

**INSTALLATION GUIDE**

**KAHEL OS ENTERPRISE LINUX  
DESKTOP EDITION**

**( v1.0 )**

TEAM 8LIENS  
25 SEP 2009

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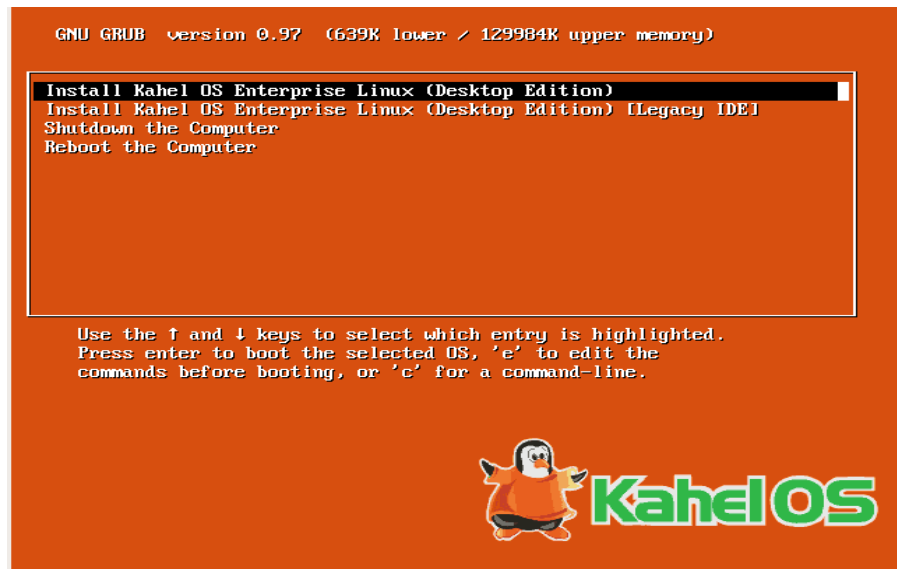
# Kahel OS Enterprise Linux Desktop Edition Installation Guide

## MINIMUM SYSTEM REQUIREMENTS

- Kahel OS Enterprise Linux (desktop Edition) Installation Media (Download at <http://www.kahelos.com>)
- An i686-based or x86-64 computer
- At least Intel Pentium Pro, Intel Pentium 3 or AMD Athlon/Duron.
  - Note that AMD K6, Transmeta Crusoe, CyrixIII, and VIA-C3 are NOT supported.
- ATI, Nvidia or Intel graphics cards recommended for desktop effects
- At least 256 MB RAM
- 5 GB Free Disk Space

## SETUP AND INSTALLATION MODE

- I. Insert the CD installer in your CD drive. You will see this screen on boot up. For desktops on SATA, select the first option. Otherwise, select the second.



For more info on SATA hard drives, go to [http://en.wikipedia.org/wiki/Serial\\_ATA](http://en.wikipedia.org/wiki/Serial_ATA). On IDEs, [http://en.wikipedia.org/wiki/Parallel\\_ATA](http://en.wikipedia.org/wiki/Parallel_ATA).

- II. Selecting the 1<sup>st</sup> or 2<sup>nd</sup> Option will boot up the installer as shown in this screenshot:

```
> http://www.kahelos.org
> Copyright 2009 Meric Mara
> Copyright 2009 Joel Bryan Juliano
> Distributed under the GNU General Public License (GPL)

-----
:: Starting Udev Daemon [DONE]
:: Triggering Udev uevents [DONE]
:: Loading Modules [DONE]
:: Loading standard ACPI modules [DONE]
:: Waiting for Udev uevents to be processed [DONE]
> Udev uevent processing time: 321ms
:: Bringing up loopback interface [DONE]
:: Mounting Root Read-only [DONE]
:: Checking Filesystems [DONE]
:: Mounting Local Filesystems [DONE]
:: Activating Swap [DONE]
:: Configuring System Clock [DONE]
:: Initializing Random Seed [DONE]
:: Removing Leftover Files [DONE]
:: Setting Hostname: kahelserver [DONE]
:: Updating Module Dependencies [DONE]
:: Setting Locale: en_US.UTF-8 [DONE]
:: Setting Consoles to UTF-8 mode [BUSY]
```

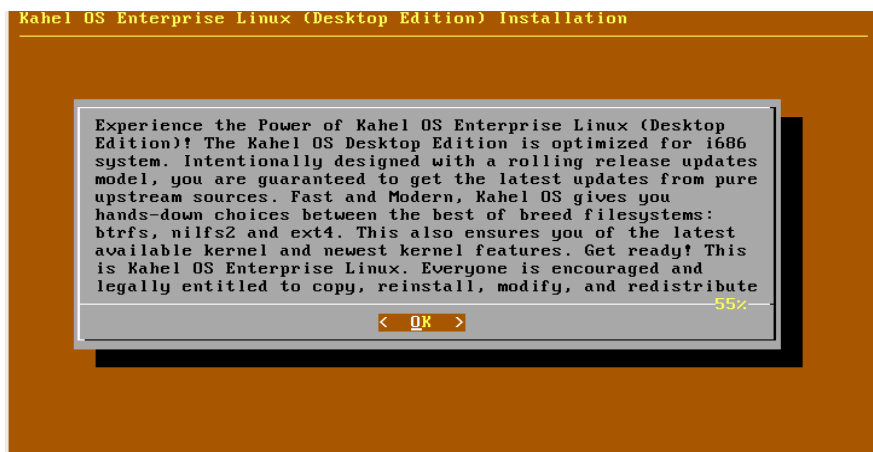
- III. When the loading of modules is done, you will be prompted for a login. There are two login accounts: "root" and "kahel". For full administrative access and ability to edit configurations as needed, you have to login as "root". For normal user privileges, you can use "kahel" as login.

```
Kahel OS Enterprise Linux (Desktop Edition) 2.6.30-ARCH (tty1)
Login as 'root' or 'kahel' without password.
To setup & install the system, login as 'root'.
kahel login: root_
```

- IV. After logging in as "root", you will see the welcome message below. To start installation proper, type "/kahel/setup".

