

CTparental Tutorial



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Emmabuntüs and parental controls

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The purpose of this manual is to explain what parental controls are under the Emmabuntüs system, and to guide parents in setting it up the **CTparental** application and start using it.

1 - Introduction

If you want to set up parental controls on your computer running Emmabuntüs, [CTparental](#) is an excellent solution, embedded within the distribution, and which can be installed and used very easily.

CTparental uses the [blacklists](#) maintained by the University of Toulouse (South of France)



A **parental control** is an aid, but will never completely replace the direct supervision of your children when they are using a computer and the dialogue to accompany them when they surf the Internet.

2 - Installation

When you start your computer for the first time after having installed Emmabuntüs, several post-installation windows popup to help you with the customization of your system. The last one concerns the parental control:

CTparental software installation

Do you want to install the parental control software "CTparental" in your computer ?

If you have minor children at home, we strongly encourage you to install this software to protect children from violent, pornographic, etc. content on Internet.

Warning: for this protection to be effective, it is important that your children use accounts without administrator rights, which will be created automatically if the option below is checked. To create these accounts, put the names of your children separated by a space in the field provided. If you want to set a password for each child account, enter the passwords separated by a space and having at least 6 characters composed of letters and numbers. Otherwise leave this field empty if you don't want to use passwords.

Warning: It is important that your children never use your own account which, by default, does not have these protections for minors and allows the installation of third party software that may be prohibited to minors.

During the "CTparental" installation, you will have to enter the account name and the password of the parental control administration interface. This password must contain at least 6 characters and one lowercase, one uppercase, one number, and one special character.

Note: after its installation, CTparental allows you to also define Internet access time slots for your children via its administration interface which is located under the Applications menu (icon on the top left), then Internet section. For more information read this tutorial.

Automatic creation of child accounts

Child accounts names :

Child accounts password :

Create a guest account without password that will be reset at each startup

Launching the configuration interface

Show this window at next startup

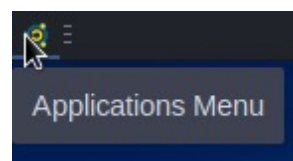
After having read carefully the presentation text, you can check the automatic creation of accounts, the names of the children (separated by a space) and their respective passwords (also separated by a space). You can also ask for the creation of a guest account that will also be subject to parental control like the children, but whose data will be deleted at the end of each session.

You can also check the box to automatically launch the configuration interface and then validate by clicking on the **OK** button.

3 - Configuration interface

3.1 - Manual launch

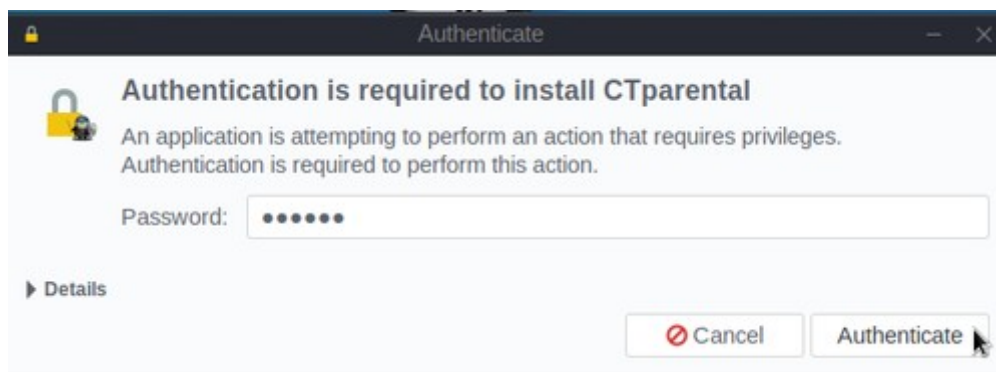
To launch the configuration interface, click on the small icon at the top left of the screen to open the applications menu:



Then choose the **Internet** category in the left panel and **CTparental** in the right one.

3.2 - Authentication

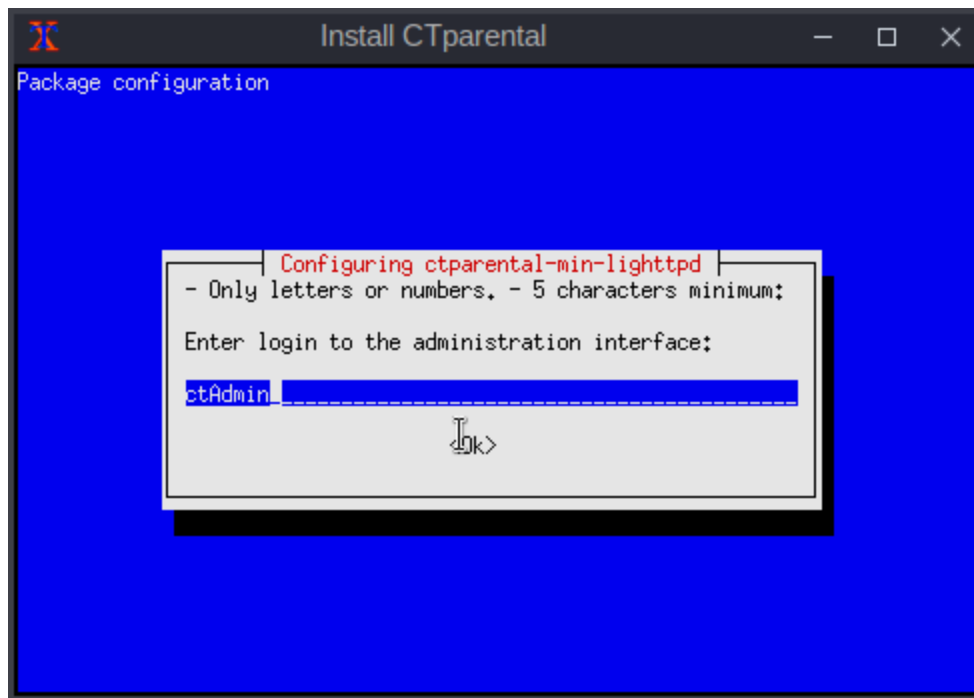
Before launching the interface, the system will obviously ask you for the administrator password:



Of course, we are talking here about the parental account admin password.

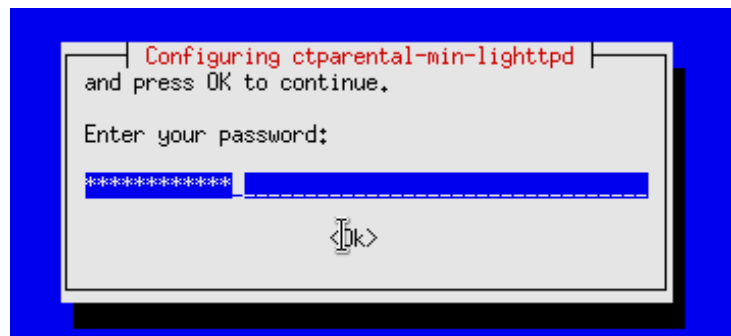
3.3 - First launch

The first time you launch CTparental, it will be permanently installed on your computer.

