

AutoCD v4.0.X Installation Guide

Isabel 4.9



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November 2005


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1. Before you begin

This guide covers the main steps in the installation process. Before starting installation, make sure you know the following information about your computer. If some of these parameters are unknown or unfamiliar to you, please contact your network administrator.

- Host name.
- Domain name.
- IP address (if no DHCP server is set).
- Net mask (if no DHCP server is set).
- Gateway (if no DHCP server is set).
- Name server (DNS).

Please note that the automated installation process will partition and format your hard disk. The default setting is to clear the main hard disk drive completely (typically /dev/hda on Linux or C: under Windows) and use all this space to install SuSE 9.2. These settings can be changed, but in that case you should read and follow this set of instructions carefully in order to avoid losing relevant data.

The installation process will automatically create two user accounts: the superuser (login = "root") and an Isabel user (login = "isabel"). Both of them will have "autocd" as their password, but you can (and should!) change them afterwards using the `passwd` command.

2. Burning the CD from the ISO image file

Any recording utility should be suitable, but Nero version 5.5 or higher is strongly recommended (you can download a free demo version at <http://www.nero.com>). The recording process is very simple: just launch the "Nero – Burning Rom" application, cancel the wizard and select the "Burn Image..." option on the "Recorder" menu.

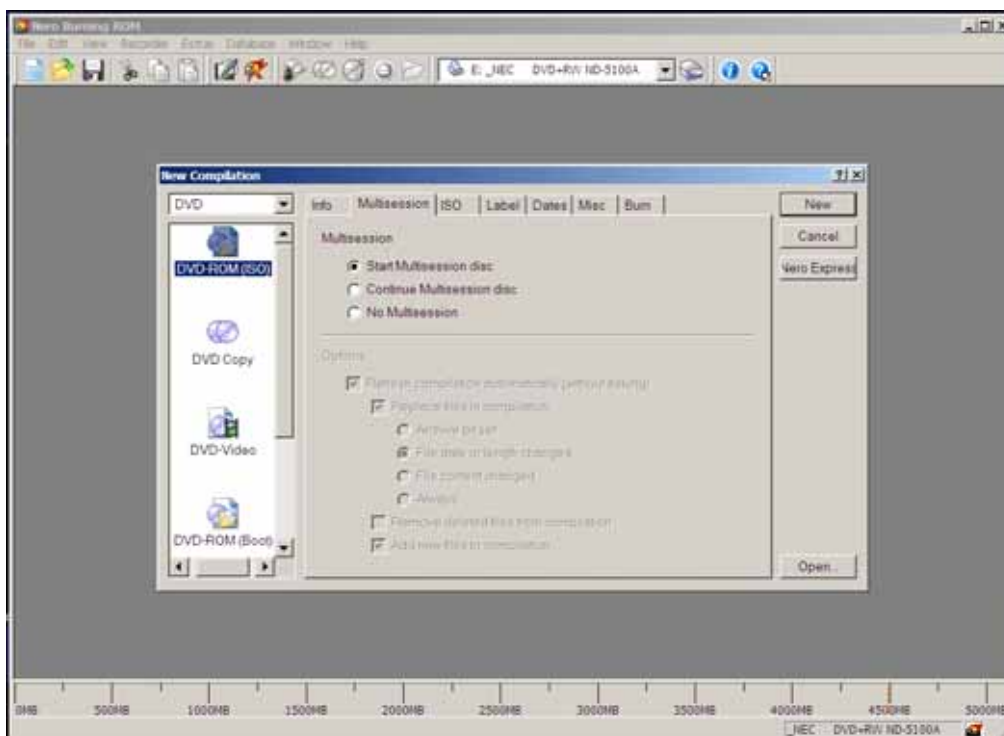


Figure 1. When starting Nero, the wizard will appear. Click on the “Cancel” button to close it.

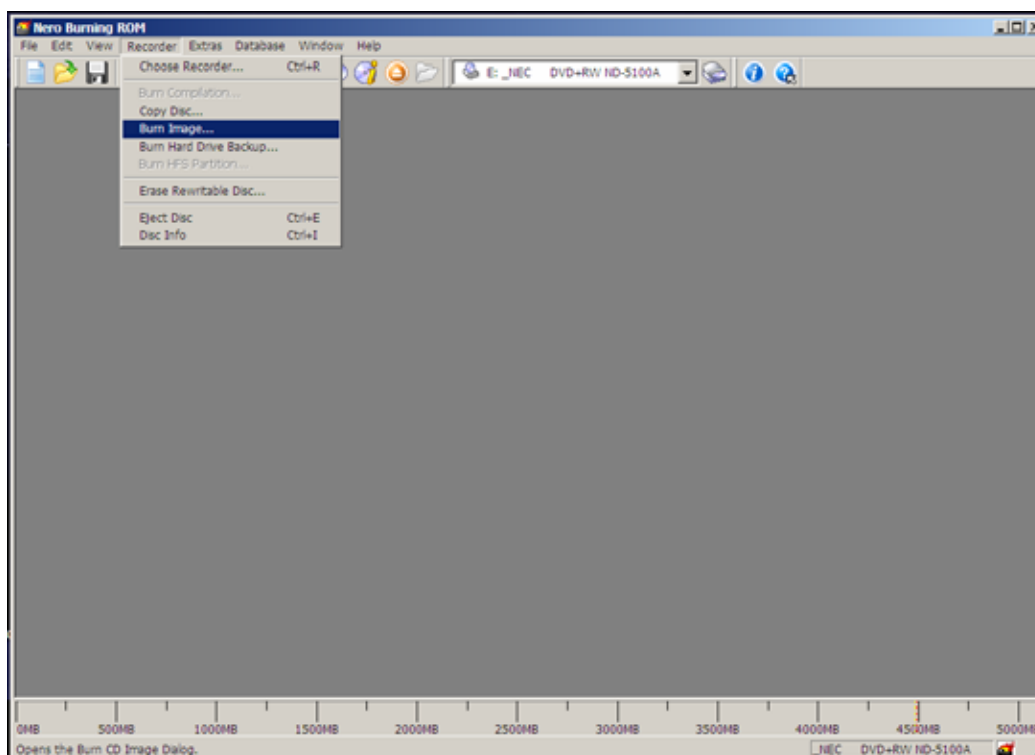


Figure 2. Select "Recorder → Burn Image..." from the menubar.

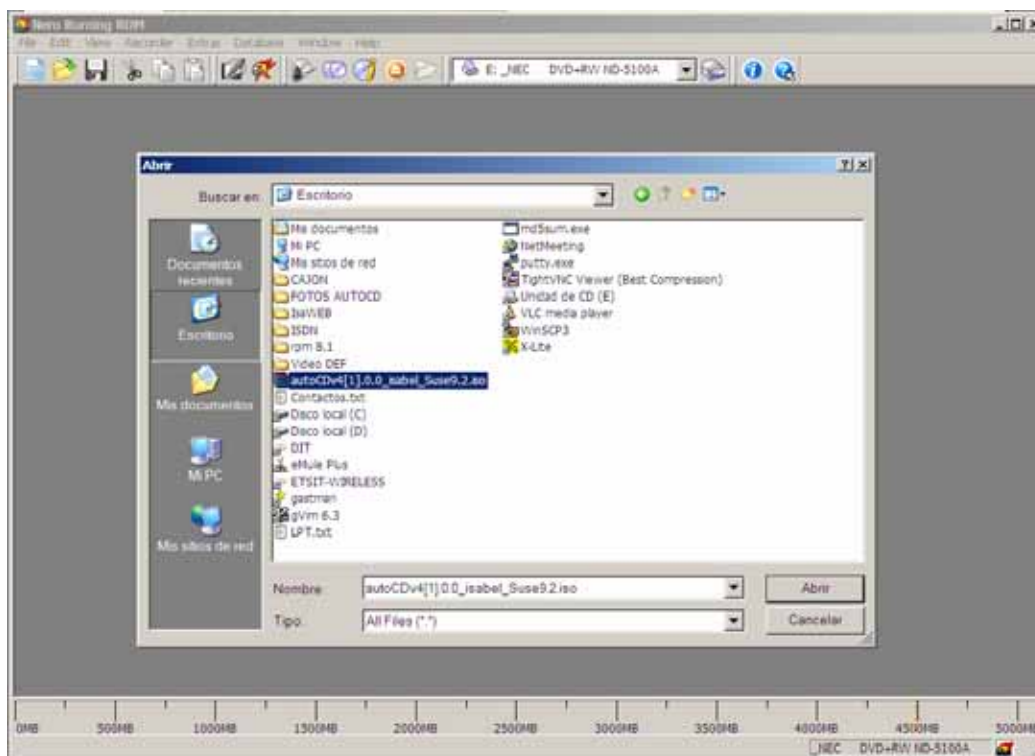


Figure 3. Select the CD Image File to burn and click on “Open”.