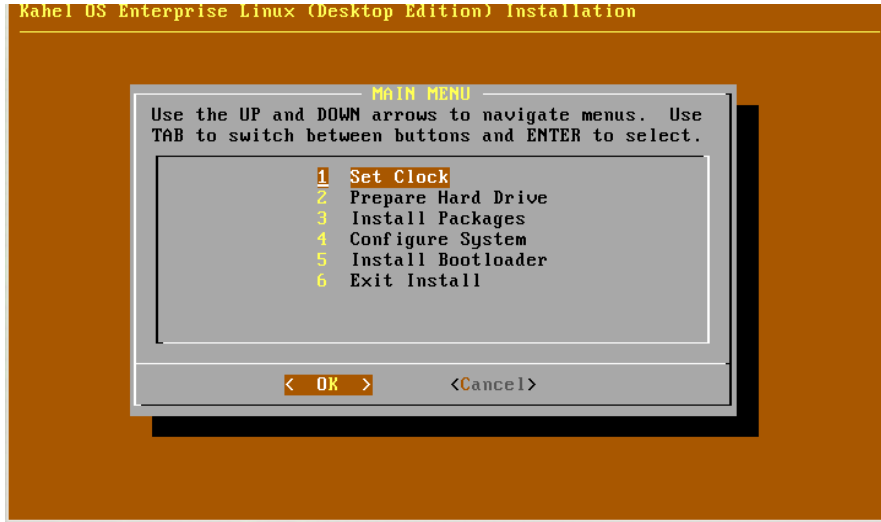
```
Kahel OS Enterprise Linux (Desktop Edition) 2.6.30-ARCH (tty1)
Login as 'root' or 'kahel' without password.
To setup & install the system, login as 'root'.
kahel login: root
*****
* Welcome to Kahel OS Enterprise Linux (Desktop Edition) *
* *
* To begin installation, run /kahel/setup *
* *
* i18n: Use the 'km' utility to change your keyboard layout *
* and console font. *
* *
*****
05:08 root ~ $ /kahel/setup_
```

- V. You will see the KahelOS introductory page upon execution of the setup command. Click **OK** to proceed with the installation process. You will then be directed to the Main Menu.

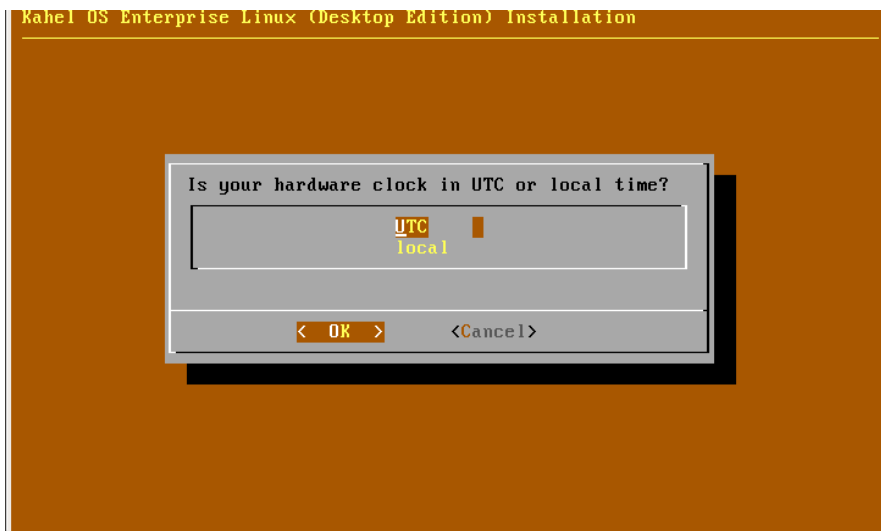


## MAIN MENU OPTIONS

- I. **Set Clock.** You can configure system time settings through (a) UTC or Coordinated Universal Time, or (b) local or defining your own time setup.



- (a) **UTC** or Coordinated Universal Time



1. **Select** region/continent by typing the number corresponding to your location. Option 11 will let direct you to set your own default time and time zone.

```

< OK > <Cancel>

Please identify a location so that time zone rules can be set correctly.
Please select a continent or ocean.
1) Africa
2) Americas
3) Antarctica
4) Arctic Ocean
5) Asia
6) Atlantic Ocean
7) Australia
8) Europe
9) Indian Ocean
10) Pacific Ocean
11) none - I want to specify the time zone using the Posix TZ format.
> 5_

```

2. Next, type in the appropriate number for your country.

```

7) Australia
8) Europe
9) Indian Ocean
10) Pacific Ocean
11) none - I want to specify the time zone using the Posix TZ format.
> 5
Please select a country.
1) Afghanistan      18) Israel           35) Palestine
2) Armenia           19) Japan            36) Philippines
3) Azerbaijan       20) Jordan           37) Qatar
4) Bahrain           21) Kazakhstan      38) Russia
5) Bangladesh       22) Korea (North)   39) Saudi Arabia
6) Bhutan            23) Korea (South)   40) Singapore
7) Brunei            24) Kuwait           41) Sri Lanka
8) Cambodia          25) Kyrgyzstan      42) Syria
9) China              26) Laos             43) Taiwan
10) Cyprus            27) Lebanon          44) Tajikistan
11) East Timor       28) Macau            45) Thailand
12) Georgia          29) Malaysia         46) Turkmenistan
13) Hong Kong        30) Mongolia         47) United Arab Emirates
14) India             31) Myanmar (Burma)  48) Uzbekistan
15) Indonesia        32) Nepal            49) Vietnam
16) Iran              33) Oman             50) Yemen
17) Iraq              34) Pakistan
> 36_