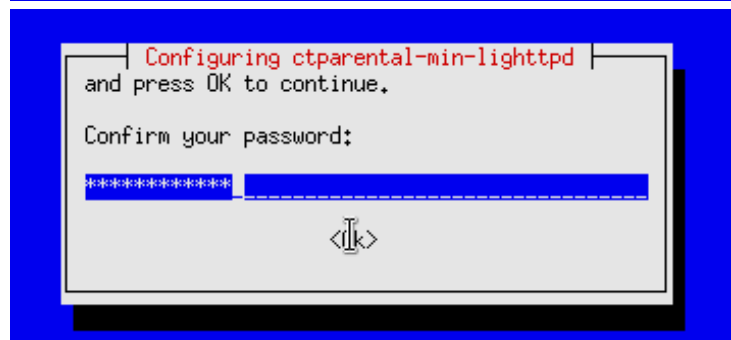


We start by entering the login ID we want to give to the **CTparental** interface administrator. For example we type *ctAdmin* in the field and then **Enter** (we can also use **Tab** to move on the **<Ok>** button, but then you need to use **Enter** anyway in order to confirm)

Enter the password for this account one first time:



And a second time to confirm it:

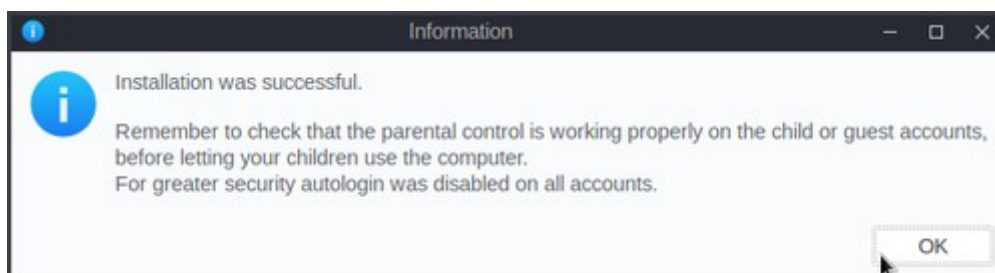


In case you did not respect the instructions concerning the format of this password, the program reminds you what they are and restarts the procedure to set the administration account.

Once this account has been created, the installation continues and you can follow its progress in the open X-terminal window:

```
Install CTparental
/systemd/system/systemd-networkd.service.
Created symlink /etc/systemd/system/multi-user.target.wants/systemd-networkd.service → /lib/systemd/system/systemd-networkd.service.
Created symlink /etc/systemd/system/sockets.target.wants/systemd-networkd.socket → /lib/systemd/system/systemd-networkd.socket.
Created symlink /etc/systemd/system/network-online.target.wants/systemd-networkd-wait-online.service → /lib/systemd/system/systemd-networkd-wait-online.service.
<nftablesreload>
md5sum: /etc/CTparental/GCtoff.conf: No such file or directory
md5sum: '/etc/CTparental/ipv6whitelist-enable/*': No such file or directory
md5sum: '/etc/CTparental/ipv4whitelist-enable/*': No such file or directory
</nftablesreload>
Created symlink /etc/systemd/system/nftables.service → /dev/null.
Synchronizing state of ufw.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install disable ufw
Removed /etc/systemd/system/multi-user.target.wants/ufw.service.
Created symlink /etc/systemd/system/ufw.service → /dev/null.
Created symlink /etc/systemd/system/sysinit.target.wants/CTparentalfirewall.service → /etc/systemd/system/CTparentalfirewall.service.
<download>
Waiting to connect to Toulouse server:
connection established:
```

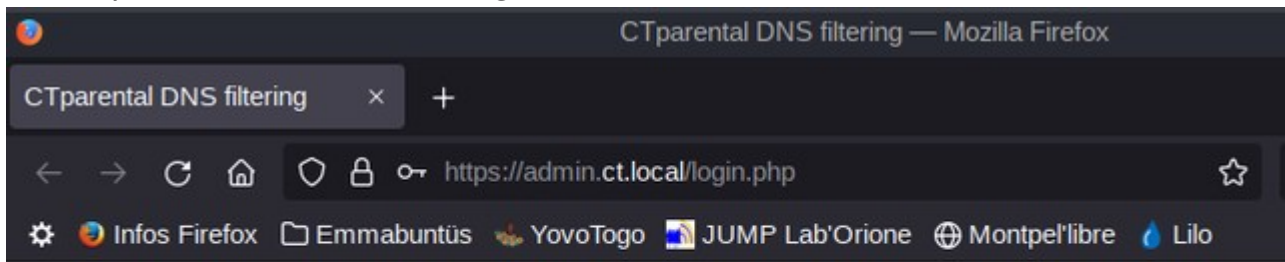
And finally CTparental informs you that the installation has been successfully completed:



Click on the **OK** button and the administration window will pop-up.

3.4 - Administration window

Once the administration account is created, the management of CTparental is done through a web interface (**Firefox** by default on Emmabuntüs) protected by the login ID and its password as defined during the installation:



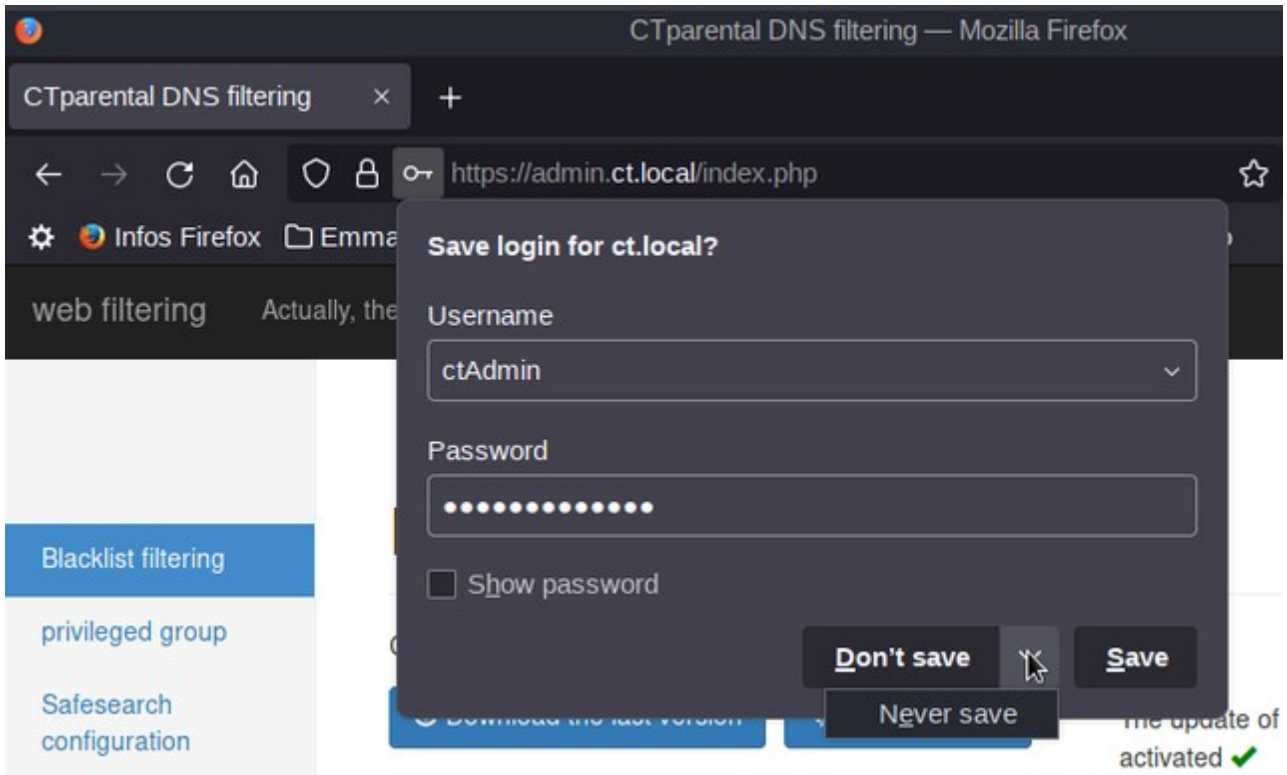
CTparental Administration Interface

Login :

Password :

 Connection 

Enter first the CTparental admin ID, then its password and click on the **Connection** button.



Firefox will offer to save those credentials, or not, and by pressing the drop-down arrow you can even tell it to never bother you again with that question.

3.4.1 - Blacklist

A 'whitelist' allows you to control network flows by authorizing only those that are recognized and qualified beforehand. A whitelist therefore contains all the websites to which browsing is authorized.



Conversely, a 'blacklist' contains all the sites to which browsing is forbidden. If this can be efficient in terms of filtering Internet content so that children do not surf on forbidden sites, it can never be exhaustive when dozens of new URLs (often ephemeral) are created every second.

In this sense, the effectiveness of the whitelist in terms of parental control is clearly better than that of the blacklist.

web filtering Actually, the Domain name filter is on ✓ Switch the Filter off Logout

Blacklist filtering

Current version: 20-02-2023 14:50:35

[Download the last version](#) [Init Categories](#) The update of the Toulouse blacklist every 7 days is activated ✓ [Disable](#)

[Switch to Whitelist](#)

Choice of filtered categories to apply.

<input checked="" type="checkbox"/> adult	<input type="checkbox"/> audio-video	<input checked="" type="checkbox"/> ct_doh_dot_doq	<input type="checkbox"/> dialer
<input checked="" type="checkbox"/> adultsearchengine	<input checked="" type="checkbox"/> bitcoin	<input checked="" type="checkbox"/> ctparental	<input checked="" type="checkbox"/> doh
<input checked="" type="checkbox"/> agressif	<input type="checkbox"/> blog	<input checked="" type="checkbox"/> dangerous_material	<input checked="" type="checkbox"/> drogue
<input type="checkbox"/> associations_religieuses	<input type="checkbox"/> celebrity	<input checked="" type="checkbox"/> dating	<input type="checkbox"/> exceptions_liste_bu
<input checked="" type="checkbox"/> astrology	<input checked="" type="checkbox"/> cryptojacking	<input checked="" type="checkbox"/> ddos	<input type="checkbox"/> filehosting
<input type="checkbox"/> financial	<input checked="" type="checkbox"/> malware	<input checked="" type="checkbox"/> phishing	<input checked="" type="checkbox"/> redirector

In the upper part of this first page you can :

- Download the latest version of the **Blacklist**
- Reset the filtered categories to the default selection
- Disable the automatic blacklist updates (not recommended)
- Switch to the **Whitelist** mode
-

Then you can select or deselect the proposed categories, and when you click on the **Init Categories button**, the default selections are restored.

web filtering Actually, the Domain name filter is on ✓ Switch the Filter off Logout

Rehabilitated domain names, ip addresses or networks

1-Enter here domain names, ip addresses or networks that are blocked by the blacklist and you want to rehabilitate. Enter one domain name or ip address or network per row (example : .domain.org or 10.0.0.0/24 or 2001::/32)

Filtered domain names, ip addresses or networks

Enter one domain name or ip address or network per row (example : .domain.org or 10.0.0.0/24 or 2001::/32)

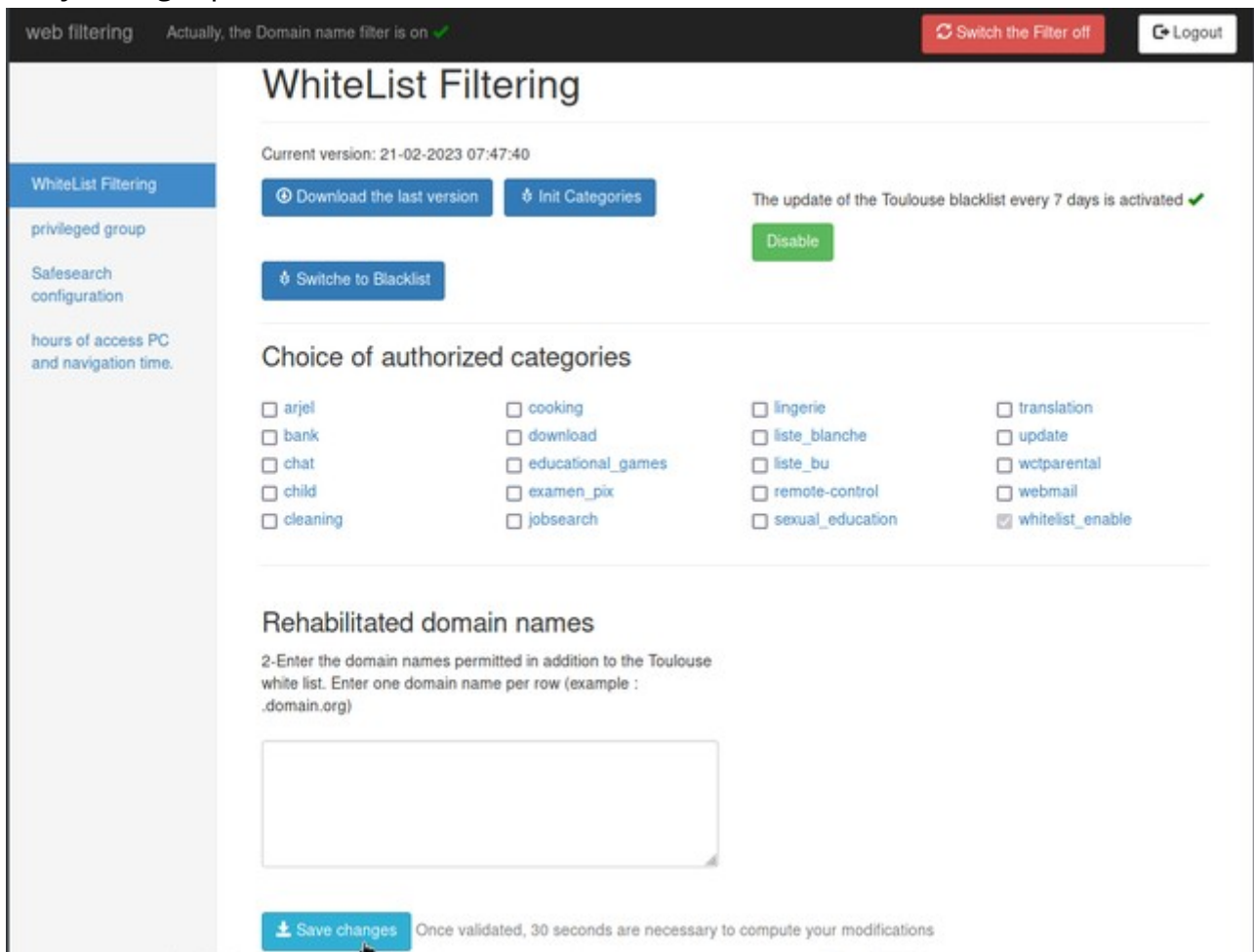
[Save changes](#) Once validated, 30 seconds are necessary to compute your modifications