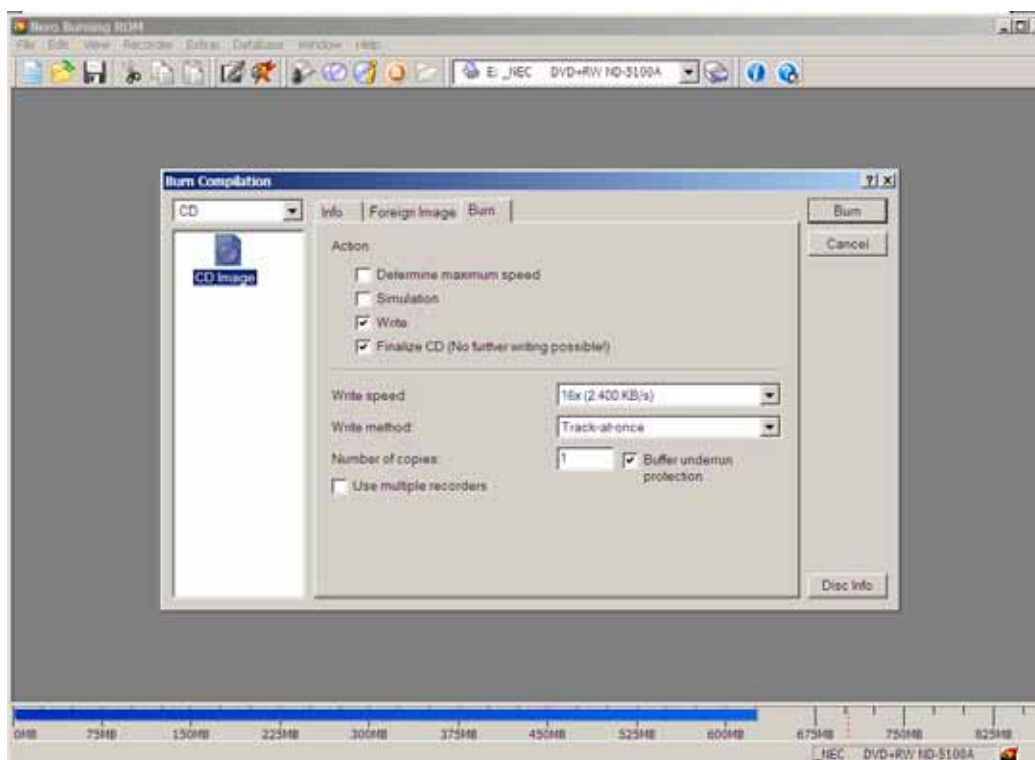


Figure 4. Select the "Write" and "Finalize CD" checkboxes and click on "Burn" to write de CD.

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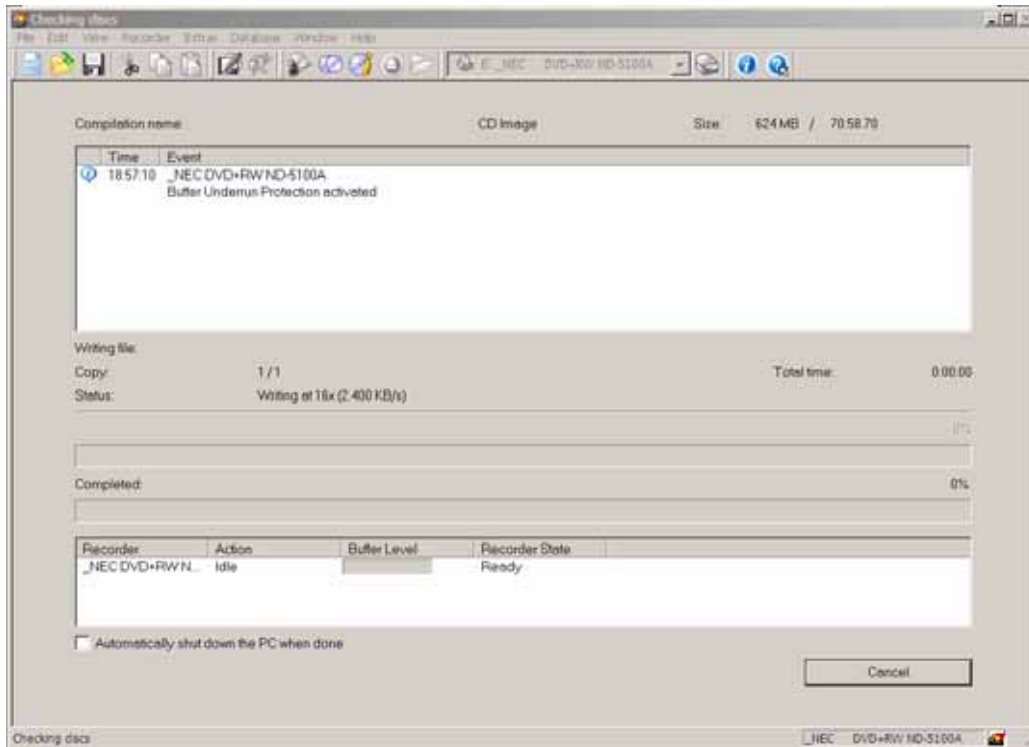



Figure 5. The burn process will then start.

3. Starting the automated installation

The automated installation CD is self-bootable, so to start the installation process you just have to insert the CD in your CD-ROM drive and reboot or power on your computer. If the installation process does not start, please ensure that the CD-ROM option appears in your bios boot sequence and it is placed before the HARDDISK option.

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4. The automated installation process

1. First, a **boot menu** with different installation options will appear:
 - AutoIDE: Select this option to auto-install SuSE 9.2 + Isabel in an IDE based PC.
 - AutoSATA: Select This option to auto-install SuSE 9.2 + Isabel in a SerialATA based PC.
 - Boot from Hard Disk: Select this option if you don't want to install SuSE 9.2 + Isabel. It will try to boot your installed OS as if the installation CD wasn't in the CDROM drive. Note that if you select this option, the installation process will end.

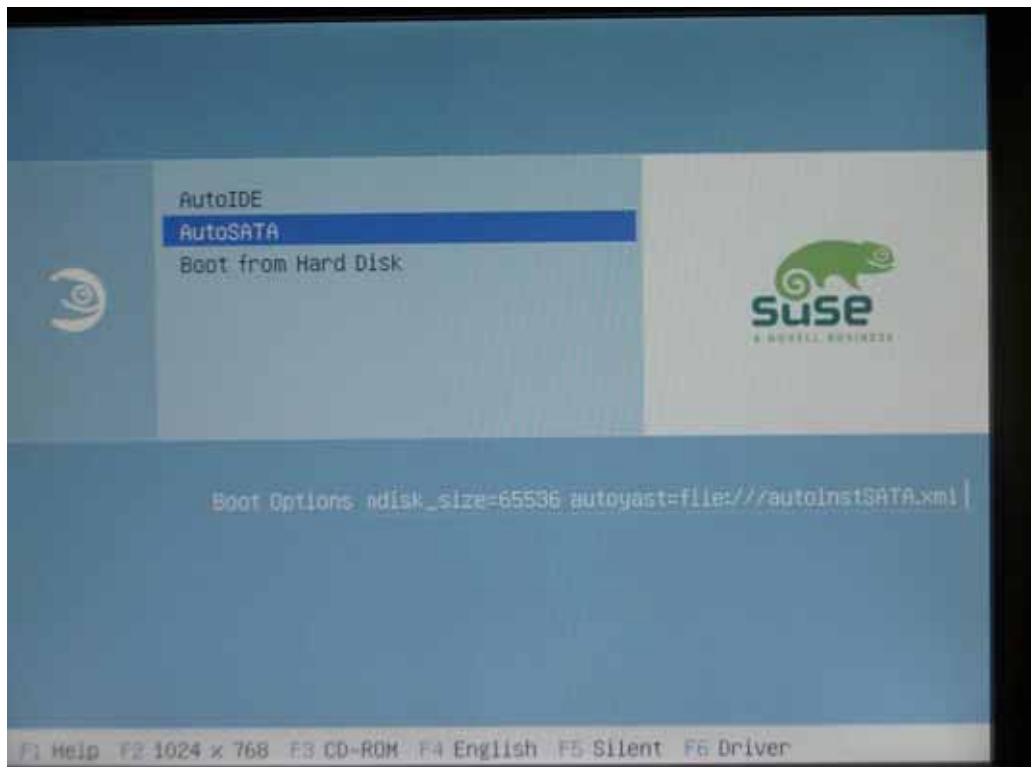



Figure 6. Boot menu. Select "AutoIDE" or "AutoSATA" depending on your system architecture.

