling them”
   c. 7.3#. “## ##,##,####. ## ## ####”
2. ###
   a. 7.4#. “### ## ##”
   b. 7.5#. “### ## ##”
3. ##
   a. 7.6#. “### ## ##/##”
   b. 7.7#. “#### ## ##”
   c. 7.8#. “#### ##” = ##### ### ##
   d. 7.9#. “##(TM) ### ## ####”

7.1. ###

drakauth

##[26]# #### ### ## ##### #### ### # ## ### ### # ####.

By default, information for your authentication is stored in a file on your computer. Modify it only if your network administrator invites you to do so and give information about that.

7.2. Manage system services by enabling or disabling them

drakxservices

This page hasn't been written yet for lack of resources. If you think you can write this help, please contact the Doc team. [https://wiki.mageia.org/en/Documentation_team] Thanking you in advance.

You can start this tool from the command line, by typing **drakxservices** as root.

7.3. ## ##,##,####. ## ##

drakfont

This tool[27] is present in the Mageia Control Center under the **System** tab. It allows you to manage the fonts available on the computer. The main screen above shows:

[26] ##### **drakauth**# ### #### # ### ### # ####.
[27] You can start this tool from the command line, by typing **drakfont** as root.

- ### ## ##, ### # ##.
- ### ### ####.
- ## ### ### #### #####.

Windows ## ####:

This button automatically adds the fonts found on the Windows partition. You must have Microsoft Windows installed.

##:

##(### ###)# ### # ####.

##:

This button is to remove installed fonts and possibly save some place. Be careful when removing fonts because it may have serious consequences on the documents that use them.

Import:

Allows you to add fonts from a third party (CD, internet, ...). The supported formats are ttf, pfa, pfb, pcf, pfm and gsf. Click on the **Import** button and then on **Add**, a file manager pops up where you can select the fonts to install, click on **Install** when done. They are installed in the folder /usr/share/fonts.

If the newly installed (or removed) fonts doesn't appear in the Drakfont main screen, close and re open it to see the modifications.

7.4. ### ##

drakclock

This tool[28] is found under the tab System in the Mageia Control Center labelled "Manage date and time". In some desktop environments it is also available by a right click / Adjust date and Time ... on the clock in the system tray.

#####.

On the upper left part, is the **calendar**. On the screenshot above, the date is September (on the upper left), 2012 (on the upper right), the 2nd (in blue) and it is a Sunday. Select the month (or year) by clicking on the little arrows on each side of September (or 2012). Select the day by clicking on its number.

On the bottom left is the **Network Time Protocol** synchronising, it is possible to have a clock always on time by synchronising it with a server. Check Enable Network Time Protocol and choose the closest server.

On the right part is the **clock**. It's useless to set the clock if NTP is enabled. Three boxes display hours, minutes and seconds (15, 28 and 22 on the screenshot). Use the little arrows to set the clock to the correct time. The format can't be changed here, see your desktop environment settings for that.

At least, on the bottom right, select your time zone by clicking on the Change Time Zone button and choosing in the list the nearest town.

Even if it isn't possible to choose a date or time format in this tool, they will be displayed on your desktop in accordance with the localisation settings.

[28] ##### **drakclock**# ### #### # ### ### # ####.

7.5. ### ##

localedrake

This tool[29] can be found in the System section of the Mageia Control Center (MCC) labelled "Manage localization for your system". It opens with a window in which you can choose your language. The choice is adapted to languages selected during installation.

The Advanced button give access to activate compatibility with old encoding (non UTF8).

The second window shows a list of countries according to the selected language. The button Other Countries gives access to countries not listed.

You have to restart your session after any modifications.

7.5.1. ##

In the Other Countries screen you can also select an input method (from the drop-down menu at the bottom of the list). Input methods allow users to input multilingual characters (Chinese, Japanese, Korean, etc).

For Asian and African locales, IBus will be set as default input method so users should not need to configure it manually.

Other input methods (SCIM, GCIN, HIME, etc.) also provide similar functions and can, if not available from the drop-down menu, be installed in another part of the Mageia Control Center. See 2.1#. “##### ##(#### # ## # ##)”.

7.6. ### ## ##/##

logdrake

This tool[30] is found in the Mageia Control Center System tab, labelled "View and search system logs".

7.6.1. To do a search in the logs

First, enter the key string you want to look for in the **Matching** field and/or the key string you want to *do not* wish to see amongst the answers in the field **but not matching**. Then select the file(s) to search in the Choose file field. Optionally, it is possible to limit the search to only one day. Select it in the **Calendar**, using the little arrows on each side of the month and year, and check "Show only for the selected day". At last, click on the search button to see the results in the window called Content of the file. It is possible to save the results in the .txt format by clicking on the **Save** button.

The Mageia Tools Logs houses the logs from the Mageia configuration tools such as the Mageia Control Center tools. These logs are updated each time a configuration is modified.

7.6.2. To configure a mail alert

Mail alert automatically checks the system load and the services every hour and if necessary sends an e-mail to the configured address.

[29] You can also start this tool from the command line, by typing **localedrake** as root.
[30] You can start this tool from the command line, by typing **logdrake** as root.

To configure this tool, click on the **Mail Alert** button and then, in the next screen, on the Configure the mail alert system drop down button. Here, all the running services are displayed and you can choose which ones you want to look watch. (See screenshot above).

