

# Grub Configuration

## ● Start up manager

Position: My computer → ctrlpanel → System → boot manager

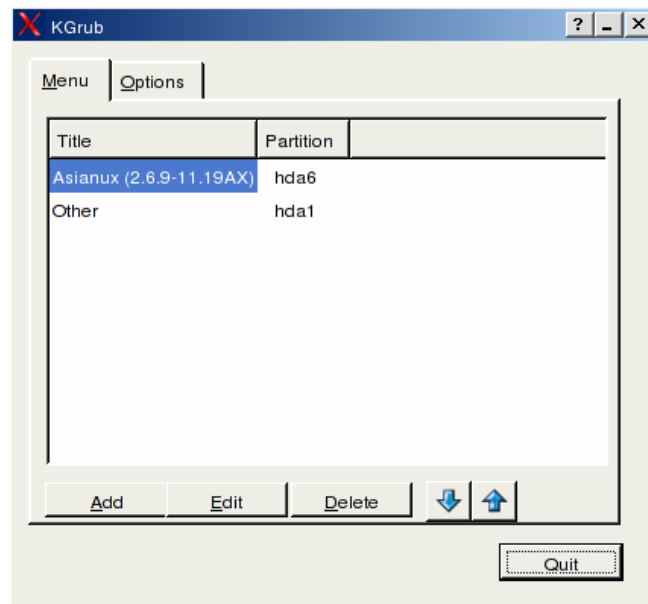
GRUB is the boot loader manager of Asianux 2.0, which is used to load kernel and boot Linux system. Moreover, it can be used to boot other system when there are multiple systems installed on your computer.

The default mount Position of GRUB is /boot/grub, its configuration file is grub.conf, and / etc/grub.conf is a link of this configuration file. All configuration work related to GRUB can be performed by modifying this file. Asianux 2.0 provides a graphical front-end tool, which can help you to intuitively complete system boot loader configuration.

## Menu startup

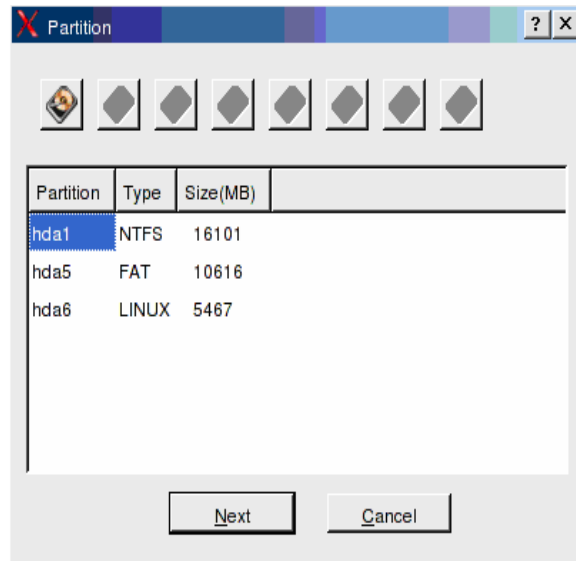
“Menu” page is used to configure GRUB boot menu display at boot time, including deciding which operating systems you would like to boot, boot mode used and boot menu sequence.

The following picture is the main window of menu label page, it can be seen that, the current OS that can be start up are Red Flag Advanced Server (include smp kernel that edit by icc) and DOS.



GRUB configuring tool

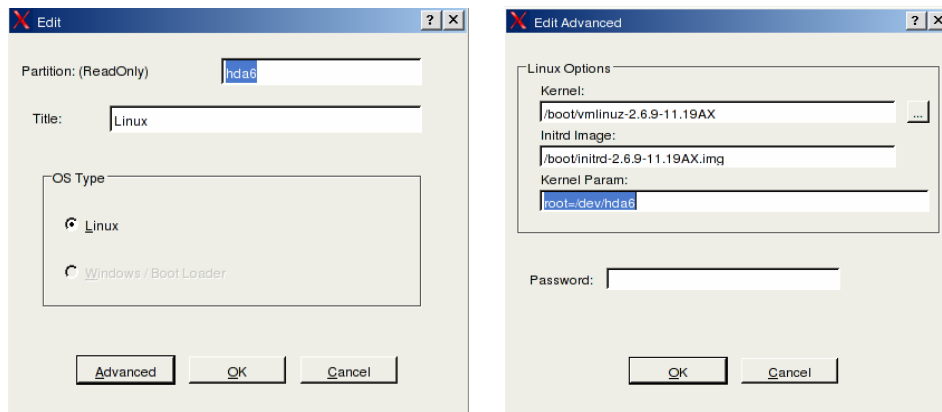
If you want to add a bootable operation system which is already installed on local computer, please click “Add” button.



Select a Partition

Program will automatically detect hard disk and partition type on your computer. The upper section of the figure shows the number of hard disk on your computer. Click any hard disk icon, information about file system partition on this hard disk will be displayed on the lower section of the window. We assume that the Red Flag Server 4.0 system to be added is located at the 1st primary partition on the 1st hard drive, and the device name is /dev/sdb1.