At the bottom of this page, you can either rehabilitate sites that were filtered by default, and filter others.

Finally, don't forget to **Save your changes** before logging out.

3.4.2 - Whitelist

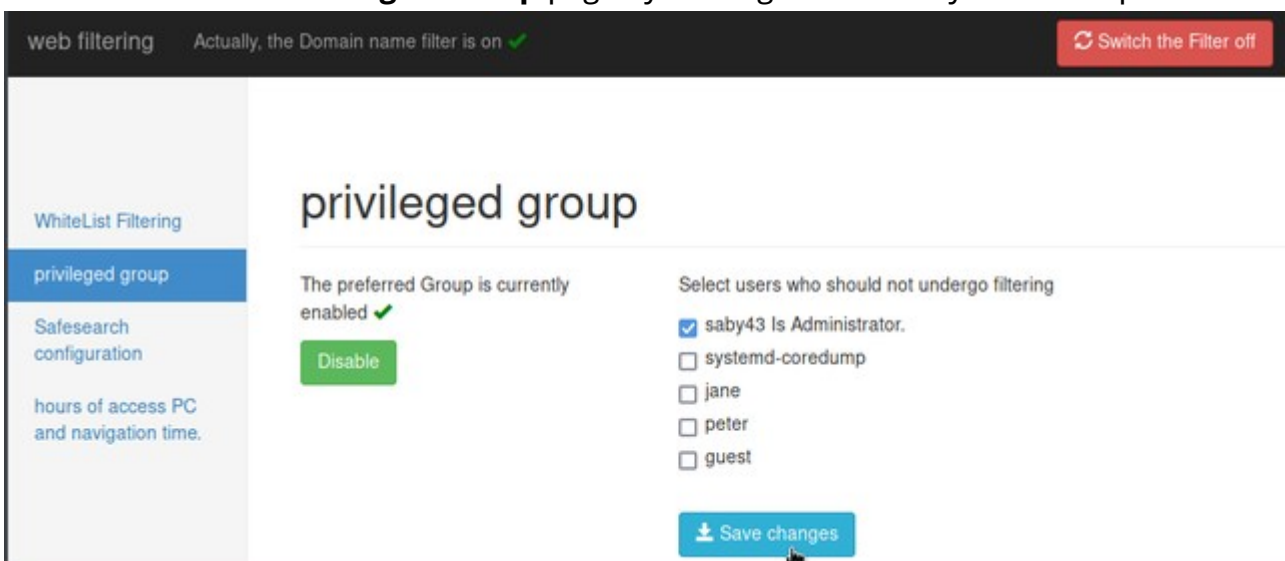
But you might prefer the **Whitelist** mode :



In this case you will have to select the authorized categories, and possibly add other sites that you want to rehabilitate. And do not forget to **Save your changes**.

3.4.3 - Privileged group

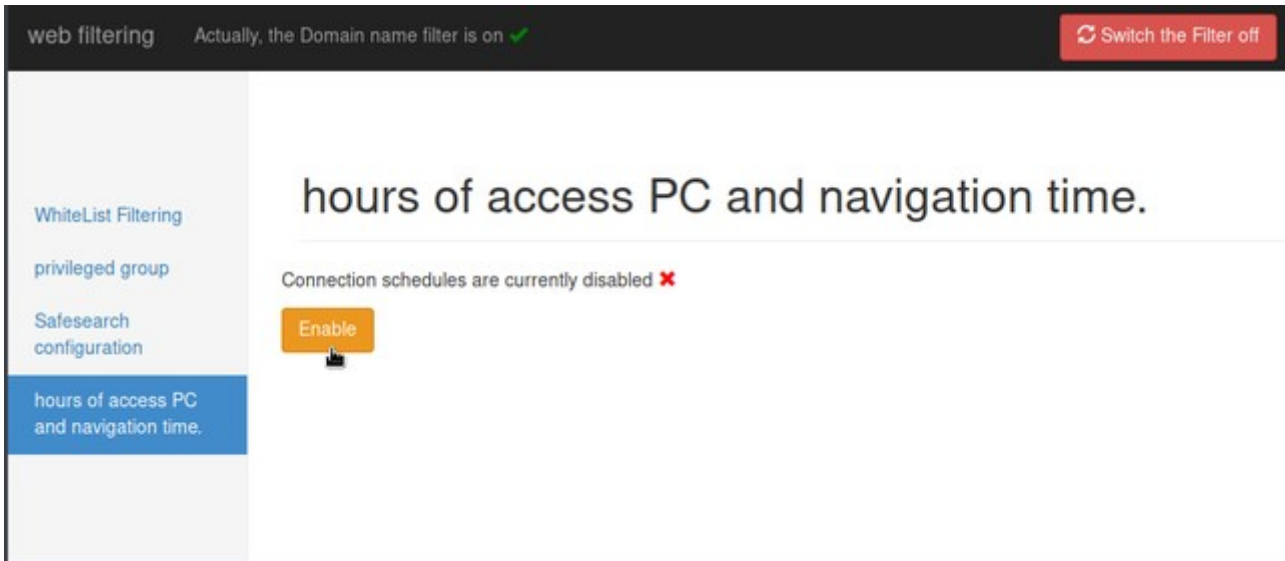
You can access the **Privileged Group** page by clicking on this entry in the left panel:



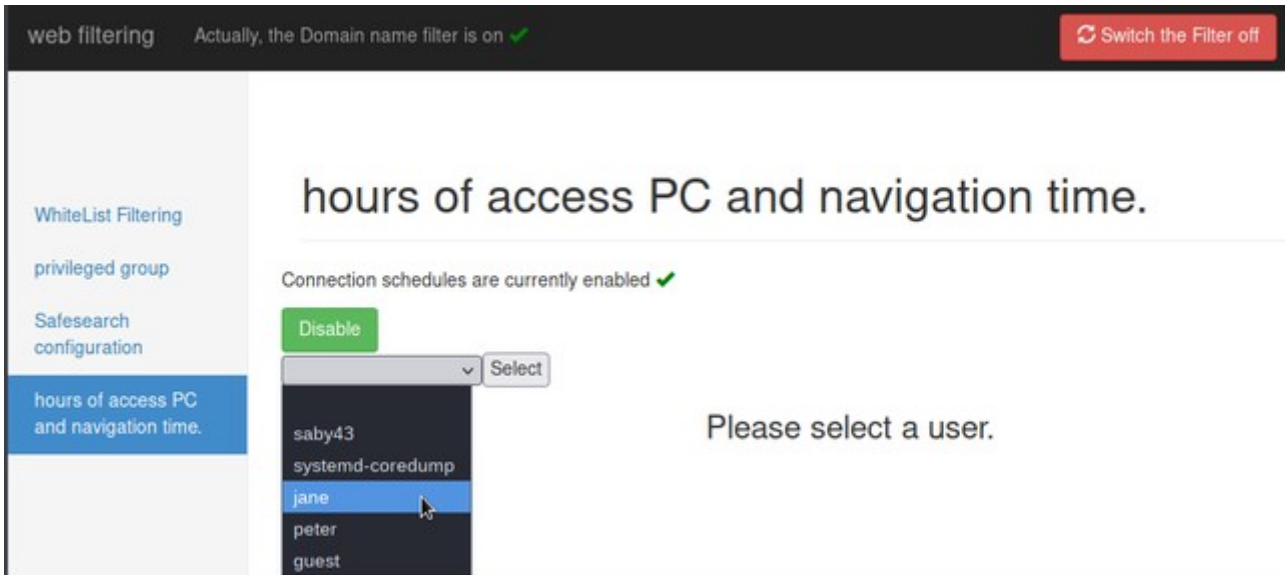
You can safely ignore the service account 'systemd-coredump', in this context.

3.4.4 - Schedules and timetables

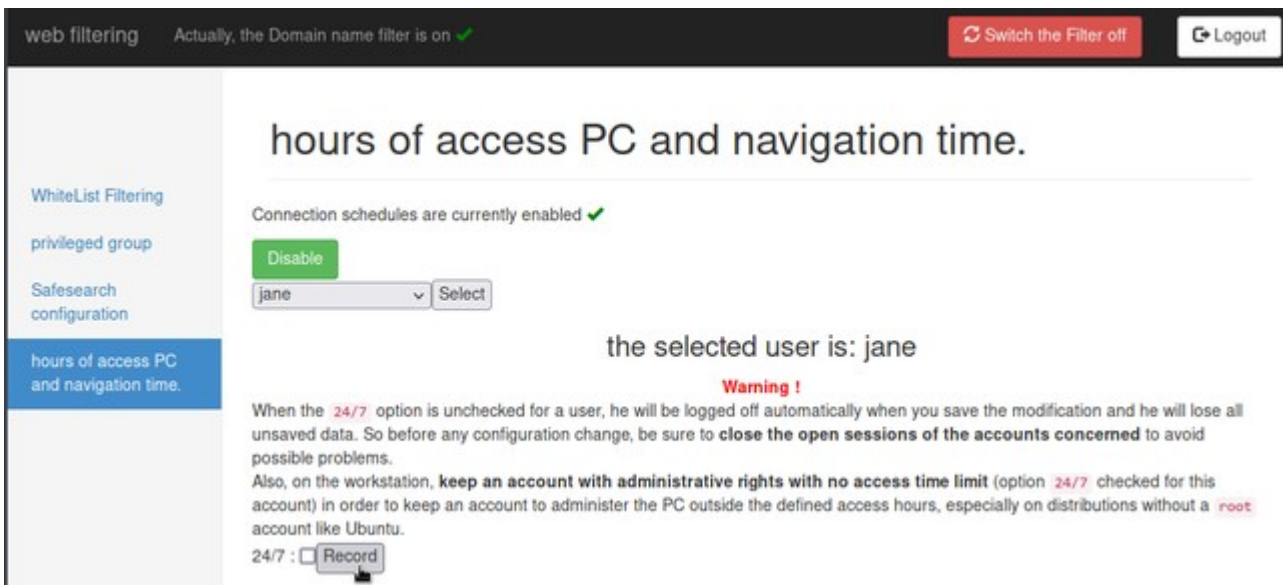
You can also access the schedule and timetable page by clicking on the 4th entry of the left panel, **hours of access PC and navigation time** :



By default, login times are disabled, so you will need to **Enable** them first:



Then select the relevant account

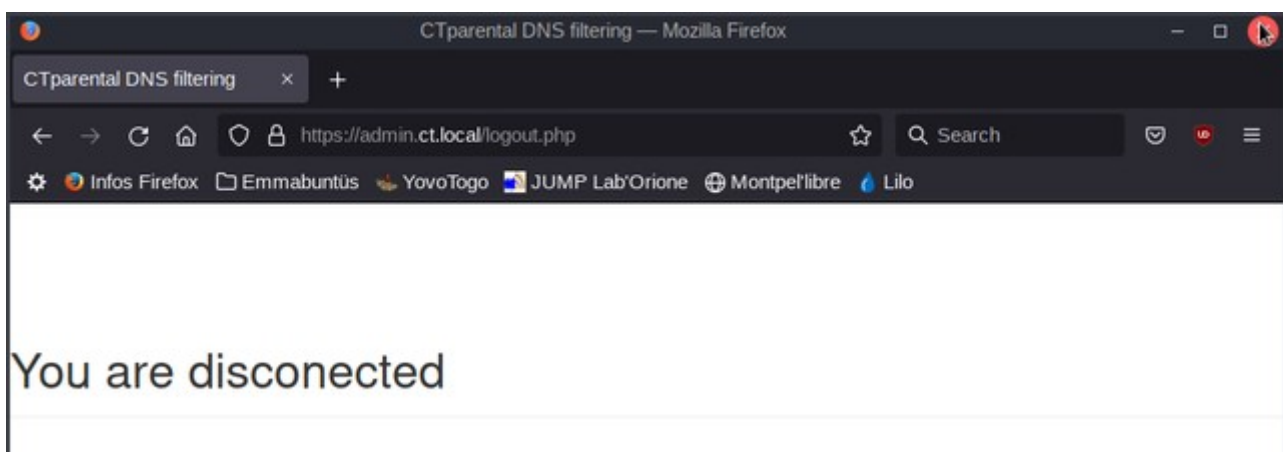
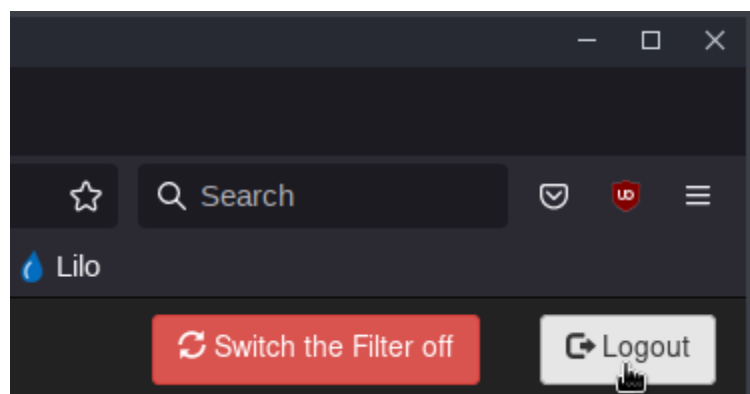