```

3. The next screen will ask you to confirm the selections you made. Enter 1 (Yes) to save your selections or 2 (No) to go back to selecting your region/continent and country.

```

6) Bhutan            23) Korea (South)   40) Singapore
7) Brunei            24) Kuwait           41) Sri Lanka
8) Cambodia          25) Kyrgyzstan      42) Syria
9) China              26) Laos             43) Taiwan
10) Cyprus            27) Lebanon          44) Tajikistan
11) East Timor       28) Macau            45) Thailand
12) Georgia          29) Malaysia         46) Turkmenistan
13) Hong Kong        30) Mongolia         47) United Arab Emirates
14) India             31) Myanmar (Burma)  48) Uzbekistan
15) Indonesia        32) Nepal            49) Vietnam
16) Iran              33) Oman             50) Yemen
17) Iraq              34) Pakistan
> 36

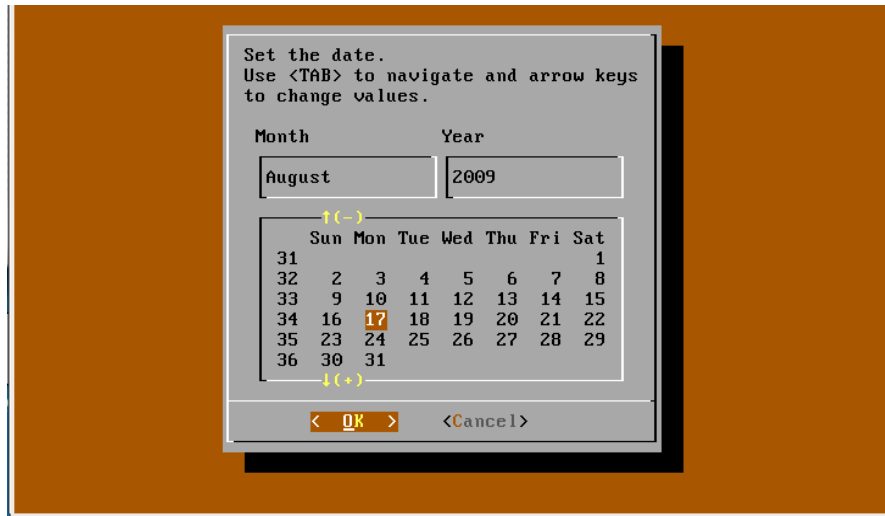
The following information has been given:

      Philippines

Therefore TZ='Asia/Manila' will be used.
Local time is now:   Mon Aug 17 03:09:19 PHT 2009.
Universal Time is now: Sun Aug 16 19:09:19 UTC 2009.
Is the above information OK?
1) Yes
2) No
> 1_

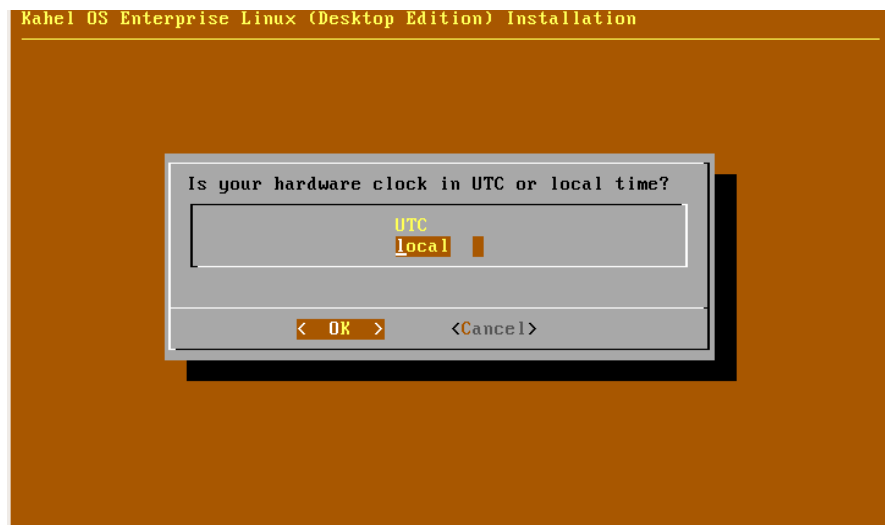
```

4. After setting up your time zone, the next screen will let you set your date values. Choose **OK** after selecting your current date settings.



5. After confirming your date settings, the next screen will let you set your time values. Choose **OK** after selecting your current time settings and to go back to the **Main Menu**.

**(b) Local Time**



1. Choosing **local** will show the screen below that will allow you to choose your region/continent. Enter the number corresponding to your region/continent.

```

Please identify a location so that time zone rules can be set correctly.
Please select a continent or ocean.
1) Africa
2) Americas
3) Antarctica
4) Arctic Ocean
5) Asia
6) Atlantic Ocean
7) Australia
8) Europe
9) Indian Ocean
10) Pacific Ocean
11) none - I want to specify the time zone using the Posix TZ format.
> 5_

```

2. After defining the country/region, you will be asked to select a country. Enter the corresponding number of the country.

```

7) Australia
8) Europe
9) Indian Ocean
10) Pacific Ocean
11) none - I want to specify the time zone using the Posix TZ format.
> 5
Please select a country.
1) Afghanistan      18) Israel           35) Palestine
2) Armenia           19) Japan            36) Philippines
3) Azerbaijan        20) Jordan           37) Qatar
4) Bahrain           21) Kazakhstan      38) Russia
5) Bangladesh        22) Korea (North)   39) Saudi Arabia
6) Bhutan            23) Korea (South)   40) Singapore
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16) Iran             33) Oman             50) Yemen
17) Iraq            34) Pakistan
> 36_