The following services can be watched :

- ## ###
- ##### ## ##
- FTP ##
- ### ###### ##
- SSH ###
- ## ###
- Xinetd ###
- BIND Domain Name Resolve

In the next screen, select the Load value you consider unacceptable. The load represents the demand to a process, a high load slows the system down and a very high load may indicate that a process has gone out of control. The default value is 3. We recommend setting the load value to 3 times the number of processors.

In the last screen, enter the Email address of the person to be warned and the Email server to use (local or on the Internet).

7.7. #### ##

drakconsole

This tool[31] gives you access to a console which is directly opened as root. We do not think that you need more information about that.

7.8. ####

userdrake

This tool[32] is found under the **System** tab in the Mageia Control Center labelled "Manage users on system"

The tool allows an administrator to manage the users and the groups, this means to add or delete a user or group and to modify user and group settings (ID, shell, ...)

When userdrake is opened, all the users existing on the system are listed in the Users tab, and all the groups in the Groups tab. Both tabs operate the same way.

1 ### ##

###:

The field **Full Name** is intended for the entry of a family name and first name, but it is possible to write anything or nothing as well!

#####.

[31] You can start this tool from the command line, by typing **drakconsole** as root.
[32] You can start this tool from the command line, by typing **userdrake** as root.

Setting a **Password** is highly recommended. There is a little shield on the right, if it is red, the password is weak, too short or is too similar to the login name. You should use figures, lower and upper case characters, punctuation marks, etc. The shield will turn orange and then green as the password strength improves.

####.

Login Shell is a drop down list that allows you to change the shell used by the user you are adding, the options are Bash, Dash and Sh.

Create a private group for the user, if checked will automatically create a group with the same name and the new user as the only member (this may be edited).

The other options should be obvious. The new user is created immediately after you click on OK.

2 ## ##

###, ### ##, ## ## ID# #### ###.

3 ##(### ###)

###: ## # ##### ### ## #### ### # ####(ID# ### # ####).

##:

The first option is for setting an expiration date for the account. Connection is impossible after this date. This is useful for temporary accounts.

####. ### ## ## #### ### ######.

#####.

Password Info: Allows you to set an expiration date for the password, this forces the user to change his password periodically.

##: #### #### #### ### ### # ####.

####.

4 ##(### ### ##)

###: ## ### ### # ####.

###: #### ### #### #### ### # ####.

5 ##

Select a user or a group and click on **Delete** to remove it. For a user, a window appears to ask if home directory and mailbox must also be deleted. If a private group has been created for the user, it will be deleted as well.

####.

6 ## ##

Userdrake #### ### # ####. ###### ## #### # #### ######.

7 ### ##

guest is a special account. It is intended to give somebody temporary access to the system with total security. Login is xguest, there is no password, and it is impossible to make modifications to the system from this account. The personal directories are deleted at the end of the session. This account is enabled by default, to disable it, click in the menu on Actions -> Uninstall guest account.

7.9. ##(TM) ### ##

transfugdrake

This tool[33] is found under the **System** tab in the Mageia Control Center labeled Import Windows(TM) documents and settings

The tool allows an administrator to import the user documents and settings from a Windows® 2000, Windows® XP or Windows® Vista™ installation on the same computer as the Mageia installation.

Please note that all the changes will be applied by transfugdrake immediately after pressing Next.

After starting transfugdrake you will see the first wizard page with some explanation about the tool and import options.

As soon as you read and understand the instructions, press the Next button. This should run a detection of Windows® installation.

When the detection step is complete you will see a page which allows you to choose accounts in Windows® and Mageia for the import procedure. It is possible to choose other user account than yours own.

Please take into account that due to migrate-assistant (the backend of transfugdrake) limitations Windows® user account names with special symbols can be displayed incorrectly.

####.

Some Windows® applications (especially drivers) may create user accounts for different purposes. For example, NVidia drivers in Windows®are updated using *UpdatusUser*. Please do not use such accounts for the import purposes.

When you finished with the accounts selection press Next button. The next page is used to select a method to import documents:

[33] You can start this tool from the command line, by typing **transfugdrake** as root.

Transfugdrake is designed to import Windows® data from *My Documents*, *My Music* and *My Pictures* folders. It is possible to skip import by selecting the appropriate item in this window.

When you finished with the document import method choosing press Next button. The next page is used to select a method to import bookmarks:

Transfugdrake can import *Internet Explorer* and *Mozilla Firefox* bookmarks into the bookmarks of Mageia *Mozilla Firefox* instance.

Choose the preferred import option and press the Next button.

####:

####.

The last page of wizard shows some congratulation message. Just press the Finish button.

7.10.

draksnapshot-config

##[34]# MCC# ### ## ## ## ## #### ### # ####.

When you start this tool in MCC for the first time, you will see a message about installing draksnapshot. Click on Install to proceed. Draksnapshot and some other packages it needs will be installed.

Click again on Snapshots, you will see the Settings screen. Tick Enable Backups and, if you want to backup the whole system, Backup the whole system.

If you only want to backup part of your directories, then choose Advanced. You will see a little pop-up screen. Use the Add and Remove buttons next to the Backup list to include or exclude directories and files from the backup. Use the same buttons next to the Exclude list to remove subdirectories and/or files from the chosen directories, that should **not** be included in the backup. Click on Close when you are done.

Now give the path to Where to backup, or choose the Browse button to select the correct path. Any mounted USB-key or external HD can be found in **/run/media/your_user_name/**.

Click on Apply to make the snapshot.

8.

####. ## ### #### ### #####.