2. After performing some automated steps and analyzing your system, the **"Installation Settings"** screen will appear.

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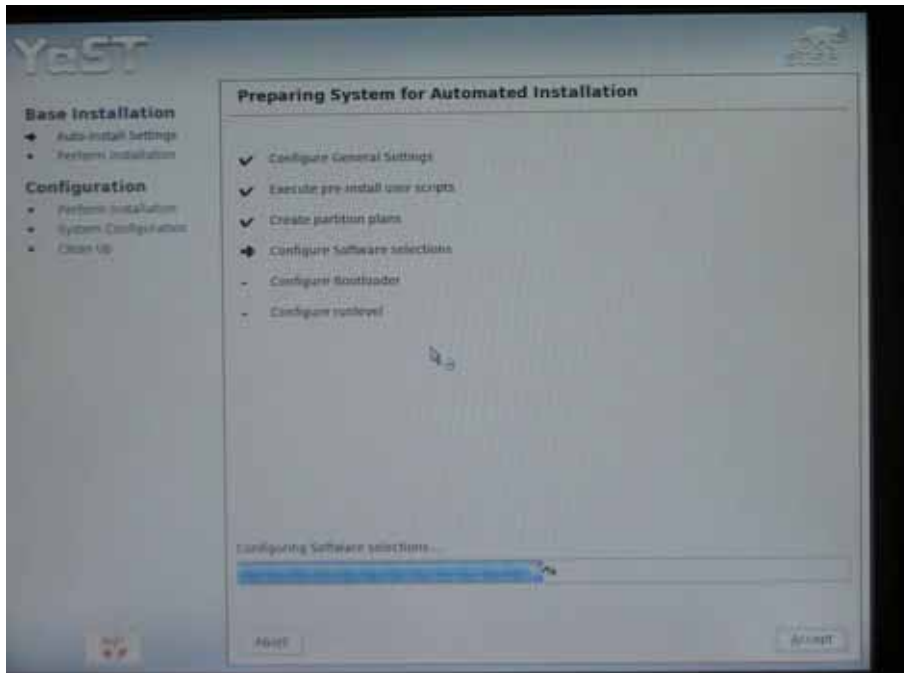


Figure 7. The installation program will detect your hardware configuration.

The “Installation Settings” screen shows the settings that are going to be applied to your system and enables you to make some changes. The default settings are suitable for most systems, so **if you don’t mind partitioning and formatting your whole hard disk drive** just select your language, keyboard and time zone and click the “accept” button. Otherwise, the menu options are:

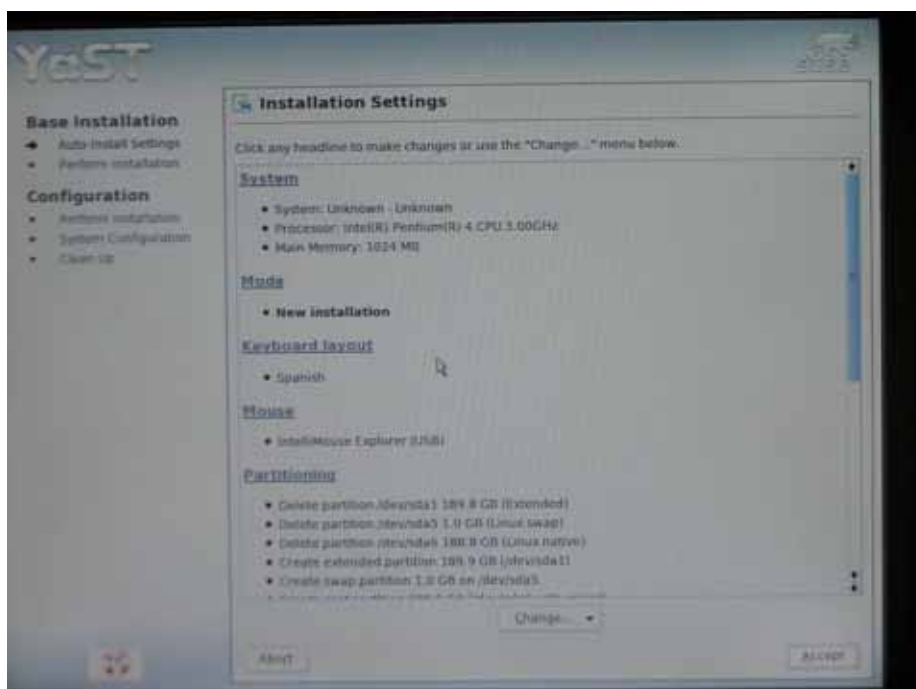




Figure 8. Installation settings screen. Change the installation setting clicking on each title .

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- **System:** Selects the main hardware characteristics of your PC.
 - **Mode:** Select always “new installation” (default).
 - **Keyboard layout:** Use this option to select the appropriate keyboard type. (Tip: if you select your language first, the keyboard layout will change accordingly).
 - **Mouse:** Your mouse type will be automatically detected. In case it is not, you can select the correct mouse type using this option.
 - **Partitioning :** The default option is to clear completely /dev/hda and assign the resulting space to SuSE 9.2 (**WARNING: all previous data in the drive will be lost**), but you can use this menu entry to override this setting. Please refer to the “Expert partitioning” section of this document for further information.
 - **Software :** The optimum software selection for an Isabel Terminal is already configured for you. Please do not make any changes in the package list; otherwise you might seriously compromise the automated installation process and the resulting system might not be able to run the Isabel application.
 - **Booting:** This menu entry allows you to change the bootloader configuration. Since it’s automatically configured for you, only experts should make changes in this section.
 - **Time Zone :** Use this option to set the correct time zone.
 - **Language:** This menu entry allows you to select your language. From now on all installation messages and menus will be given in the selected language.
3. After accepting and confirming your settings, **the installation process will start.**

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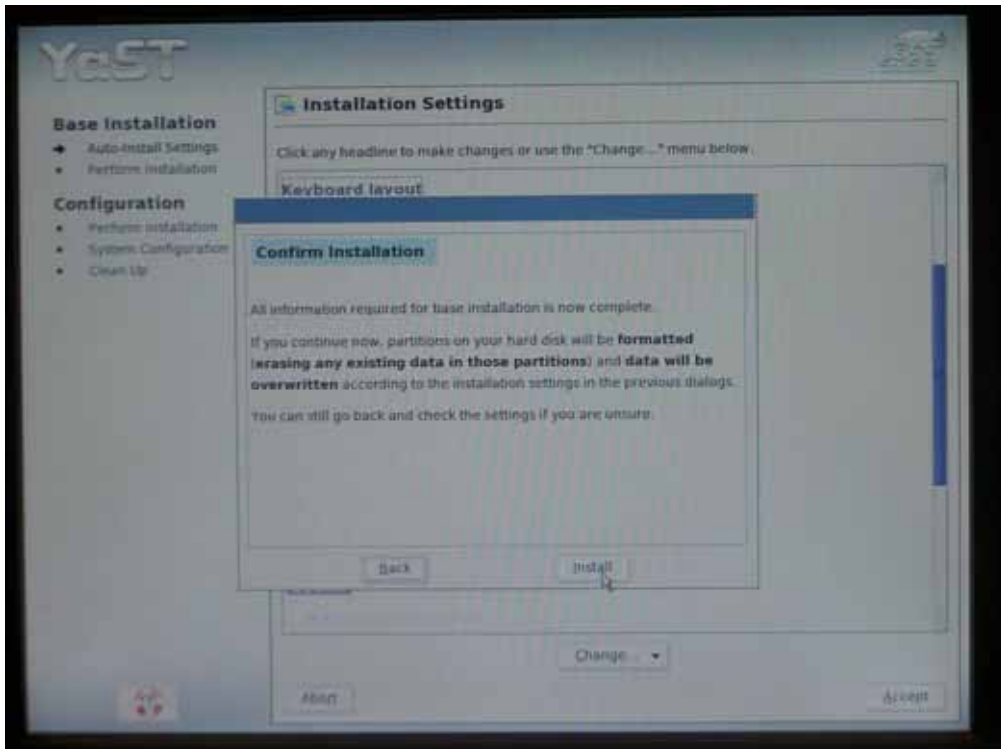


Figure 9. After clicking on "Accept" a confirmation window will spawn. Click on "Install" to proceed.

4. First, it will partition and format your hard disk drive, then it will install the selected packages and finally it will configure some of your devices (e.g. graphics card) and execute the post-installation scripts.

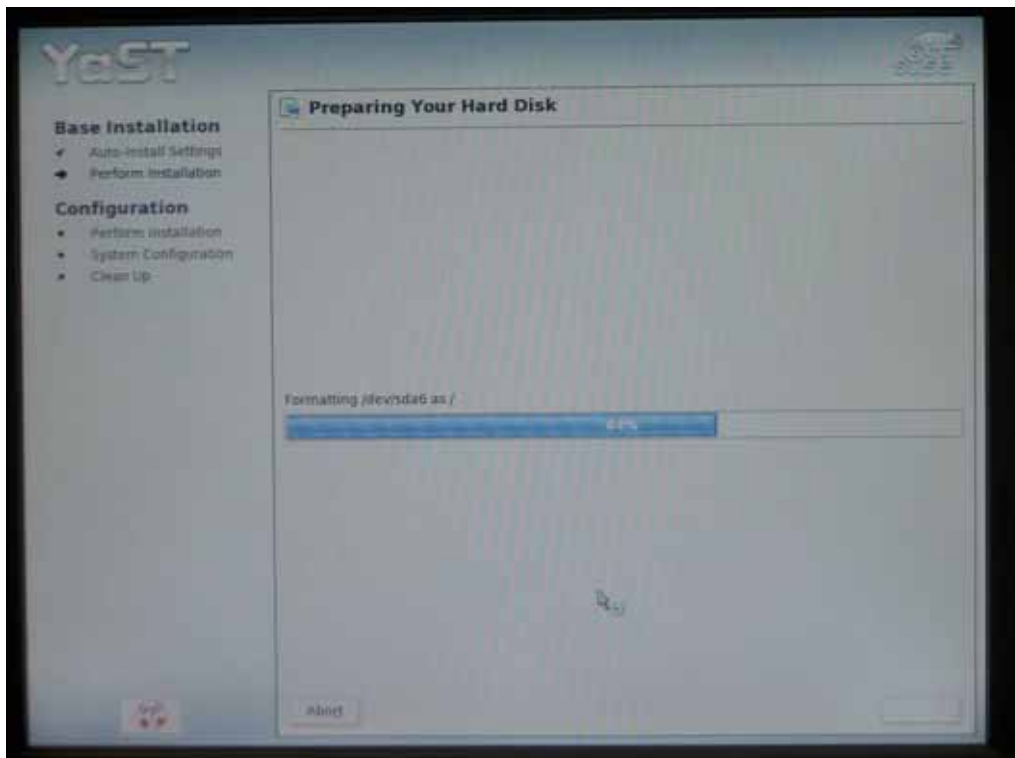


Figure 10. After confirming, your harddrive will be formatted.