```

3. The next screen will ask you to confirm the selections you made. Enter 1 (Yes) to save your selection or 2 (No) to go back to selecting your region/continent and country.

```

6) Bhutan            23) Korea (South)   40) Singapore
7) Brunei            24) Kuwait           41) Sri Lanka
8) Cambodia          25) Kyrgyzstan      42) Syria
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10) Cyprus           27) Lebanon          44) Tajikistan
11) East Timor       28) Macau            45) Thailand
12) Georgia          29) Malaysia         46) Turkmenistan
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15) Indonesia        32) Nepal            49) Vietnam
16) Iran             33) Oman             50) Yemen
17) Iraq            34) Pakistan
> 36

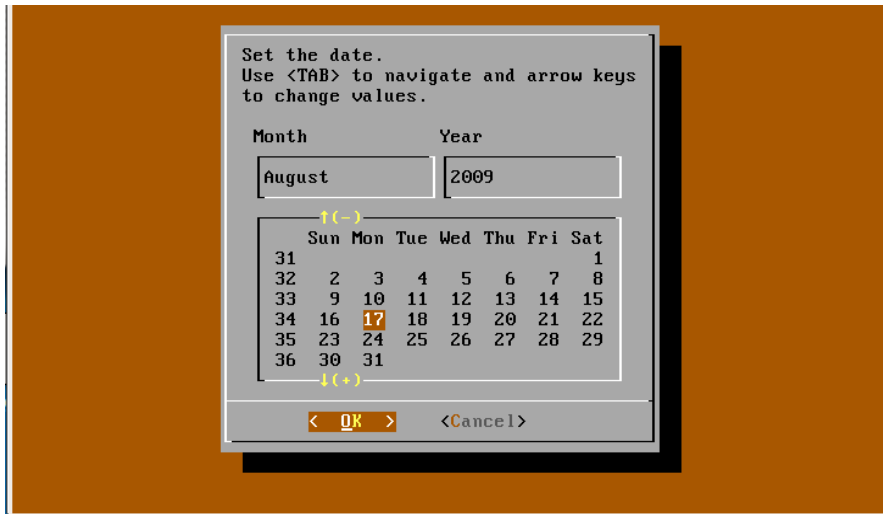
The following information has been given:

      Philippines

Therefore TZ='Asia/Manila' will be used.
Local time is now:      Mon Aug 17 03:09:19 PHT 2009.
Universal Time is now: Sun Aug 16 19:09:19 UTC 2009.
Is the above information OK?
1) Yes
2) No
> 1_

```

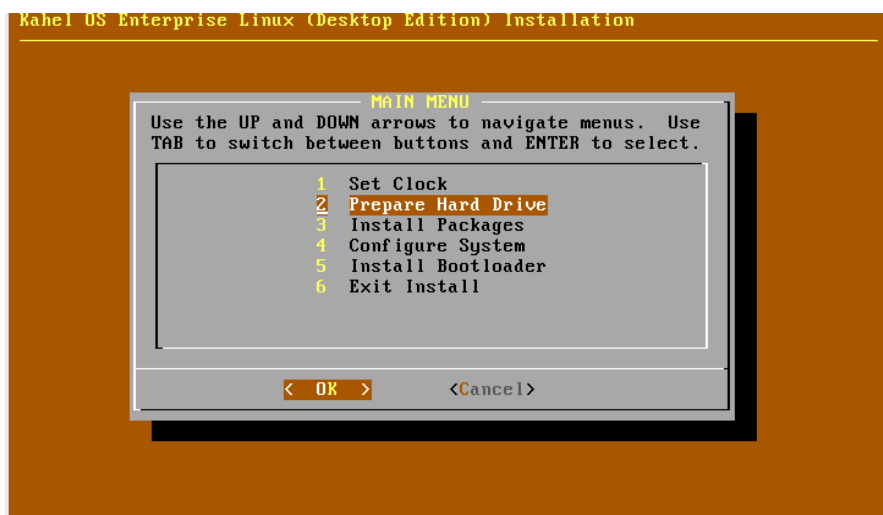
4. After setting up the time zone, next is the date values. Select **OK** to save your date values.



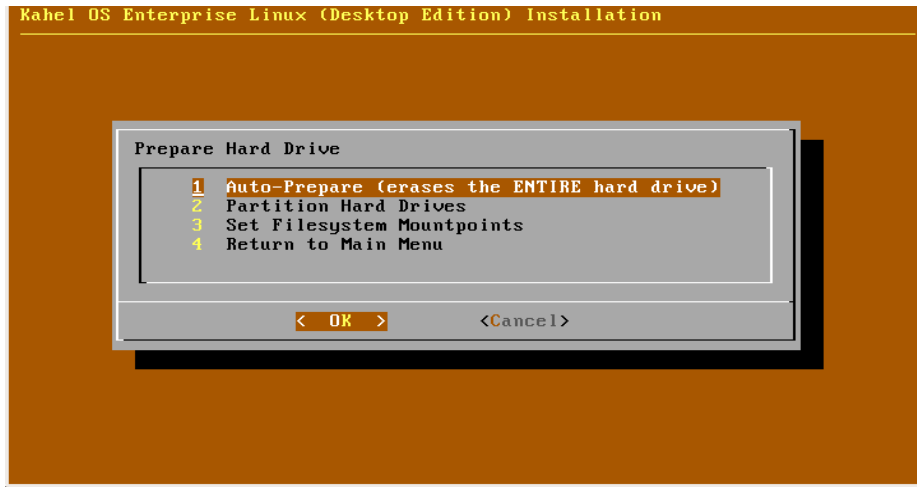
5. After setting the date values, next are the time values. Choose **OK** when done to go back to the **Main Menu**.



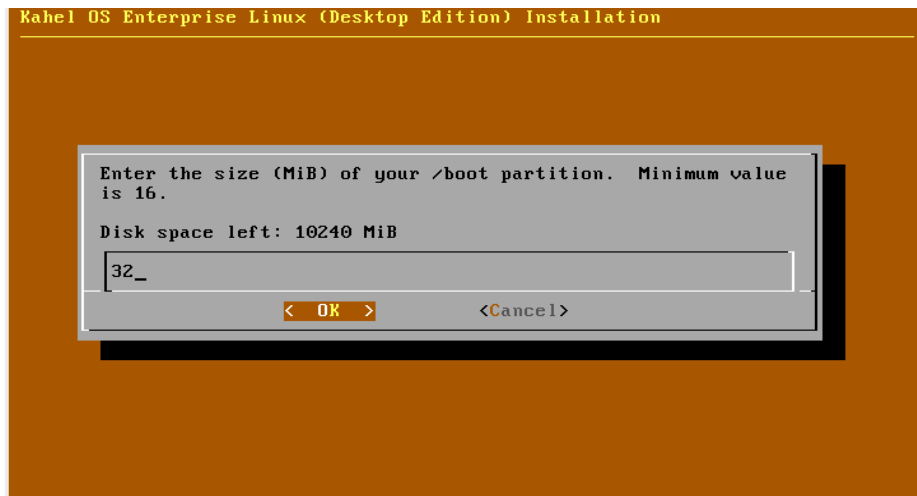
- II. **Prepare Hard Drive.** In Hard drive preparation, the partitions and the filesystem mountpoints are defined.