1. *##(R) ##*
   a. 8.1#. “##(SMB)# ### ####/#### ###”
   b. 8.2#. “Share directories and drives with Samba” = *Windows(SMB) #### #### # #### ##*
2. *NFS ## ##*
   a. 8.3#. “NFS ### ####/#### ###”
   b. 8.4#. “NFS# ### ##### #### ##”

[34]##### **draksnapshot-config**# ### #### # ### ### # ####.

3. *WebDAV ##*

    a. 8.5#. “Access WebDAV shared drives and directories”

8.1. ##(SMB)# ### ####/####

diskdrake --smb

8.1.1.

This tool[35] allows you to declare which shared directories to be accessible to all users on the machine. The protocol used for this is SMB which has been popularized on Windows(R) systems. The shared directory will be available directly at boot. Shared directories can be also accessed directly in a single session by a user with tools such as file browsers.

####. ## ## 6.8#. “Hosts definitions”

8.1.2. Procedure

######.

Click on the server name and on > before the server name to display the list of the shared directories and select the directory you want to access.

###.

####. ## ### #### ## ### #### ### ## ####.

SMB ### ### # ## ### ### ### ### # ####. ##### #### # ### #### #### ### # ####.

After accepting the configuration with the Done button, a message will ask "Do you want to save the /etc/fstab modifications". Saving, will allow directory to made available at each boot, if the network is accessible. The new directory is then available in your file browser, for example in dolphin.

8.2. Share directories and drives with Samba

draksambashare

8.2.1.

Samba is a protocol used in different Operating Systems to share some resources like directories or printers. This tool allows you to configure the machine as a Samba server using the protocol SMB/CIFS. This protocol is also used by Windows(R) and workstations with this OS can access the resources of the Samba server.

8.2.2. Preparation

To be accessed from other workstations, the server has to have a fixed IP address. This can be specified directly on the server, for example with 6.1#. “#### ##”, or at the DHCP server which identifies the station

[35] ##### **diskrake --smb**# ### #### # ### ### # ####.

with its MAC-address and give it always the same address. The firewall has also to allow the incoming requests to the Samba server.

8.2.3. Wizard - Standalone server

At the first run, the tools [36] checks if needed packages are installed and proposes to install them if they are not yet present. Then the wizard to configure the Samba server is launched.

In the next window the Standalone server configuration option is already selected.

#####. # ### ## #### ## #### ## #### ###.

netbios ### ###### ### #### # #### #####.

##:

- ###: ###### #### #### # ## ### ### ###.
- ##: ###### # ### ## ### ### #####.

IP ## ## ### ### #### #### #### # ## #### ### # ####.

#####. ### # ### Windows ######## #### #####.

Samba# ### ### # ## ### ## #### ### # ####.

The wizard displays a list of the chosen parameters before you accept the configuration. When accepted, the configuration will be written in `/etc/samba/smb.conf`.

8.2.4. Wizard - Primary domain controller

If the "Primary domain controller" option is selected, the wizard asks for indication if Wins is to support or not and to provide admin users names. The following steps are then the same as for standalone server, except you can choose also the security mode:

- domain: provides a mechanism for storing all user and group accounts in a central, shared, account repository. The centralized account repository is shared between (security) controllers.

8.2.5. ### ####

####:

A new entry is thus added. It can be modified with the Modify button. Options can be edited, such as whether the directory is visible to the public, writable or browseable. The share name can not be modified.

[36] ##### **draksambashare**# ### #### # ### ### # ####.

8.2.6. Menu entries

####.

File|Write conf. ## ### `/etc/samba/smb.conf`# #####.

Samba server|Configure. # #### #### ## ### # ####.

Samba server|Restart. The server is stopped and restarted with the current configuration files.

Samba Server|Reload. The configuration displayed is reloaded from the current configuration files.

8.2.7. Printers share

Samba also allows you to share printers.

8.2.8. Samba users

In this tab, you can add users who are allowed to access the shared resources when authentication is required. You can add users from 7.8#. “#### ##”

8.3. NFS ### ####/####

diskdrake --nfs

.

8.3.1.

This tool[37] allows you to declare some shared directories to be accessible to all users on the machine. The protocol used for this is NFS which is available on most Linux or Unix systems. The shared directory will be thus available directly at boot. Shared directories can be also accessible directly in a single session for a user with tools such as file browsers.

8.3.2. Procedure

######.

> ### #### ## #### ### #### ###### ##### #####.

###.

After choosing the mount point, You can mount it. You can also verify and change some options with the Options button. After mounting the directory, you can unmount it with the same button.

On accepting the configuration with the Done button, a message will displayed, asking "Do you want to save the /etc/fstab modifications". This will make the directory available at each boot, if the network is accessible. The new directory is then available in your file browser, for example in Dolphin.

[37] **diskdrake --nfs**# ### #### ##### # ### ### # ####.

8.4. NFS# ### ##### ####

draknfs

8.4.1. Prerequisites

###[38]# ## #### ## #### ### # ####:

nfs-utils #### #### ###. ########?

#####.

8.4.2. ##

#####. # ##### ### ## ####. ## ### #### ## ### #### # ####.

8.4.3. ##

"## ##"###. ## #### ### ## ####. ## ##### ### # ####.

8.4.3.1. NFS

####. #### ### #### ##### ##### ### # ####.

8.4.3.2. ###

####.

NFS ###### ## ## #### ### # ####:

single host: a host either by an abbreviated name recognized be the resolver, fully qualified domain name, or an IP address

netgroups: NIS netgroup# @group## ### # ####.

#####: ### #### ##### ## * # ?# ### # ####. #: *.cs.foo.edu# cs.foo.edu #### ## #### #####.