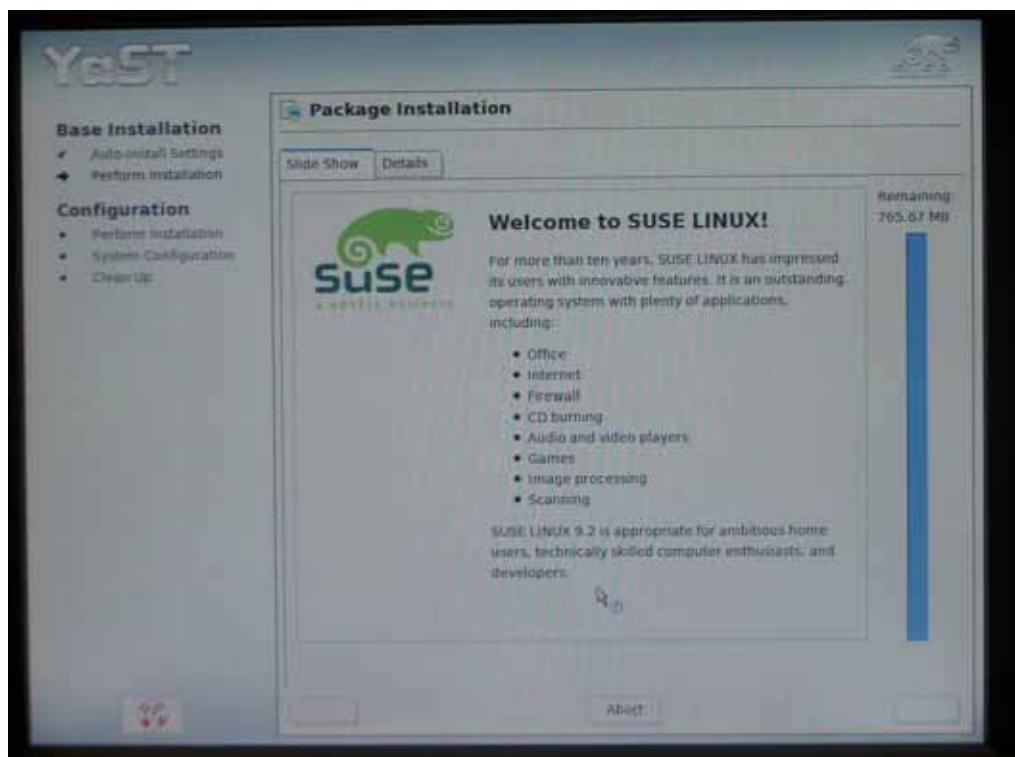


Figure 11. The installation program will start copying files to your system.

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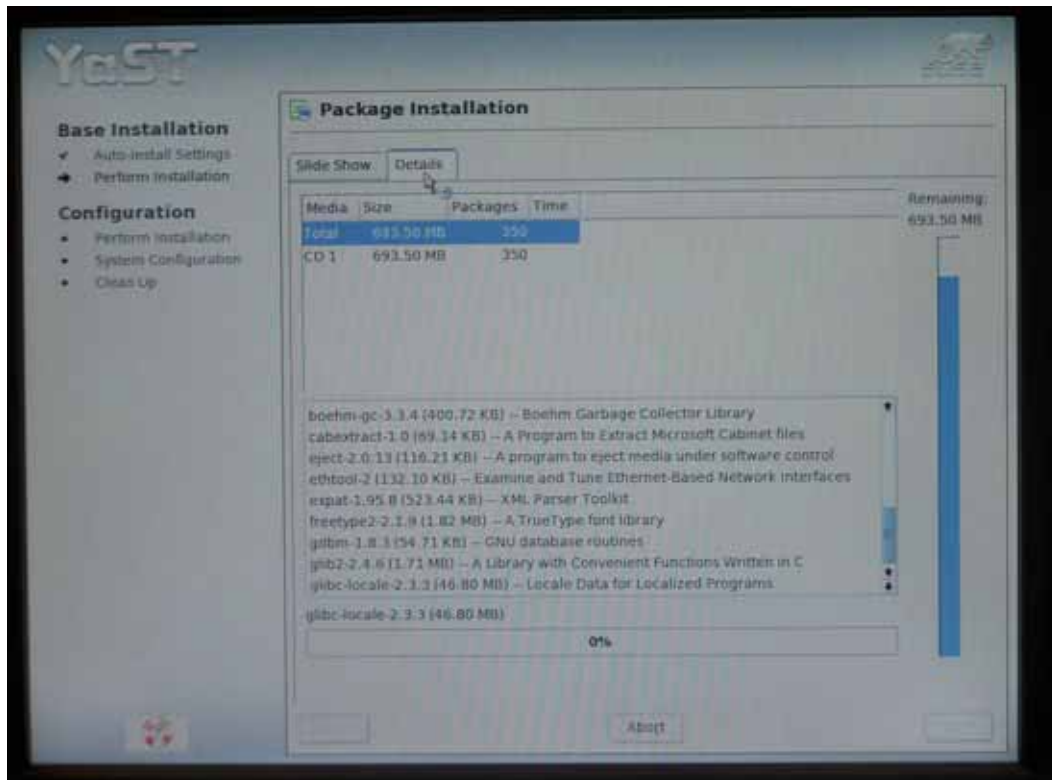


Figure 12. You can also on the "Details" tab to get detailed information about the installation process

Should the system reboot during this process, please select the "Boot from Hard Disk" option from the boot menu (default one).

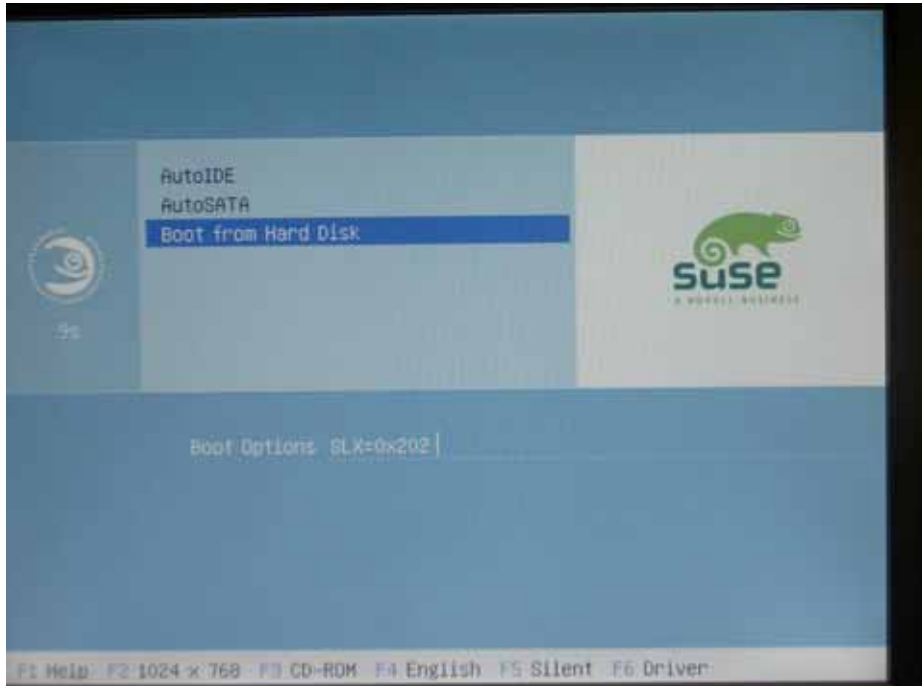


Figure 13. After rebooting, select "Boot from Hard Disk"

5. After completing the installation, the Sound card configuration wizard will appear. This step is fairly simple: if your sound card has been correctly autodetected all you have to do is select the "Quick automatic setup" option and click the "Next" button. You can configure the volume later using the alsamixer or gamix tools.