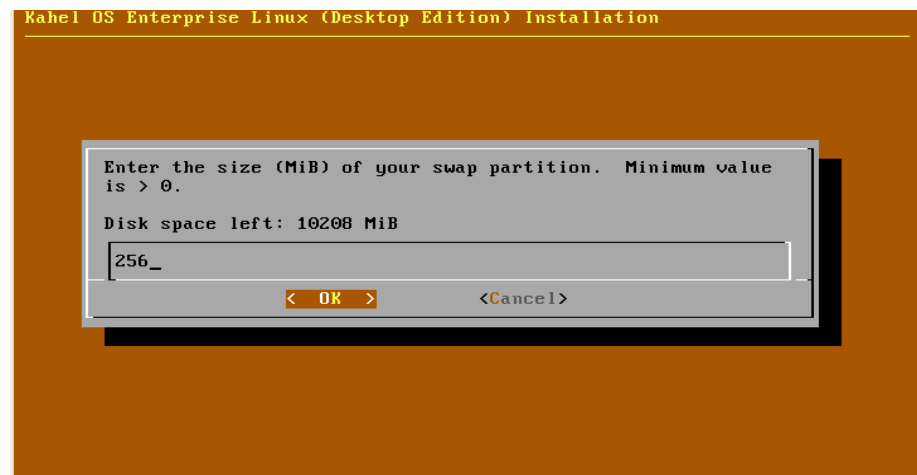
- a. After selecting **OK** in **Prepare Hard Drive**, you will see the following options (1) **Auto-Prepare**, (2) **Partition Hard Drives**, (3) **Set Filesystem Mountpoints**, and (4) **Return to Main Menu**.



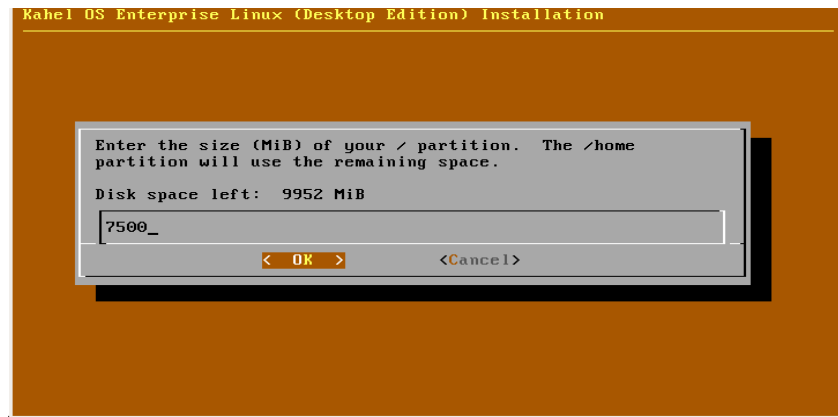
1. **Auto-Prepare.** This option will erase the ENTIRE hard drive and skips options 2 and 3 because autoprepare will already partition your hard drive (Option 2) and set mounting points for your filesystem (Option 3).
- (a) **Partitioning /boot.** In Kahel OS, the default **/boot** partition is **32MB**. You can enter other values then select **OK** to save it.



- (b) **Swap partition.** Default value is **256MB** but you can define your own. Then, select **OK** to save.



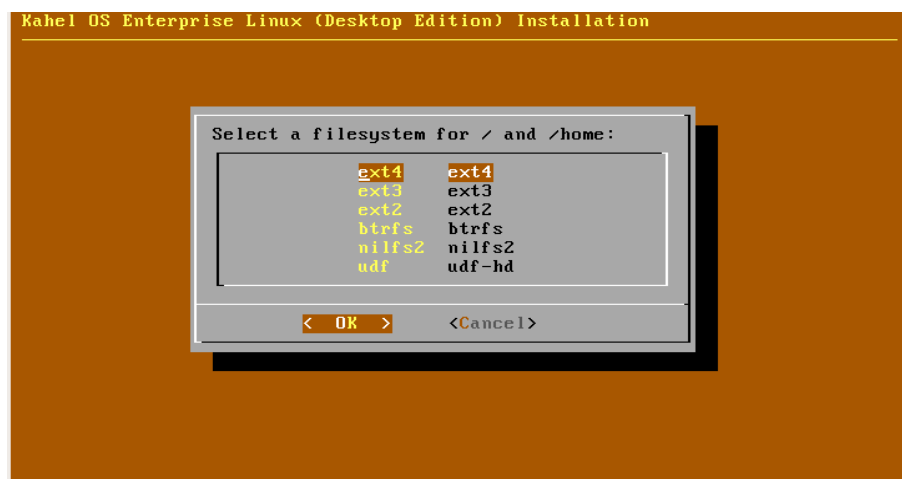
- (c) **Partitioning / or root directory.** Default value of **7500MB**. Enter other values as may be desired, then select **OK**.



- (d) **Partitioning /srv.** As prompted during the root partitioning, the remaining disk space shall be allocated to **/srv**. Select **<Yes>** to proceed with partitioning the remaining space to **/srv**. Else, select **<No>** to enter desired value and partition the remaining space as desired.



- (e) **Select filesystem for / and /srv.** There are six options you can choose for your filesystem: (1) **ext4**, (2) **ext3**, (3) **ext2**, (4) **btrfs**, (5) **nilfs2**, and, (6) **udf-hd**.