IP networks: you can also export directories to all hosts on an IP (sub-)network simultaneously. For example, either `/255.255.252.0' or `/22' appended to the network base address.

8.4.3.3. ### ID

map root user as anonymous: maps requests from uid/gid 0 to the anonymous uid/gid (root_squash). The root user from the client cannot read or write to the files on the server which are created by root on the server itself.

allow real remote root access: turn off root squashing. This option is mainly useful for diskless clients (no_root_squash).

map all users to anonymous user: maps all uids and gids to the anonymous user (all_squash). Useful for NFS-exported public FTP directories, news spool directories, etc. The opposite option is no user UID mapping (no_all_squash), which is the default setting.

anonuid # anongid: ## ### uid # gid# ##### #####.

[38]##### **draknfs**# ### #### # ### ### # ####.

8.4.3.4. ##

##: # ### ##### ### IPPORT_RESERVED(1024)## ## ### #### ##### ###. # ### ##### ## ####.

Read-Only share: allow either only read or both read and write requests on this NFS volume. The default is to disallow any request which changes the filesystem. This can also be made explicit by using this option.

Synchronous access: prevents the NFS server from violating the NFS protocol and to reply to requests before any changes made by these requests have been committed to stable storage (e.g. disc drive).

Subtree checking: enable subtree checking which can help improve security in some cases, but can decrease reliability. See exports(5) man page for more details.

8.4.4. Menu entries

So far the list has at least one entry.

8.4.4.1. File|Write conf

Save the current configuration.

8.4.4.2. NFS Server|Restart

The server is stopped and restarted with the current configuration files.

8.4.4.3. NFS Server|Reload

The configuration displayed is reloaded from the current configuration files.

8.5. Access WebDAV shared drives and directories

diskdrake --dav

###[39] WebDAV ## ##### #### ## #### ## # ### Mageia ## ### ####.

8.5.1.

WebDAV [http://en.wikipedia.org/wiki/WebDAV] is a protocol that allows to mount a web server's directory locally, so that it appears as a local directory. It is necessary that the remote machine run a WebDAV server. This is not the aim of this tool to configure the WebDAV server.

8.5.2. # ##

The first screen of the tool displays the already configured entries, if any, and a New button. Use it to create a new entry. Insert the server URL in the field of the new screen.

Then you get a screen with radio buttons to select some actions. Continue with the action Mount point by clicking OK after selecting the radio button, as the Server is already configured. You can however correct it, if needed.

####.

#####. ## ### ### ## ## #### ### # ####.

[39] **diskdrake --dav**# ### #### ##### # ### ### # ####.

####.

After you accepted the configuration with the radio button Done, the first screen is displayed again and your new mount point is listed. After you choose Quit, you are asked whether or not to save the modifications in */etc/fstab*. Choose this option if you want that the remote directory is available at each boot. If your configuration is for one-time usage, do not save it.

9.

In this screen you can choose between several tools to manage or share your local disks. Click on a link below to learn more.
##

1. 9.1#. “### ### ##”
2. 9.2#. “CD/DVD ##”
3. 9.3#. “##### ### ##”

9.1. ### ###

drakdisk or diskdrake

This tool[40] is very powerful, a tiny error or a cat jumping on your keyboard can lead to losing all data on a partition or even to erasing the entire hard disk. For that reason, you'll see the screen above on top of the tool screen. Click on *Exit* if you're not sure you want to continue.

If you have more than one hard disk, you can switch to the hard disk you want to work on by selecting the correct tab (sda, sdb, sdc etc).

You can choose from many actions to adjust your hard disk to your preferences. Wiping an entire hard disk, splitting or merging partitions, resizing them or changing the filesystem, formatting or viewing what is in a partition: it is all possible. The *Clear all* button at the bottom is to erase the complete disk, the other buttons become visible on the right after you click on a partition.

If you have an UEFI system, you can see a small partition called "EFI System Partition" and mounted on /boot/EFI. Never delete it, because it contains all your different operating systems bootloaders.

If the selected partition is mounted, like in the example below, you cannot choose to resize, format or delete it. To be able to do that the partition must be unmounted first.

It is only possible to resize a partition on its right side

To change a partition type (change ext3 to ext4 for example) you have to delete the partition and then re-create it with the new type. The button Create appears when a disk empty part is selected

####. #####.

[40] You can start this tool from the command line, by typing **drakdisk** or **diskdrake** as root.

Selecting *Toggle to expert mode* gives some extra available actions, like labeling the partition, as can be seen in the screenshot below.

9.2. CD/DVD

diskdrake --removable

This tool [41]is found under the tab Local disks in the Mageia Control Center labelled accordingly with your removable hardware (CD/DVD players and burners and floppy drives only).

####.

At the top of the window there is a short description of your hardware and the chosen options to mount it. Use the menu on the bottom to change them. Check the item to be changed and then on the OK button.

9.2.1. ###

#####. #### /media/cdrom###.

9.2.2.

####. ## ### ### ####:

9.2.2.1. user/nouser

user allows an ordinary user (not root) to mount the removable disk, this option involves noexec, nosuid and nodev. The user who mounted the disk is the only one who can umount it.

9.3. ##### ###

diskdrake --fileshare

This simple tool[42] allows you, the administrator, to allow users to share parts of their own /home subdirectories with other users of a same local network which may have computers running either Linux or Windows operating system.

"## ### ### ##"## #### ## ## ### # ### Mageia ## ### ####.