You will then have to deselect the check box **24/7** and click the **Record** button in order to access the page for defining the schedules and timetables.

Then all you have to do is enter your various data in this page and click on **Record**.

3.4.5 - Exiting the management interface

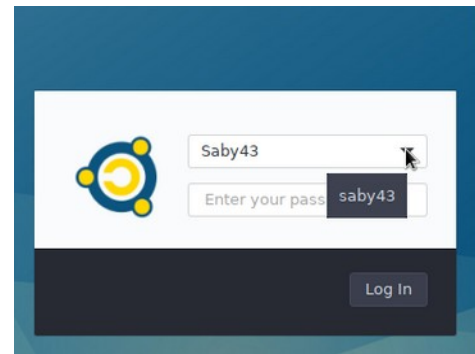
To exit this management interface, after having recorded all your changes, simply click on the Logout button located toward the top right of the window.



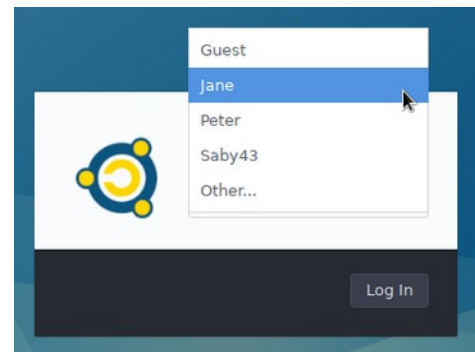
Now, all you have to do is quit Firefox, or continue surfing the Internet

4 - Connection/Login

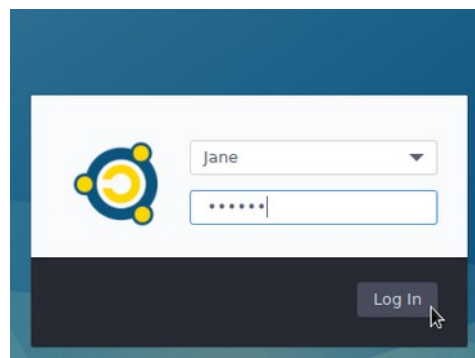
Now that several user accounts - protected by password - have been defined in your system, the login procedure can no longer be automatic and it will be necessary to select an account first by clicking on the small arrow in the drop-down menu:



Select your account ID in the list :



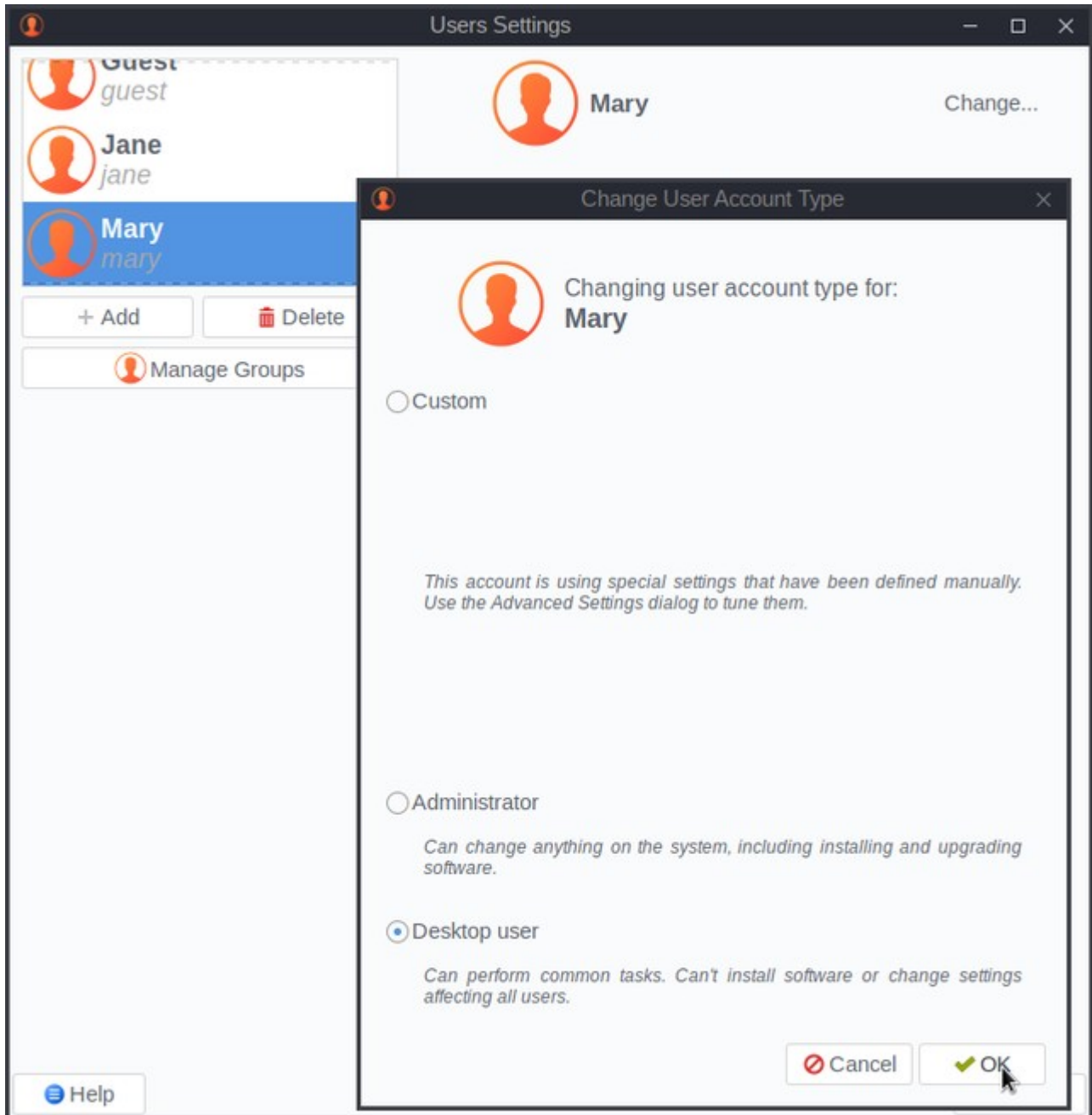
Then enter your password and click on the **Log in** button in order to open your own session :