- (1) **Ext4** – You can use to large file system support for more info go to this link <http://en.wikipedia.org/wiki/Ext4> , this file system is recommended for production.
- (2) **Ext3** – allows in-place upgrades from the ext2 file system without having to back up and restore data for more info click the this link <http://en.wikipedia.org/wiki/Ext3>.
- (3) **Ext2** – for more info for this file format check this site <http://en.wikipedia.org/wiki/Ext2>
- (4) **Btrfs** – Claiming a “focus on fault tolerance, repair and easy administration” is said to be a next-generation filesystem. You can browse more on its features a t <http://en.wikipedia.org/wiki/Btrfs>
- (5) **Nilfs2** – Its offer minimal damage to file data and system consistency on hardware failure for more info check thi link <http://en.wikipedia.org/wiki/NILFS2>
- (6) **udf** - an operating-system-independent file system commonly used on DVD and other digital media UDF can also be used as a replacement for FAT32, without the limitations of FAT32.

Select **OK** after choosing what filesystem you wish to use.

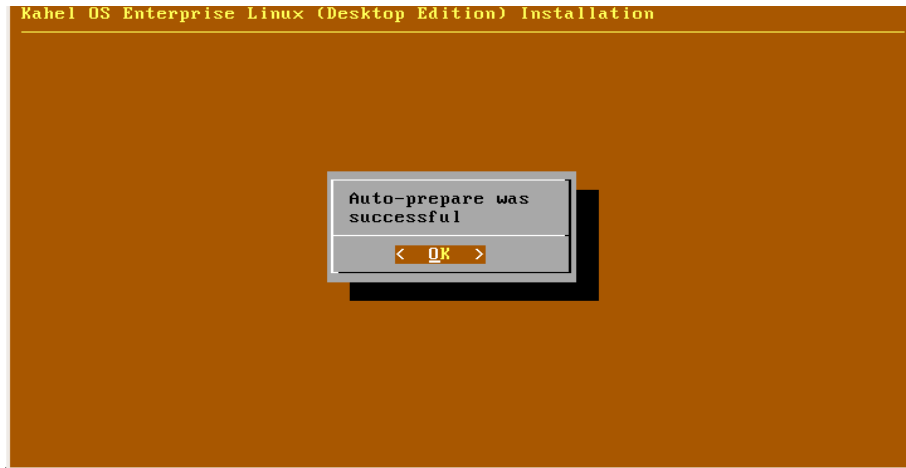
- (f) Next screen asks you to confirm the filesystem you selected. Select **YES** to proceed.



- (g) Another warning prompt will notify the user that the **/dev/sda** will be **COMPLETELY ERASED**. Select **<YES>** to proceed in formatting **/dev/sda**.

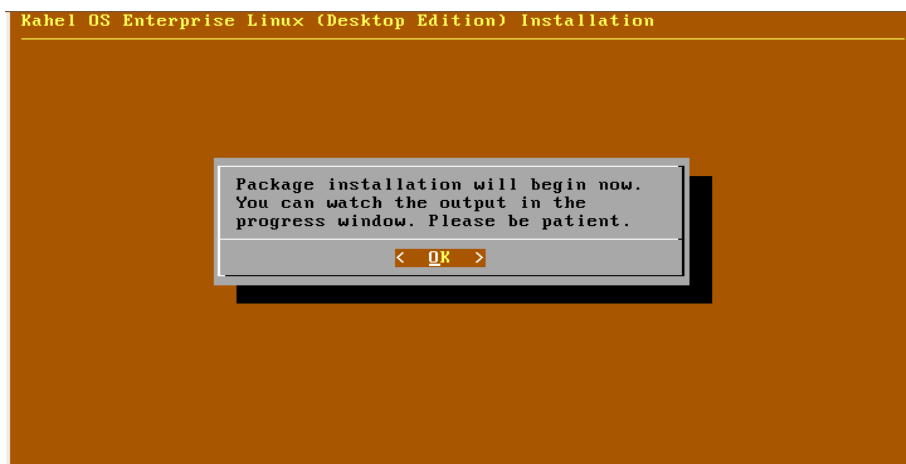
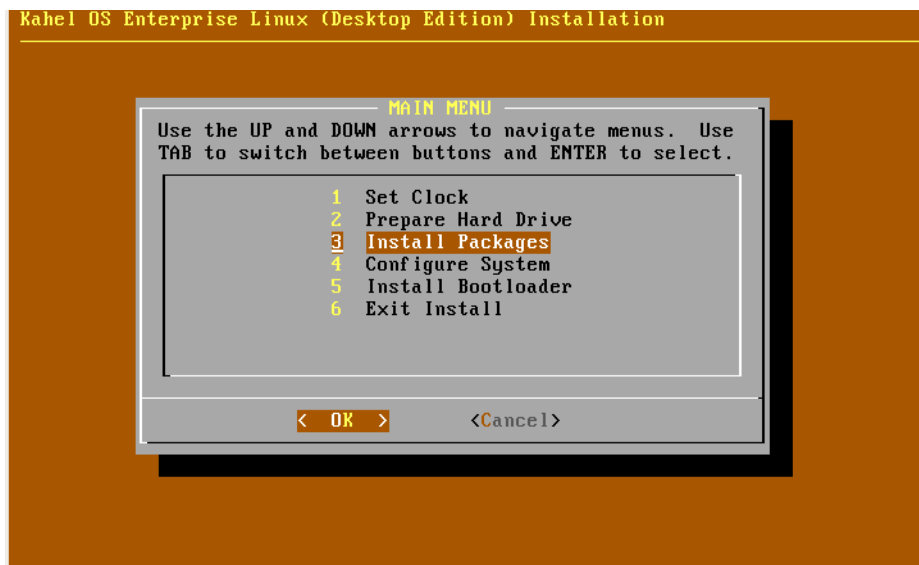


- (h) When the **Auto Prepare** is done the notification screen is prompted notify that if the procedure is succesful. Select **OK** to go back to the **Main Menu**.



### III. Installation of Kahel OS Enterprise Linux Packages

- a. Select **OK** to begin the installation of Kahel OS Enterprise Linux packages.