First, answer the question : "Would you like to allow users to share some of their directories ?", click on No sharing if the answer is no for all users, click on Allow all users for all users and click on Custom if the answer is no for some users and yes for the others. In this last case, the users that are authorised to share their directories must belong to the fileshare group, which is automatically created by the system. You will be asked about this later.

Click on OK, a second screen appears which asks you choose between NFS or SMB. Check NFS if Linux is the only operating system on the network, check SMB if the network includes both Linux and Windows machines and then click on OK. Any required packages will be installed if necessary.

The configuration is now complete unless the Custom option was chosen. In this case, an extra screen prompts you to open Userdrake. This tool allows you to add users authorised to share their directories to the fileshare group. In the User tab, click on the user to add to the fileshare group, then on Edit, In the Groups tab. Check the fileshare group and click on OK. For more information about Userdrake, see: 7.8#. “#### ##”

[41]##### **diskdrake --removable**# ### #### # ### ### # ####.
[42]##### **diskdrake --fileshare**# ### #### # ### ### # ####.

When adding a new user to the fileshare group, you have to disconnect and reconnect the network for the modifications to be taken into account.

From now on each user belonging to the fileshare group can select in his/her file manager the directories to be shared, although not all file managers have this facility.

10.

####. ## ### #### ### #####.
##

1. 10.1#. “MSEC: System Security and Audit” = ### ##, ## # ## ##
2. 10.2#. “## ### ##”
3. 10.3#. “### ### ####”
4. 10.4#. “#### #####, ### ####”
5. 10.5#. “Parental Controls”

10.1. MSEC: System Security and Audit

msecgui

10.1.1. Presentation

msecgui[43] is a graphic user interface for msec that allows to configure your system security according to two approaches:

- It sets the system behaviour, msec imposes modifications to the system to make it more secure.
- ### ### ### ### ## #### ## ##### #### #### ### #####.

msec uses the concept of "security levels" which are intended to configure a set of system permissions, which can be audited for changes or enforcement. Several of them are proposed by Mageia, but you can define your own customised security levels.

10.1.2. Overview tab

######

The first tab takes up the list of the different security tools with a button on the right side to configure them:

- MCC/##/## ### #### ## ### ## # ## ###
- MCC / ##### ## / ### ####### ## # ## ####
- msec itself with some information:
  - ### ##
  - ### ## ## ##
  - the date of the last Periodic checks and a button to see a detailed report and another button to execute the checks just now.

[43] ##### **msecgui**# ### #### # ### ### # ####.

10.1.3. ## ##

A click on the second tab or on the Security Configure button leads to the same screen shown below.

10.1.3.1. ## ##

##:

After having checked the box Enable MSEC tool, this tab allows you by a double click to choose the security level that appears then in bold. If the box is not checked, the level « none » is applied. The following levels are available:

1. Level **none**. This level is intended if you do not want to use msec to control system security, and prefer tuning it on your own. It disables all security checks and puts no restrictions or constraints on system configuration and settings. Please use this level only if you are knowing what you are doing, as it would leave your system vulnerable to attack.
2. Level **standard**. This is the default configuration when installed and is intended for casual users. It constrains several system settings and executes daily security checks which detect changes in system files, system accounts, and vulnerable directory permissions. (This level is similar to levels 2 and 3 from past msec versions).
3. Level **secure**. This level is intended when you want to ensure your system is secure, yet usable. It further restricts system permissions and executes more periodic checks. Moreover, access to the system is more restricted. (This level is similar to levels 4 (High) and 5 (Paranoid) from old msec versions).
4. Besides those levels, different task-oriented security are also provided, such as the **fileserver** , **webserver** and **netbook** levels. Such levels attempt to pre-configure system security according to the most common use cases.
5. The last two levels called **audit_daily** and **audit_weekly** are not really security levels but rather tools for periodic checks only.

These levels are saved in `/etc/security/msec/level.<levelname>`. You can define your own customised security levels, saving them into specific files called `level.<levelname>`, placed into the folder `/etc/security/msec/.` This function is intended for power users which require a customised or more secure system configuration.

Keep in mind that user-modified parameters take precedence over default level settings.

##:

If you check the box Send security alerts by email to:, the security alerts generated by msec are going to be sent by local e-mail to the security administrator named in the nearby field. You can fill either a local user or a complete e-mail address (the local e-mail and the e-mail manager must be set accordingly). At last, you can receive the security alerts directly on your desktop. Check the relevant box to enable it.

It is strongly advisable to enable the security alerts option in order to immediately inform the security administrator of possible security problems. If not, the administrator will have to regularly check the logs files available in `/var/log/security.`

##:

Creating a customised level is not the only way to customise the computer security, it is also possible to use the tabs presented here after to change any option you want. Current configuration for msec is stored in `/etc/security/msec/security.conf`. This file contains the current security level name and the list of all the modifications done to the options.

10.1.3.2. ### ## #

This tab displays all the security options on the left side column, a description in the centre column, and their current values on the right side column.

To modify an option, double click on it and a new window appears (see screenshot below). It displays the option name, a short description, the actual and default values, and a drop down list where the new value can be selected. Click on the OK button to validate the choice.

Do not forget when leaving msecgui to save definitively your configuration using the menu File -> Save the configuration. If you have changed the settings, msecgui allows you to preview the changes before saving them.

10.1.3.3. #### ##

This tab displays all the network options and works like the previous tab

10.1.3.4. ## ## #

Periodic checks aim to inform the security administrator by means of security alerts of all situations msec thinks potentially dangerous.