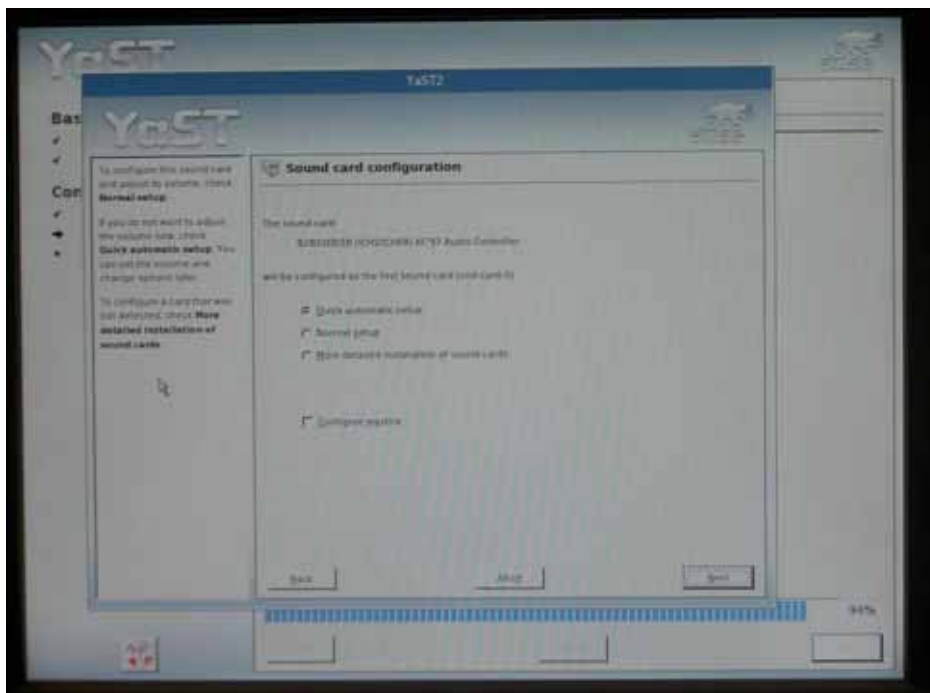


Figure 14. Select "Quick automatic setup" to automatically configure your sound card.



- 6. Then, the TV card configuration wizard will appear to allow you to configure your video grabber card. Remember that you only have to configure the VIDEO device, and not to configure any associated AUDIO device. Select the device to configure and press the "Configure" button and follow the instructions you will find in the left margin.

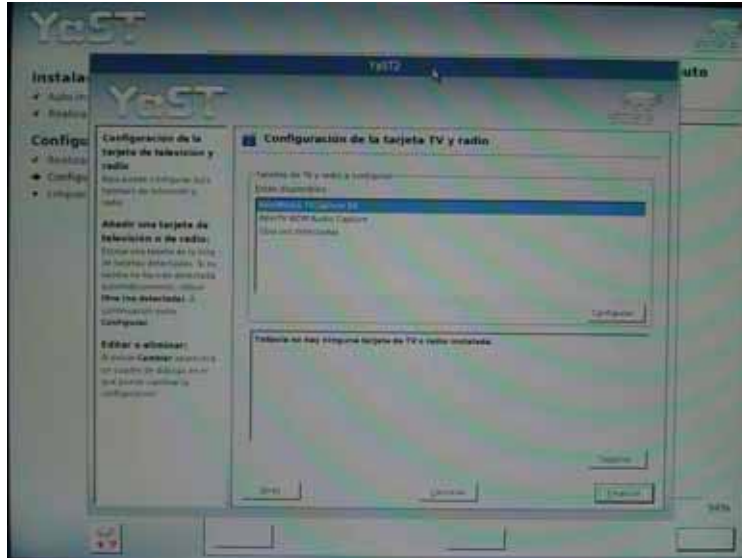
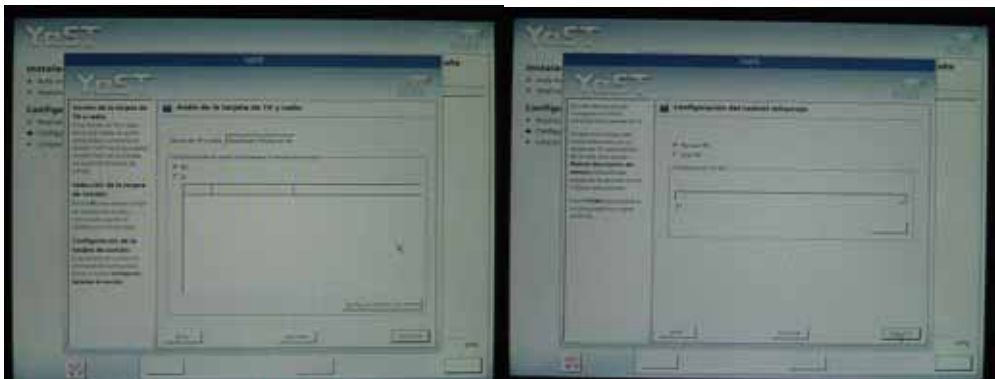


Figure 15. Select your Video capturer device and click on the "Configure" button.



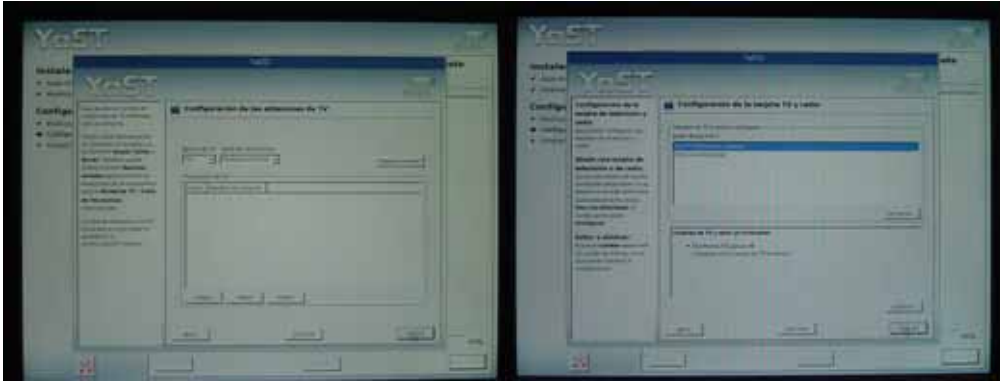


Figure 16. TV capturer configuration sequence

7. When the configuration of the TV card finishes, the Network card configuration wizard will appear. Click the “Configure” button in order to configure your network card and set up your network, it’s very important that you don’t skip the “Host name and name server” and “Routing” steps in the detailed settings section. If you use DHCP remember to check the “Update the host name via DHCP” and “Update DNS servers via DHCP” checkboxes from the “Hostname and DNS Servers” configuration window.

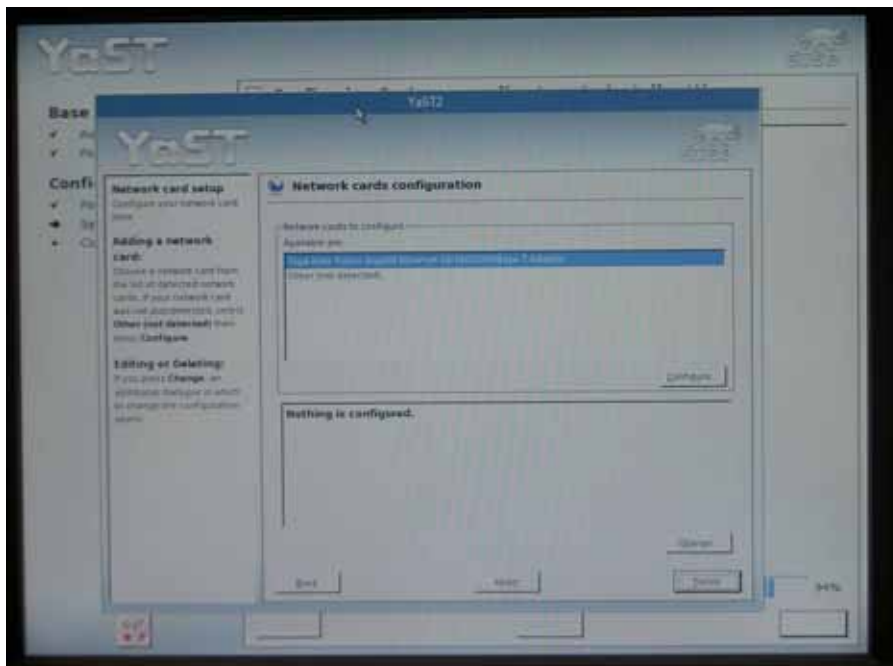


Figure 17. Network configuration menu. Select your detected network card and click on “Configure...”