Kahel OS Enterprise Linux (Desktop Edition) Installation

Installing... Please Wait

```
xf86-video-nouveau-0.0.10_git20090612-2 xf86-video
xf86-video-r128-6.8.1-1 xf86-video-radeonhd-1.2.5-
xf86-video-rendition-4.2.2-1 xf86-video-s3-0.6.2-1
xf86-video-s3virge-1.10.3-1 xf86-video-savage-2.3.
xf86-video-siliconmotion-1.7.2-1 xf86-video-sis-0.
xf86-video-sisusb-0.9.2-1 xf86-video-tdfx-1.4.3-1
xf86-video-trident-1.3.3-1 xf86-video-tseng-1.2.2-
xf86-video-v4l-0.2.0-3 xf86-video-vmware-10.16.6-1
xf86-video-vooodoo-1.2.2-1
```

```
Total Download Size: 0.00 MB
Total Installed Size: 3109.84 MB
```

```
Proceed with installation? [Y/n]
checking package integrity...
```

-

Kahel OS Enterprise Linux (Desktop Edition) Installation

Installing... Please Wait

```
installing readline...
installing bash...
installing zlib...
installing binutils...
installing bzip2...
installing gcc-libs...
installing db...
installing cracklib...
installing pam...
installing shadow...
installing gmp...
installing libcap...
installing coreutils...
installing cpio...
installing device-mapper...
```

- b. The screen prompts complete installation of packages. Click **Continue** to confirm installation and return to the **Main Menu**.

Kahel OS Enterprise Linux (Desktop Edition) Installation

(-) Installation Complete

```
dash-0.5.5.1-2 expat-2.0.1-2 filesystem-2009.07-1
dbus-core-1.2.14-1 dcron-3.2-4 dhcpcd-5.0.7-1
dialog-1.1_20080819-2 diffutils-2.8.1-6 file-5.03
gawk-3.1.7-1 gdbm-1.8.3-6 gen-init-cpio-2.6.17-3
gettext-0.17-3 pcre-7.9-1 grep-2.5.4-3 perl-5.10
groff-1.20.1-2 hdparm-9.22-2 sed-4.2.1-1 libusb-
glib2-2.20.4-1 udev-145-1 net-tools-1.60-14 kbd-
sysvinit-2.86-5 initscripts-2009.08-1 iputils-200
jfsutils-1.1.14-1 kernel26-firmware-2.6.30-1
module-init-tools-3.10-1 klibc-1.5.15-3 klibc-ext
klibc-udev-141-3 klibc-module-init-tools-3.8-1
klibc-kbd-1.15.20080312-10 mkinitcpio-0.5.26-1
kernel26-2.6.30.5-1 less-436-1 xz-utils-4.999.8be
openssl-0.9.8k-4 libarchive-2.7.1-1 libfetch-2.25
```

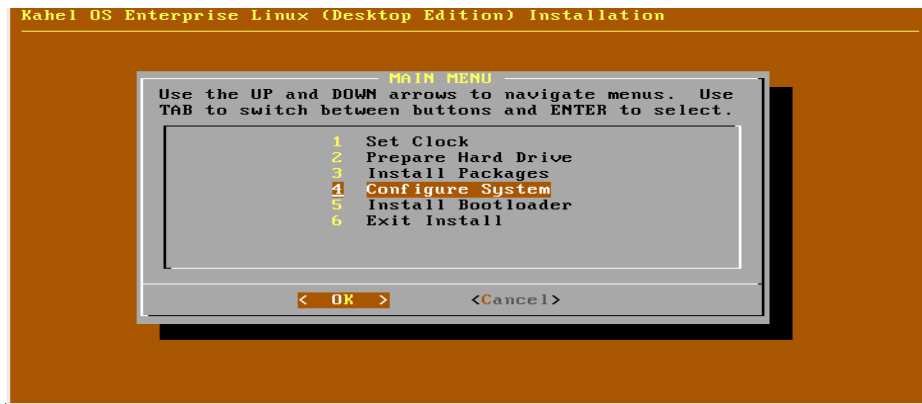
(+)

<Continue>

3%

**IV. Configure System.** In this option you will begin configuration of needed and available system settings and resources.

Select **OK** to proceed.

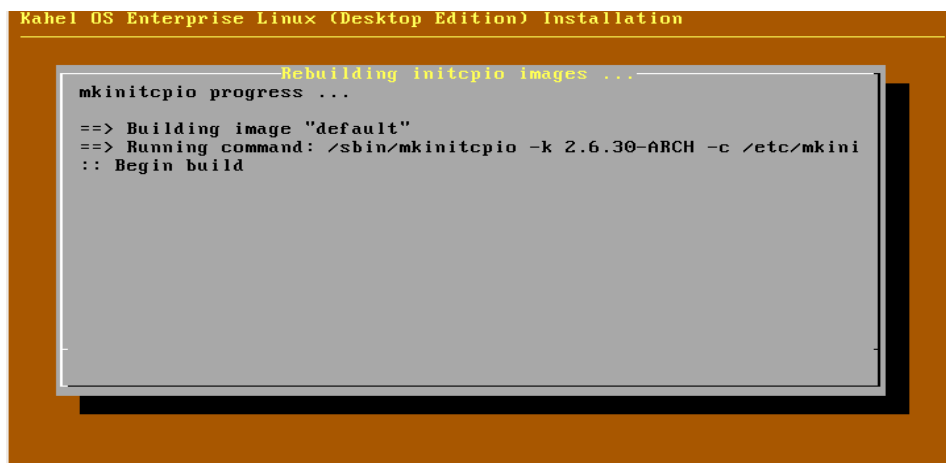


a. Next screen shows the list of configurations that you can setup.