This tab displays all the periodic checks done by msec and their frequency if the box Enable periodic security checks is checked. Changes are done like in the previous tabs.

10.1.3.5. ## #

Sometimes alert messages are due to well known and wanted situations. In these cases they are useless and wasted time for the administrator. This tab allows you to create as many exceptions as you want to avoid unwanted alert messages. It is obviously empty at the first msec start. The screenshot below shows four exceptions.

######.

Select the wanted periodic check in the drop down list called Check and then, enter the Exception in the text area. Adding an exception is obviously not definitive, you can either delete it using the Delete button of the Exceptions tab or modify it with a double clicK.

10.1.3.6. ###

####.

Like for the security, msec owns different permissions levels (standard, secure, ..), they are enabled accordingly with the chosen security level. You can create your own customised permissions levels, saving

them into specific files called `perm.<levelname>` placed into the folder `/etc/security/msec/` . This function is intended for power users which require a customised configuration. It is also possible to use the tab presented here after to change any permission you want. Current configuration is stored in `/etc/security/msec/perms.conf`. This file contains the list of all the modifications done to the permissions.

Default permissions are visible as a list of rules (a rule per line). You can see on the left side, the file or folder concerned by the rule, then the owner, then the group and then the permissions given by the rule. If, for a given rule:

- the box Enforce is not checked, msec only checks if the defined permissions for this rule are respected and sends an alert message if not, but does not change anything.
- the box Enforce is checked, then msec will rule the permissions respect at the first periodic check and overwrite the permissions.

For this to work, the option CHECK_PERMS in the **Periodic check tab** must be configured accordingly.

To create a new rule, click on the Add a rule button and fill the fields as shown in the example below. The joker * is allowed in the File field. “current” means no modification.

Click on the OK button to validate the choice and do not forget when leaving to save definitively your configuration using the menu File -> Save the configuration. If you have changed the settings, msecgui allows you to preview the changes before saving them.

It is also possible to create or modify the rules by editing the configuration file `/etc/security/msec/perms.conf`.

Changes in the **Permission tab** (or directly in the configuration file) are taken into account at the first periodic check (see the option CHECK_PERMS in the **Periodic checks tab**). If you want them to be taken immediately into account, use the msecperms command in a console with root rights. You can use before, the msecperms -p command to know the permissions that will be changed by msecperms.

Do not forget that if you modify the permissions in a console or in a file manager, for a file where the box Enforce is checked in the **Permissions tab** , msecgui will write the old permissions back after a while, accordingly to the configuration of the options CHECK_PERMS and CHECK_PERMS_ENFORCE in the **Periodic Checks tab** .

10.2. ## ###

drakfirewall

This tool[44] is found under the Security tab in the Mageia Control Center labelled "Set up your personal firewall". It is the same tool in the first tab of "Configure system security, permissions and audit".

[44] You can start this tool from the command line, by typing **drakfirewall** as root.

A basic firewall is installed by default with Mageia. All the incoming connections from the outside are blocked if they aren't authorised. In the first screen above, you can select the services for which outside connection attempts are accepted. For your security, uncheck the first box - Everything (no firewall) - unless you want to disable the firewall, and only check the needed services.

It is possible to manually enter the port numbers to open. Click on Advanced and a new window is opened. In the field Other ports, enter the needed ports following these examples :

80/tcp : open the port 80 tcp protocol

24000:24010/udp : 24000 ~ 24010 udp ##### ## ### ###.

###.

#####.

If you don't host specific services (web or mail server, file sharing, ...) it is completely possible to have nothing checked at all, it is even recommended, it won't prevent you from connecting to the internet.

The next screen deals with the Interactive Firewall options. These feature allow you to be warned of connection attempts if at least the first box Use Interactive Firewall is checked. Check the second box to be warned if the ports are scanned (in order to find a failure somewhere and enter your machine). Each box from the third one onwards corresponds to a port you opened in the two first screens; in the screenshot below, there are two such boxes: SSH server and 80:150/tcp. Check them to be warned each time a connection is attempted on those ports.

These warning are given by alert popups through the network applet.

In the last screen, choose which network interfaces are connected to the Internet and must be protected. Once the OK button is clicked, the necessary packages are downloaded.

If you don't know what to choose, have a look in MCC tab Network & Internet, icon Set up a new network interface.

10.3. ### ###

draksec

##[45]# ## # ### Mageia ## ### ####.

It allows to give the regular users the needed rights to accomplish tasks usually done by the administrator.

Click on the little arrow before the item you want to drop down:

Most of the tools available in the Mageia Control Center are displayed in the left side of the window (see the screenshot above) and for each tool, a drop down list on the right side gives the choice between:

[45]##### **draksec**# ### #### # ### ### # ####.

- Default: The launch mode depends on the chosen security level. See in the same MCC tab, the tool "Configure system security, permissions and audit".
- ### ##: ### #### ## ### ### ####.
- ### ##: ### #### ## ## ### ####.
- ## ##: ### ## ## ### #####.

10.4. #### #####, ###

drakinvictus

This page hasn't been written yet for lack of resources. If you think you can write this help, please contact the Doc team. [https://wiki.mageia.org/en/Documentation_team] Thanking you in advance.

drakinvictus# ### #### # ### ### # ####.

10.5. Parental Controls

drakguard

This tool[46] is found in the Mageia Control Center, under the Security tab, labelled Parental Control. If you don't see this label, you have to install the drakguard package (not installed by default).