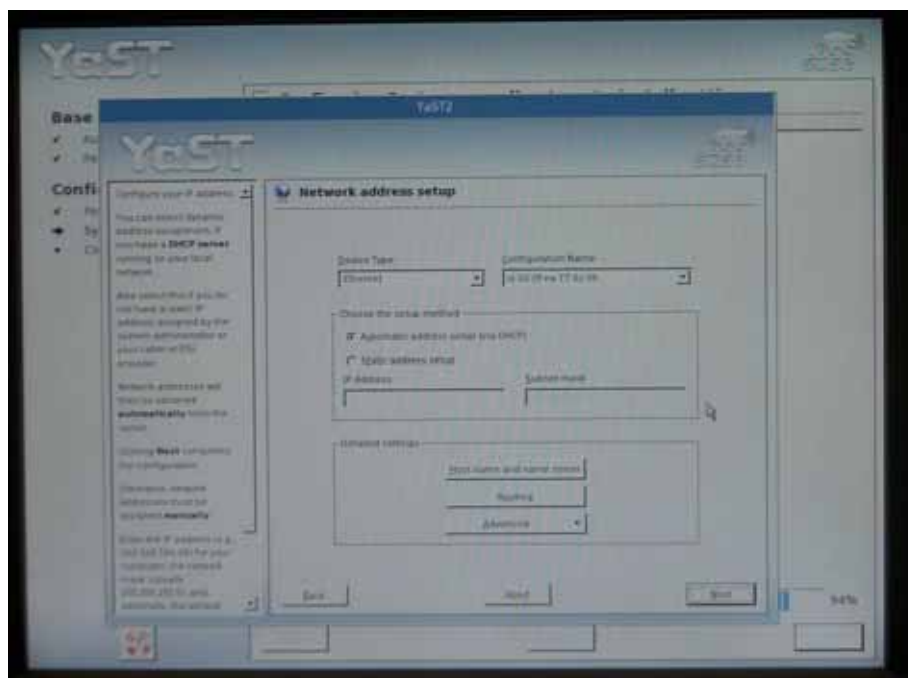


Figure 18. Select Manual or DHCP configuration depending on your network architecture. Remember to configure "Host and name server" and "Routing".

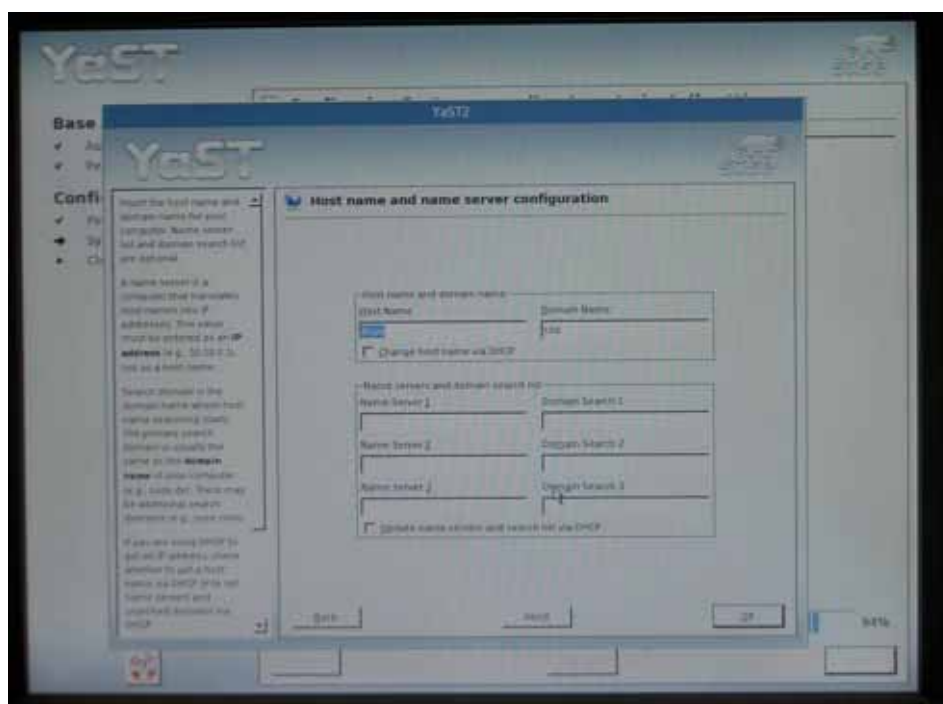


Figure 19. Select the "Change host name via DHCP" and "Update name servers and search list via DHCP" checkboxes if you are using DHCP. In other case, configure your host and domain name and name servers manually.

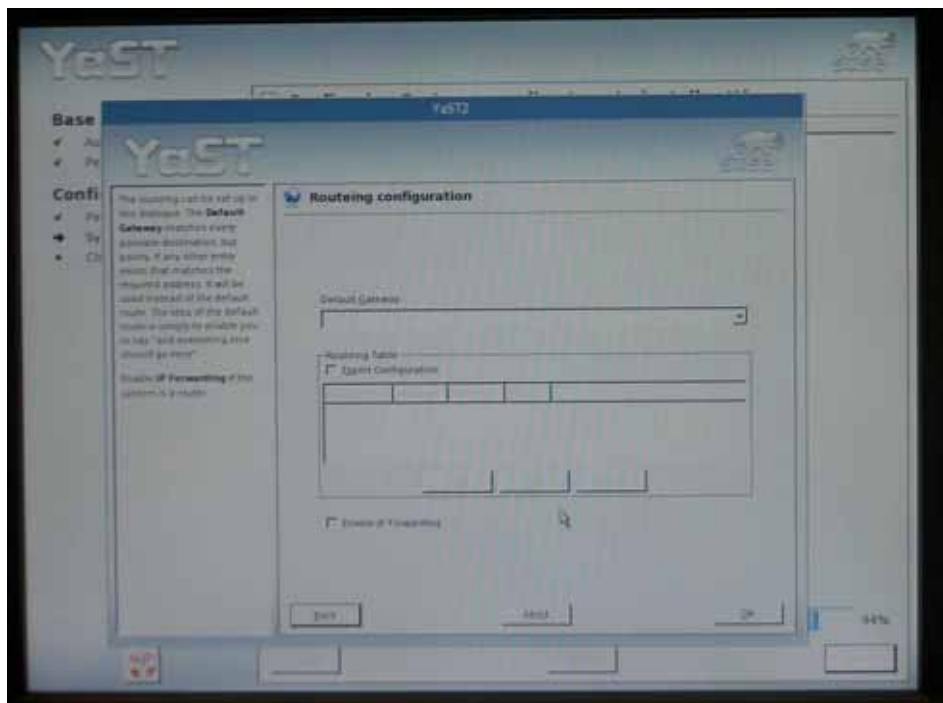


Figure 20. If you are not using DHCP, configure your default route. The IP forwarding should be disabled.

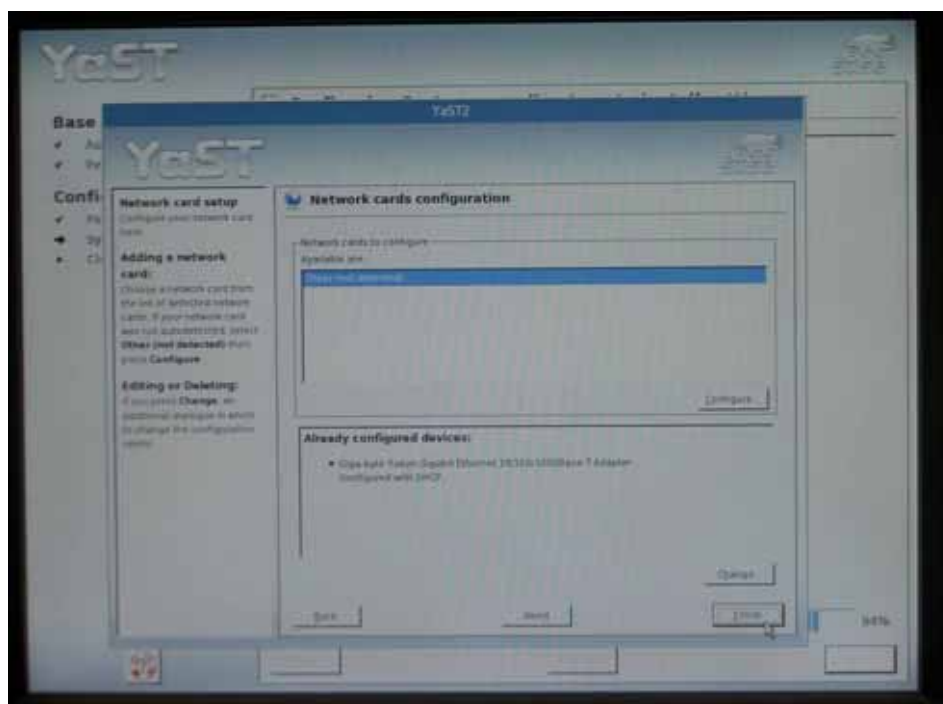

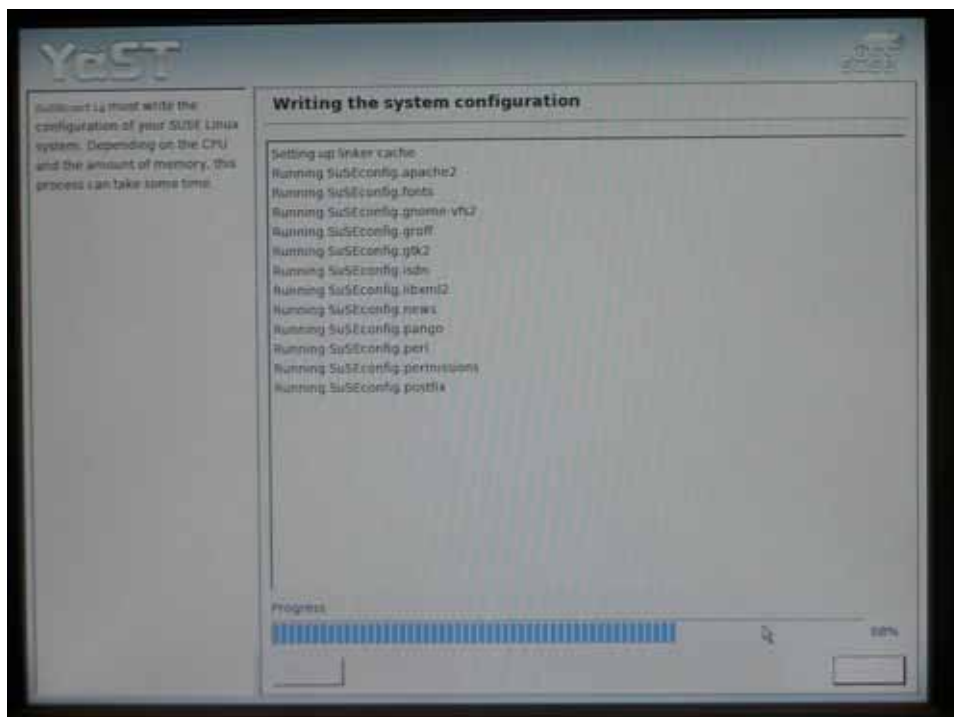


Figure 21. Once you have configured the network card, click on the "Finish" button.