Select hdb1 partition from the list, click “next”.



Add Boot Loader

The following options need to be fixed:

**Partition:** the hard drive partition where the file system is located.

**Title:** the name of system to be booted, that is, the identification of this operating system displayed in boot menu when boot GRUB.

**OS type:** select the type of bootable system to be added. If it is Linux operation system, program will automatically judge and select “**Linux**”; if it is Windows system or other bootstrap loader, program will automatically select “**Windows/other boot loader**”.

Clicking “**advanced**” button will enable you to perform some advanced properties configuration.

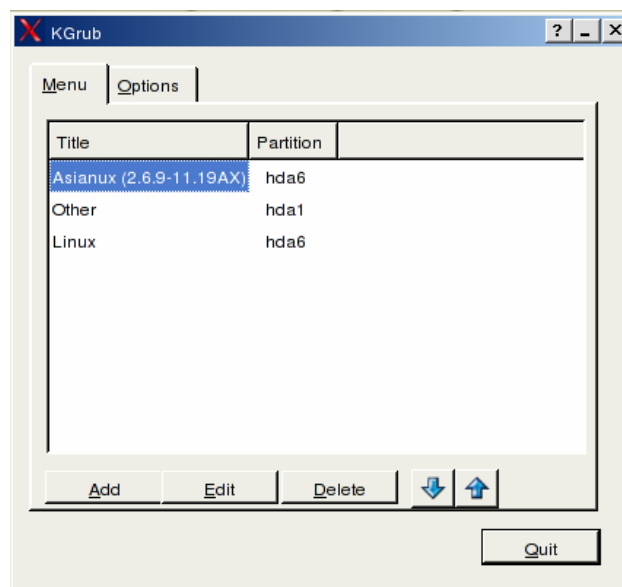
In this demonstration where Linux operating system is added, you must know the Position of kernel file and initrd image file and parameter to be sent to kernel. If program fails to automatically identify, you must specify it by yourself.

In this demonstration where the root file system of Red Flag server 4.0 that you want to boot is located at /dev/hdb1, please input “**root=/dev/hdb1**” kernel parameter, otherwise, kernel will be unable to identify foot file system, and then input other parameters that you want to add. These parameters will be sent to kernel at boot time. These parameters will be sent to kernel at boot time.



If want to add Windows system or other bootstrap loader, it is not necessary for you to perform above configuration. GRUB will utilize “**chainloader**” technology to load existing boot loader from partition boot record, and then boot.

If you have set “**Password**” in textbox, then after configuration is completed, system will ask you to enter correct password every time you boot this system.

After configuration is completed, click “**OK**” button to complete. Newly added item will be displayed in menu page window.



The menu after adding

Select one item from the window, then click  or  button to adjust its display position in the menu. The boot menu will display them in this order every time you boot GRUB after the configuration takes effect.

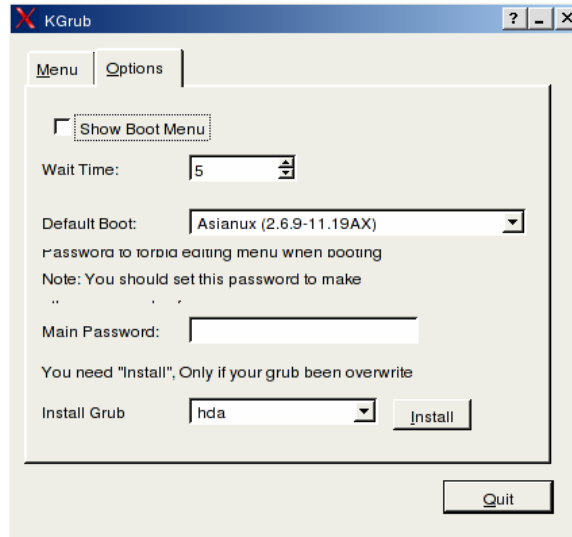
“Edit” and “Delete” option allows you to change the settings of a boot item or delete a menu boot item.



*Press “exit” after completion, applications will ask whether to save configured files. Only when “yes” is selected, will the configuration take effect the next time you boot the system.*

## Options setup

Option tab is used to setup global parameter of GRUB boot manager (see the figure below):



Boot Option Setup

The functions of major configuration items in this page are as follows:

**Show Boot Menu:** By default it will display boot menu when starting up GRUB boot loader. If it is not selected, system will enter default booting system after starting up latency time instead of showing boot menu (to call out boot menu, you need to press <Esc>).

**Wait Time:** If there is no personal interference within this period of time, it will to enter default boot system.

**Default Boot:** It is used to select default boot image from drop down list.

**Main Password:** You can set a password if you want to restrict others from editing boot menu during boot process.

**Install Grub:** the mount position of boot loader. When you reinstall GRUB boot loader, which is overwritten by other boot loaders, you can select GRUB installation Position from drop-down list flexibly.



*Compared with LILO, GRUB is more powerful. It can not only read file system but also identify kernel image. This means you don't need to reinstall GRUB after upgrading kernel or changing configuration file.*