10.5.1. Presentation

Drakguard is an easy way to set up parental controls on your computer to restrict who can do what, and at which times of day. Drakguard has three useful capabilities:

- It restricts web access to named users to set times of day. It does this by controlling the shorewall firewall built into Mageia.
- It blocks execution of particular commands by named users so these users can only execute what you accept them to execute.
- It restricts access to websites, both manually defined through blacklists/whitelists, but also dynamically based on the content of the website. To achieve this Drakguard uses the leading opensource parental control blocker DansGuardian.

10.5.2. Configuring Parental controls

If your computer contains hard drive partitions that are formatted in Ext2, Ext3, or ReiserFS format you will see a pop up offering to configure ACL on your partitions. ACL stands for Access Control Lists, and is a Linux kernel feature that allows access to individual files to be restricted to named users. ACL is built into Ext4 and Btrfs file systems, but must be enabled by an option in Ext2, Ext3, or Reiserfs partitions. If you select 'Yes' to this prompt drakguard will configure all your partitions to support ACL, and will then suggest you reboot.

Enable parental control: If checked, the parental control is enabled and the access to Block programs tab is opened.

Block all network traffic: If checked, all the websites are blocked, except the ones in the whitelist tab. Otherwise, all the websites are allowed, except the ones in the blacklist tab.

[46] You can start this tool from the command line, by typing **drakguard** as root.

User access: Users on the left hand side will have their access restricted according to the rules you define. Users on the right hand side have unrestricted access so adult users of the computer are not inconvenienced. Select a user in the left hand side and click on Add to add him/her as an allowed user. Select an user in the right hand side and click on Remove to remove him/her from the allowed users.

Time control: If checked, internet access is allowed with restrictions between the Start time and End time. It is totally blocked outside these time window.

10.5.2.1. Blacklist/Whitelist tab

Enter the website URL in the first field at the top and click on the Add button.

10.5.2.2. Block Programs Tab

Block Defined Applications: Enables the use of ACL to restrict access to specific applications. Insert the path to the applications you wish to block.

Unblock Users list: Users listed on the right hand side will not be subject to acl blocking.

11.

In this screen you can choose between several tools to configure your boot steps. Click on a link below to learn more.

####

1. 11.1#. “##### ### ## ## ###### ######.”
2. 11.2#. “## ### ###...”
3. 11.3#. “##### ### ##”

11.1. ##### ### ## ## ###### ######.

drakautologin

This tool[47] allows you to automatically login the same user, in her/his desktop environment, without asking for any password. It's called autologin. This is generally a good idea when there is only one user like to be using the machine.

"## #### ## ## ### ##"### #### ## Mageia ## ### ## # ### ####.

#####:

Check Launch the graphical environment when your system starts, if you want X Window System to be executed after the boot. If not, the system will start in text mode. Nevertheless, it will be possible to launch the graphic interface manually. This can be done by launching the command 'startx' or 'systemctl start dm'.

If the first box is checked, two other options are available, check either No, I don't want autologin, if you want the system to continue to ask for which user to connect (and password) or check Yes, I want autologin with this (user, desktop), if needed. In this case, you also need to supply the Default username and the Default desktop.

11.2. ## ### ###...

drakboot

[47] ##### **drakautologin**# ### #### # ### ### # ####.

If you are using a UEFI system instead of BIOS, the user interface is slightly different as the boot device is obviously the EFI system Partition (ESP).

This tool[48] allows you to configure the boot options (choice of the bootloader, set a password, the default boot, etc.)

"## ### ##"### #### ## Mageia ## ### ## # ### ####.

####. ## ### #### #### ## #### ## # ####!

In the first part, called Bootloader, it is possible if using BIOS, to choose which Bootloader to use, Grub, Grub2 or Lilo, and with a graphical or a text menu. It is just a question of taste, there are no other consequences. You can also set the Boot device, don't change anything here unless you are an expert. The boot device is where the bootloader is installed and any modification can prevent your machine from booting.

In a UEFI system, the bootloader is Grub2-efi and is installed in /boot/EFI partition. This FAT32 formatted partition is common to all operating systems installed.

In the second part, called Main options, you can set the Delay before booting default image, in seconds. During this delay, Grub or Lilo will display the list of available operating systems, prompting you to make your choice. If no selection is made, the bootloader will boot the default one once the delay elapses.

In the third and last part, called Security, it is possible to set a password for the bootloader. This means a username and password will be asked at the boot time to select a booting entry or change settings. The username is "root" and the password is the one chosen here.

#####.

ACPI ###:

ACPI (Advanced Configuration and Power Interface) is a standard for the power management. It can save energy by stopping unused devices, this was the method used before APM. Check this box if your hardware is ACPI compatible.

SMP ###:

SMP# Symmetric Multi Processors# ### #### ##### ## #######.

HyperThreading# ## ##### ## ## Mageia# ## ## ##### ## SMP# ######.

APIC ### # ## APIC ###:

APIC stands for Advanced Programmable Interrupt Controller. There are two components in the Intel APIC system, the local APIC (LAPIC) and the I/O APIC. The latter one routes the interrupts it receives from peripheral buses to one or more local APICs that are in the processor. It is really useful for multi-processor systems. Some computers have problems with the APIC system which can cause freezes or incorrect device detection (error message "spurious 8259A interrupt: IRQ7"). In this case, disable APIC and/or Local APIC.

[48]##### **drakboot**# ### #### # ### ### # ####.

####.

- Grub Legacy ## Lilo# ####:

  In this case, you can see the list of all the available entries at boot time. The default one is asterisked. To change the order of the menu entries, click on the up or down arrows to move the selected item. If you click on the Add or Modify buttons, a new window appears to add a new entry in the bootloader menu or to modify an existing one. You need to be familiar with Lilo or Grub to be able to use these tools.