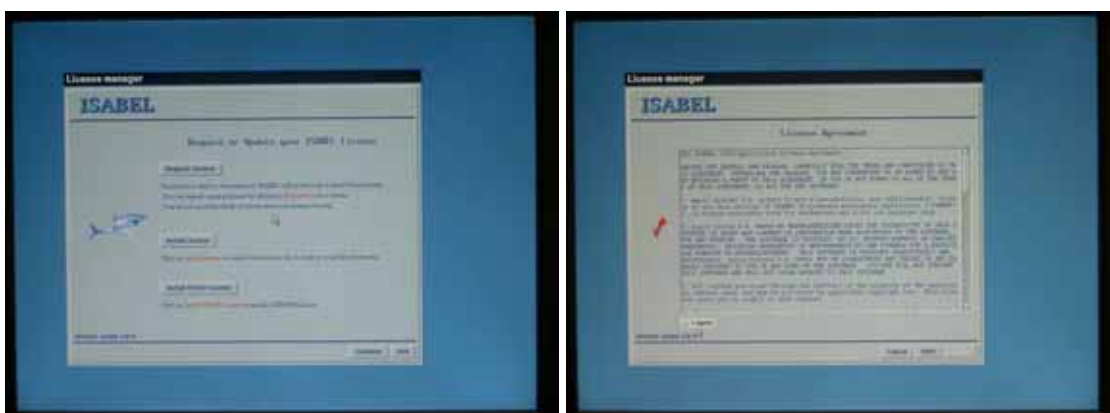
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- Finally, after saving the Network card configuration, the machine will automatically reboot. If you haven't done it already, please remove the CD from the drive to ensure that the installed system is able to boot properly.



Congratulations, you've just installed your ISABEL terminal! For instructions on how to use ISABEL please refer to the ISABEL documentation, which can be found at <http://www.agora-2000.com>.

When the system reboots you will get a boot menu that will let you choose the Operating System to start, please select the "Linux" option to start your new SuSE 9.2 + Isabel installation.



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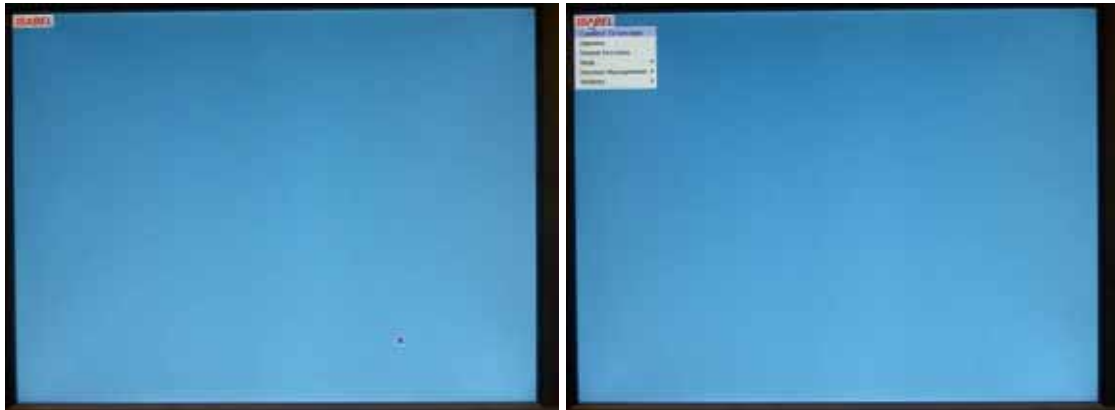


Figure 22. Once the installation is finished, you will have to read and accept the License Agreement to use Isabel.

When your systems boots you will get a graphical environment. On the upper left corner of the screen you will be able to see the Isabel menu icon. If you click on it you will get a menu that will let you launch and quit the Isabel application.

In this graphical environment (TWM) you can get the system menu by ALT+left-clicking with your mouse anywhere on the blue desktop. To move a window ALT+left-click on the menu bar and drag it to the desired position. To launch a root or isabel (local) console just ALT+right-click on the desktop and select the appropriate menu option. The default root and isabel (local) password are “autocd”, but you should change it as soon as possible using the passwd command.

5. Expert partitioning

The default partitioning setting in the automated installation process is to clear your main hard disk drive completely and use the resulting space to install SuSE 9.2. Evidently, this will destroy all previous data in the drive. If you want to preserve an existing Windows or Linux installation or install SuSE 9.2 in a different drive (e.g. a secondary disk like /dev/hdb or a SCSI drive) or partition, you can override these settings and set up your own partitioning plan. To do so, you just have to follow these steps:

1. In the “Installation Settings” screen (for further information refer to step 2 in the previous chapter) select the “Partitioning” menu entry.

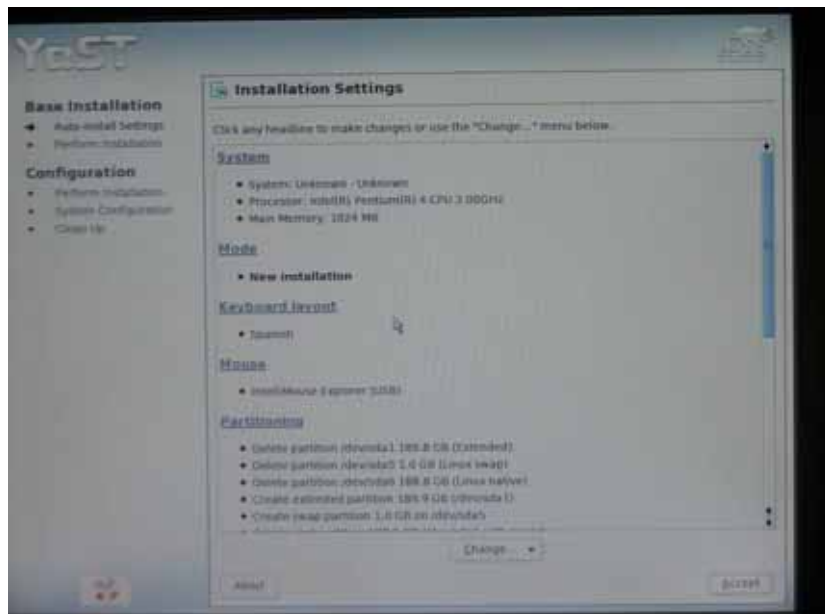


Figure 23. Installation settings screen.

- The screen will change into the “Expert Partitioner” screen. Click the “Expert” button and select “Reread partition table” to discard the installer partitioning settings and recover your original partition table.

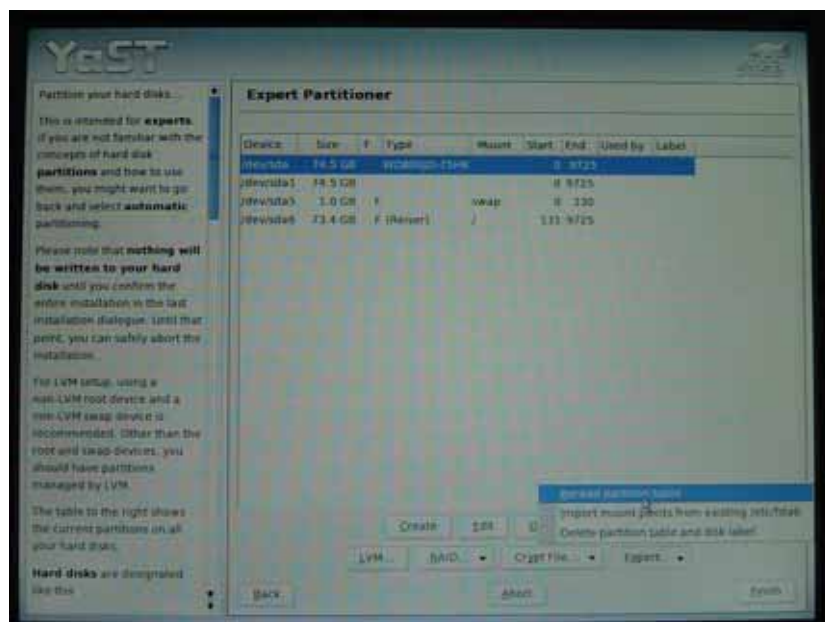



Figure 24. Click on "Expert→Reread partition table" to load your actual partition configuration.