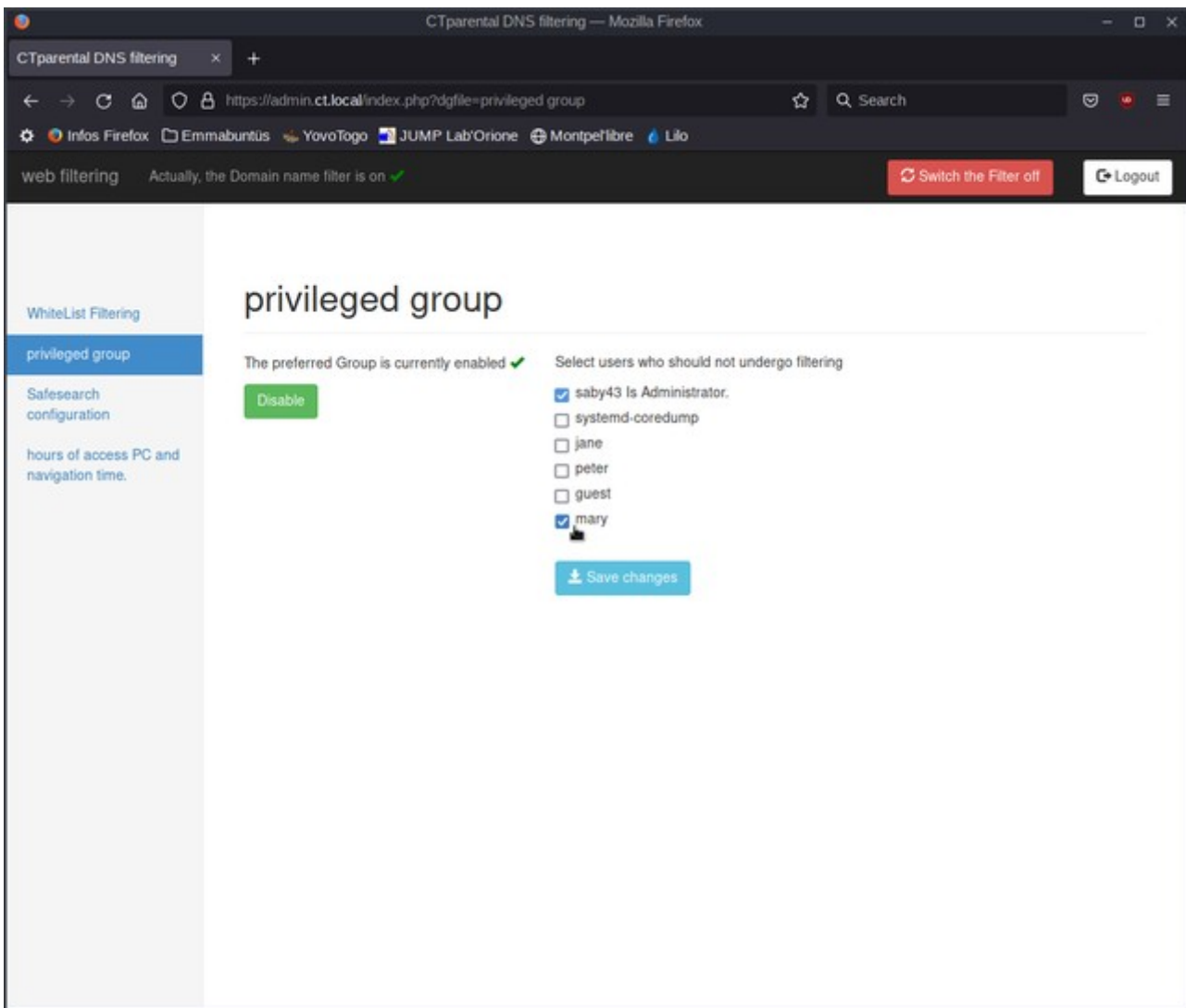
5 - Hints

5.1 - New user

You must be careful that, if later on you want to add a new child account, it **wont** be protected by default.



In this example, we just added **Mary** as a regular new desktop user, and when we re-open the CTparental graphical interface:

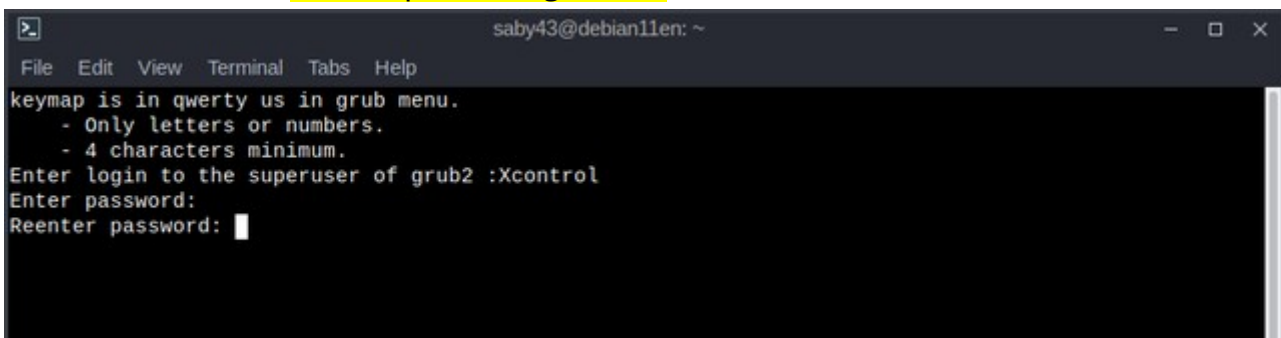


As you can see, **mary**, the new account, is part of the privileged group. You need to deselect the checkbox and click on **Save changes**

5.2 - Grub protection

It is also strongly advised to put a password on the GRUB menu.