  ### ### ## ##### ### ### ### ### ######. Grub ## "##"# #####. #: Mageia3.

  ### #### ## ### #####. Grub ## "##"# #####. #: /boot/vmlinuz.

  ## #### ### ### ## ### #####. Grub ## "##"# #####. ## ## (hd0,1).

  Append #### ## # ### ### ### #####.

  ### ### #### Grub# ##### # ### #####.

  In the extra screen called Advanced, it is possible to choose the Video mode, an initrd file and a network profile, see Section 6.6, “## #### #### ##”, in the drop-down lists.

- Grub2 ## Grub2-efi(### ## # UEFI #### ## ##### #### ## ##)# ####.

  # ## ###### #### ### ## ### ## ### #####; #### ### ## ######.

  Append #### ## # ### ### ### #####.

  If you have other operating systems installed, Mageia attempts to add them to your Mageia boot menu. If you don't want this behaviour, uncheck the box Probe Foreign OS

  In the extra screen called Advanced, it is possible to choose the Video mode. If you don't want a bootable Mageia, but to chain load it from another OS, check the box Do not touch ESP or MBR and accept the warning.

ESP ## MBR# #### #### ## ## OS## ### #### ## # ### ### # ### #####.

Mageia ####### ### # ## *Grub Customizer*## ### ### # ####(## ##).

11.3. ##### ###

drakedm

Here[49] you can choose which display manager to use to log into your desktop environment. Only the ones available on your system will be shown.

Most users will only notice that the provided login screens look different. However, there are differences in supported features, too. LXDM is a lightweight display manager, SDDM and GDM have more extras.

[49] You can start this tool from the command line, by typing **drakedm** as root.

12. ## Mageia

There are more Mageia tools than those that can be started in the Mageia Control Center. Click on a link below to learn more, or continue reading the next pages.

1. 12.1#. “Mageia ## ## ##”*drakbug*
2. 12.2#. “## ### ## ## # ### ## ##”*drakbug_report*
3. 12.3#. “Display Available NFS And SMB Shares”*TO BE WRITTEN*
4. 12.4#. “Display Your PCI, USB and PCMCIA Information”
5. ### # ## ##?

12.1. Mageia ## ##

drakbug

Usually, this tool[50] starts automatically when a Mageia tool crashes. However, it is also possible that, after filing a bug report, you are asked to start this tool to check some of the information it gives, and then provide that in that existing bug report.

If a new bug report needs to be filed and you are not used to doing that, then please read How to report a bug report properly [https://wiki.mageia.org/en/How_to_report_a_bug_properly] before clicking on the "Report" button.

In case the bug has already been filed by someone else (the error message that drakbug gave will be the same, then), it is useful to add a comment to that existing report that you saw the bug, too.

12.2. ## ### ## ## # ### ##

drakbug_report

##[51]# ###### #### ### # ####.

It is advised to write the output of this command to a file, for instance by doing **drakbug_report > drakbugreport.txt**, but make sure you have enough disk space first: the file can easily be several GBs large.

####.

#####:

- lspci
- pci_devices
- dmidecode
- fdisk
- scsi
- /sys/bus/scsi/devices
- lsmod

[50] ##### **drakbug**# ### #### # ### ### # ####.
[51] ##### **drakbug_report**# ### #### # ### ### # ####.

- cmdline
- pcmcia: stab
- usb
- ###
- cpuinfo
- syslog
- Xorg.log
- monitor_full_edid
- stage1.log
- ddebug.log
- install.log
- fstab
- modprobe.conf
- lilo.conf
- grub: menu.lst
- grub: install.sh
- grub: device.map
- xorg.conf
- urpmi.cfg
- modprobe.preload
- sysconfig/i18n
- /proc/iomem
- /proc/ioport
- mageia ##
- rpm -qa
- df

At the time this help page was written, the "syslog" part of this command's output was empty, because this tool had not yet been adjusted to our switch to systemd. If it is still empty, you can retrieve the "syslog" by doing (as root) **journalctl -a > journalctl.txt**. If you don't have a lot of diskspace, you can, for instance, take the last 5000 lines of the log instead with: **journalctl -a | tail -n5000 > journalctl5000.txt**.

12.3. Display Available NFS And SMB Shares

lsnetdrake

This tool [52] can only be started and used on the command line.

This page hasn't been written yet for lack of resources. If you think you can write this help, please contact the Documentation team. [https://wiki.mageia.org/en/Documentation_team] Thanking you in advance.

12.4. Display Your PCI, USB and PCMCIA Information

lspcidrake

[52] You can start this tool from the command line, by typing **lsnetdrake**.

This tool [53] can only be started and used on the command line. It will give some more information if used under root.

lspcidrake gives the list of all the connected devices to the computer (USB, PCI and PCMCIA) and the used drivers. It needs the ldetect and ldetect-lst packages to work.

With the -v option, lspcidrake adds the vendor and device identifications.

lspcidrake often generates very long lists, so, to find an information, it is often used in a pipeline with the grep command, like in these examples:

Information about the graphic card;

lspcidrake | grep VGA

Information about the network

lspcidrake | grep -i network

-i to ignore case distinctions.

In this screenshot below, you can see the action of the -v option for lspcidrake and the -i option for grep.

There is another tool that gives information about the hardware, it is called **dmidecode** (under root)

[53] You can start this tool from the command line, by typing **lspcidrake**.