- Create your own partitioning plan using the tools provided by the partitioner.

We recommend the creation of at least two partitions for SuSE 9.2:

- A swap partition of twice the size of your physical RAM memory.

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- A root (mount point = “/”) partition. When setting this partition’s size, please take into consideration that the SuSE 9.2 + Isabel installation will consume proximately 700 Mb.

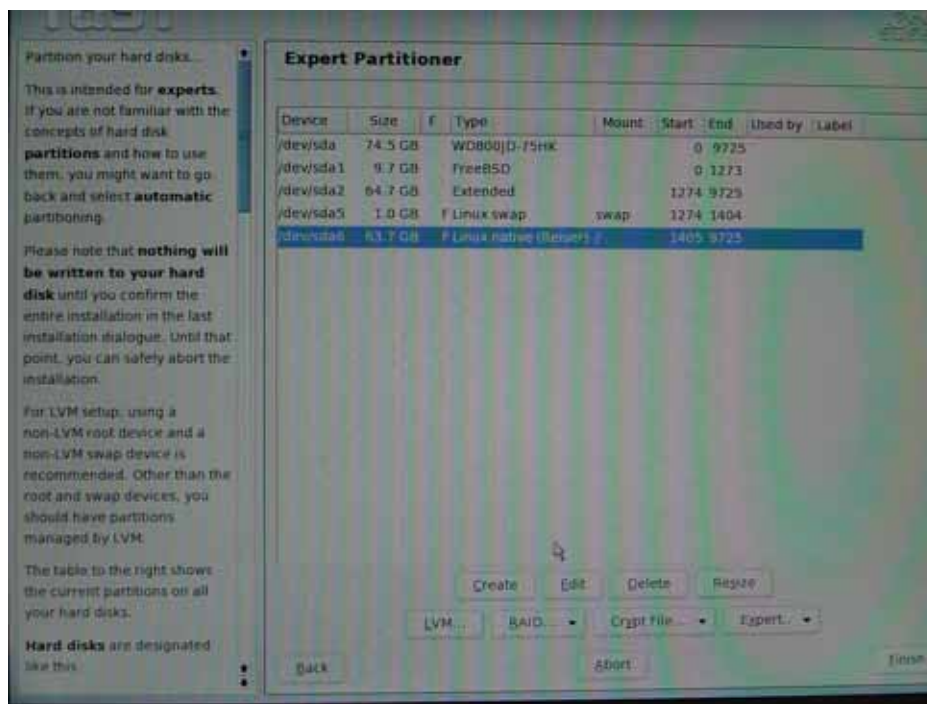


Figure 25. Example of custom partitioning plan.

4. After setting the partitioning, you will have to manually configure the boot loader. To do so, click on the “Bootling” menu entry.

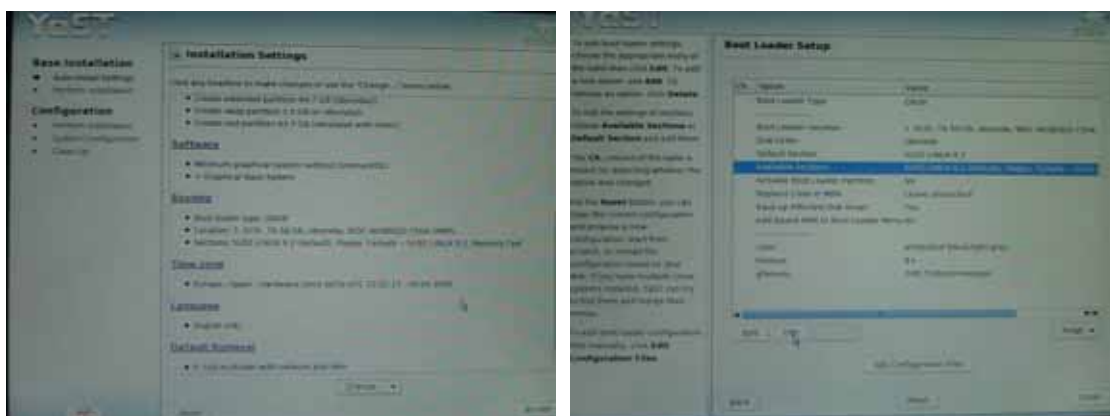


Figure 26. When you change the default partitioning plan you may need to reconfigure the boot loader.

5. Select “Available Sections” and click on “Edit”.

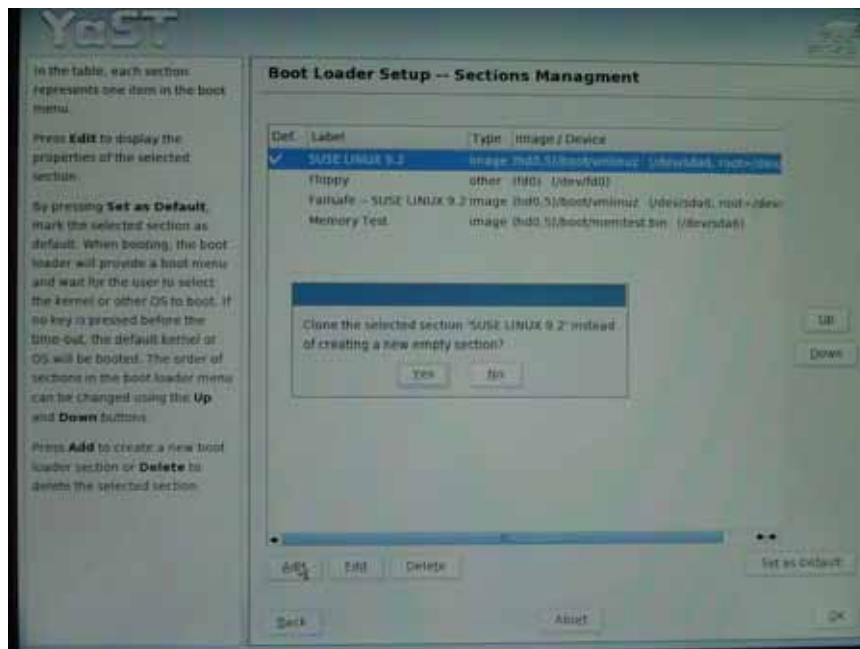


Figure 27. Sections management screen


6. Change the configuration entries as desired and click “OK” and “Finish” to return to the main menu.

6. Troubleshooting

Hardware configuration during the automated installation process relies on SuSE’s recognition of your PC hardware. Therefore, to ensure a problem-free setup, your PC devices must be supported by SuSE 9.2. You can find a complete list of supported devices at SuSE Linux’s Hardware Database (<http://hardwaredb.suse.de>), or contact a hardware vendor that supplies SuSE 9.2 compliant systems.

If your hardware was not automatically recognized by SuSE or an error occurred during setup, you can experience problems like:

- Network isn’t working properly or not working at all.
- X server crashes or doesn’t start.
- Screen resolution or color is not correct
- Audio isn’t working properly or not working at all.
- Video grabber isn’t working properly or not working at all.

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To solve these problems you can try to configure your system hardware manually using SuSE's yast2 utility by following these steps:

1. If you are in the graphical environment, launch a root terminal (right-click with your mouse anywhere on the desktop and select "root").
2. Execute the yast2 command.
3. From the menu on the left:
 - 3.1. If you are experiencing network problems, select "network (basic)" and then pick the "network card configuration" module.
 - 3.2. If you are experiencing other problems, select "hardware" and then pick the appropriate module depending on your kind of problem (sound, graphic card and monitor, TV card).
4. Follow the assistant to remove your previously installed hardware (if any) and install the correct one. Choose "auto-detect" and "quick automatic setup" when possible.

7. Bugs and known issues


- **Installation fails when using the default partitioning settings**

The default partitioning setting is to clear the main hard disk drive (/dev/hda) completely and use all this space to install SuSE 9.2. Therefore, if your system's hard disk drive does not receive the /dev/hda denomination in Linux (e.g. if it's not the IDE primary master or it's an ATA 100, ATA 133 or SCSI drive) the installation process will fail when using the default partitioning settings. This problem can be fixed by using the proper installation mode (IDE or ATA) at the beginning of the installation process (See Section 5 point 1) or overriding these settings with your own partitioning plan, please refer to chapter 5 "Expert partitioning" for detailed instructions.

- **X Server crashes during installation**

In certain cases the installer is unable to detect and configure properly the graphics adapter, and therefore you will get an X Server crash message and the installation process will not be able to continue properly. There is a fairly simple workaround for this issue using sax2, you just have to follow these steps:

1. When you get the X Server crash message, press "Enter" a few times until you get the login prompt.
2. Login as root (password = "autocd").
3. Switch to non-graphical mode by executing the "init 3" command.

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4. Run the video card setup wizard by executing the “sax2” command and use it to configure properly your graphic s adapter. A 1024x768 resolution is recommended for ISABEL terminals.
5. Switch back to graphical mode by executing “init 5”. If the X server doesn’t start automatically you can launch it using the “startx” command.
6. Now you can proceed with the installation process.