In a terminal enter: `sudo CTparental -grubPon`



Then define a login name (here, as an example, *Xcontrol*) and twice the associated password. Warning: within the GRUB menu, the keyboard will be mapped **qwerty** mode.

```
saby43@debian11en: ~  
File Edit View Terminal Tabs Help  
keymap is in qwerty us in grub menu.  
- Only letters or numbers.  
- 4 characters minimum.  
Enter login to the superuser of grub2 :Xcontrol  
Enter password:  
Reenter password:  
PBKDF2 hash of your password is grub.pbkdf2.sha512.10000.54616D6D9A06D2DBF2FC242FF8AED7BD4594F0B3C15  
736BDF2097AD59BD90DB2023B08A0B4FB4FA444AD05EFD61C54A6BC83E7C4961446BF09AA878F5A9B6DEA.21D7B09DC22195  
1400913EE27BE26EE9253E20CA994193014A0DA30B18547DB05A70DCA9EE2B577C109B92C1897789242014184E103EDB615B  
F111469456F54B  
Generating grub configuration file ...  
Found background image: /usr/share/images/desktop-base/desktop-grub.png  
Found linux image: /boot/vmlinuz-5.10.0-21-amd64  
Found initrd image: /boot/initrd.img-5.10.0-21-amd64  
Warning: os-prober will be executed to detect other bootable partitions.  
Its output will be used to detect bootable binaries on them and create new boot entries.  
done  
saby43@debian11en:~$ exit
```

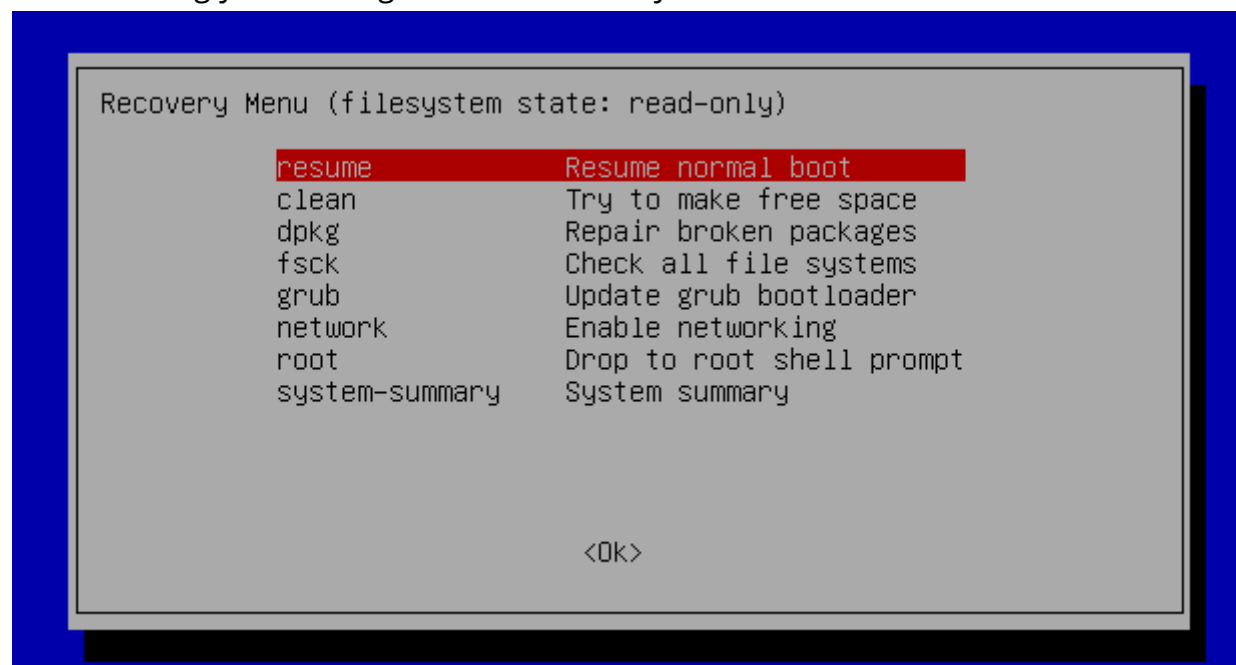
When CTparental is done with its job, you just have to enter the **exit** command.



The next time you want to use the advanced options of the GRUB menu, the system will ask you to identify yourself:



before allowing you to navigate in the Recovery menu:



6 - More information

Here after some usefull commands to manage CTparental within a terminal/



The commands presented below must be executed with administrator rights, and require a certain level of expertise.

6.1 - CTparental and firewall

When CTparental is installed it disables the firewall services of the distribution (ufw, iptables.service, nftables.service, netfilter,...) and replaces them by its own firewall service **CTparentalfirewall.service**.

Blocking an IP address for a user supervised by CTparental can be done from the parental control configuration interface.

Otherwise, to activate and configure the firewall with custom protocol or IP filtering rules for everyone, you have to activate the custom rules with :

```
sudo CTparental -ipton
```

Then by default everything will be blocked and only http, https, dns, mDNS, LLMNR, DHCP, NTP, imcp and icmpv6 protocols will be allowed to the local network and internet.

To disable them, enter :

```
sudo CTparental -iptoff
```

6.2 - Bocking an IP for all users

You need to modify the file /etc/Ctparental/ip-blackliste.conf

```
sudo nano /etc/CTparental/ip-blackliste.conf
```

Then apply the new rules with :

```
sudo CTparental -ipton
```

6.3 - Filter protocols or add other security rules

Find out first if you use iptable or nftable by issuing the command:

```
sudo CTparental -v
```

Than depending on the result, modify the file /etc/Ctparental/iptables.conf :

```
sudo nano /etc/CTparental/iptables.conf
```

or /etc/Ctparental/nftables.conf :

```
sudo nano /etc/CTparental/nftables.conf
```

and apply the new rules with:

```
sudo CTparental -v
```

6.4 - Import/export the CTparental configuration

To export the configuration within a folder, enter the command:

```
sudo CTparental -exp /path/export/folder/
```

For example, to export the configuration within your own /home:

```
sudo CTparental -exp ~/exportCTP/
```

and to import a given configuration:

```
sudo CTparental -imp /path/export/folder/CTparental.conf.yy.mm.dd.tar.gz
```

For example:

```
sudo CTparental -imp ~/exportCTP/CTparental.conf.yy.mm.dd.tar.gz
```

6.5 - Reset CTparental admin account

If you have lost the name or the password of the account created during the installation procedure, you will be able to redefine it. The following command (which requires an administrator account) will recreate the CTparental login and password:

```
sudo CTparental -uhtml
```

6.6 - Other useful command lines

- Activate CTparental:

```
sudo CTparental -on
```

- Disable CTparental:

```
sudo CTparental -off
```

- Force the blacklist update:

```
sudo CTparental -dl
```

- Set the automatic blacklist update (every 7 days):

```
sudo CTparental -aupon
```

- Disable automatic blacklist update:

```
sudo CTparental -aupoff
```

- Restore the default settings of the filtered categories:

```
sudo CTparental -dble
```

The complete command list can be found on this [official page](#)

6.7 - Wikipedia

This [Wikipedia page](#) talks about software options allowing parents to restrict content.

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