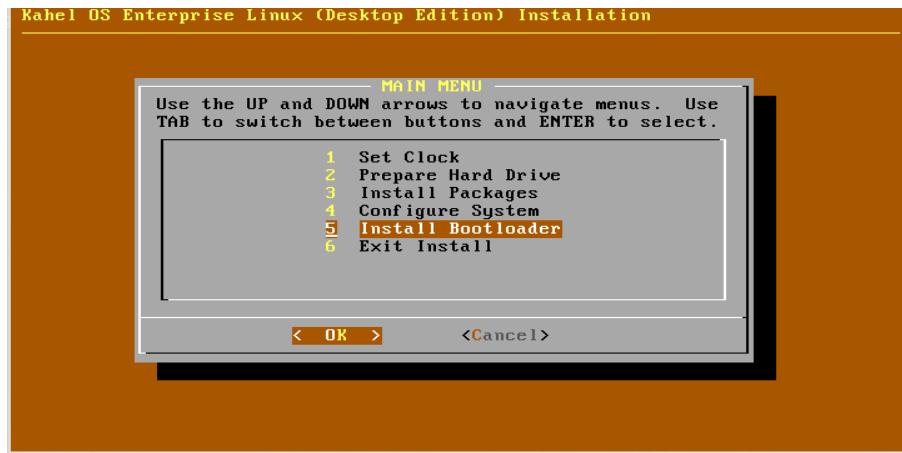


1. **Hostname.** This is a unique name for your computer or workstation.
2. **Add – Admins.** This is where you add users with administrator privileges.
3. **Add – User.** This is where you add users with normal privileges.
4. **Root – Password.** This is where you set up your root password.

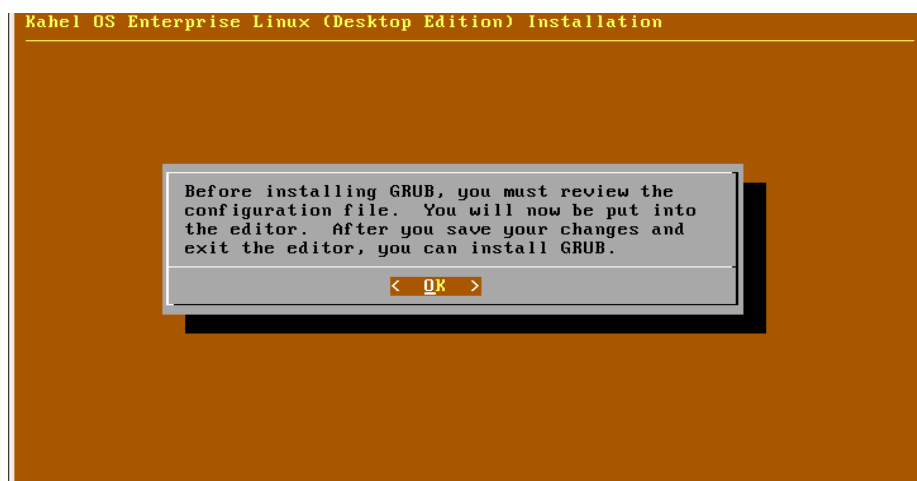
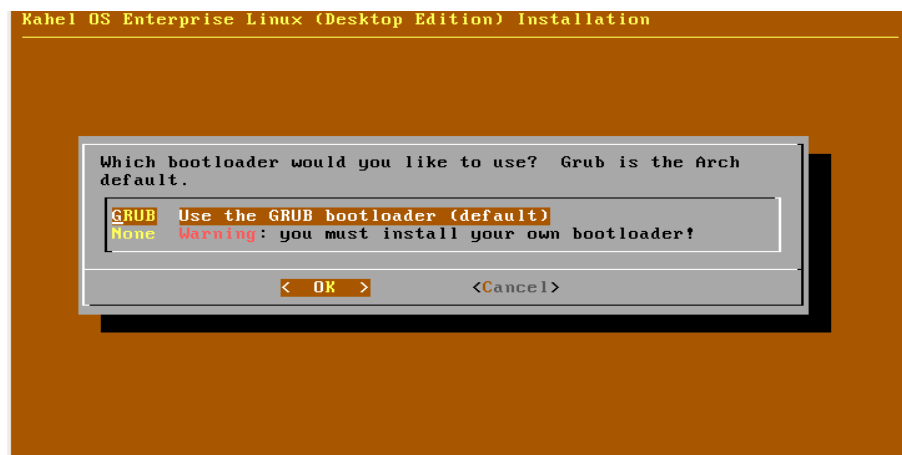
Select **Return** to save the configuration and **OK** to go back to the **Main Menu**.



V. **Installing Bootloader.** This is to give you an option of what application to use to boot Kahel OS. Select OK to proceed.



a. Included in this package is **Grub**. If you want another bootloader, you need to manually install it. Choose **GRUB**, then select **OK** to proceed.



b. Selecting your text editor is the next step. Choose **OK** after making your selection.

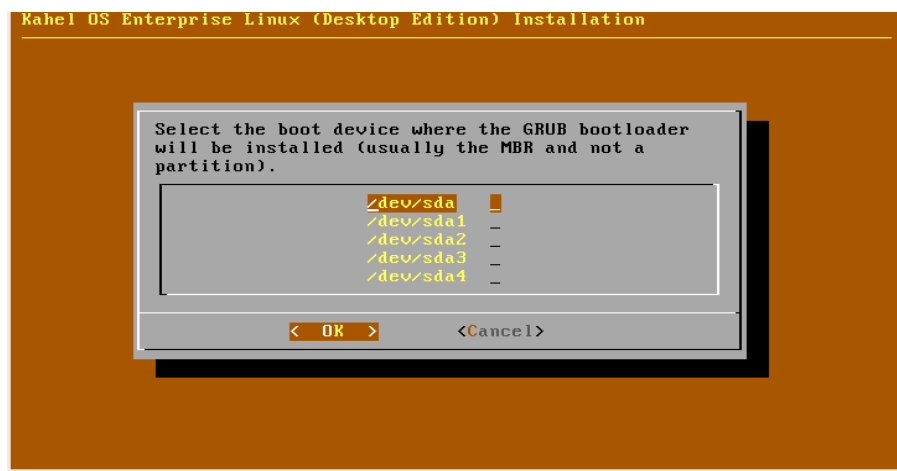
In the editor, you need to configure where your system will boot. If you will be using a USB Flash Drive, you have to change the drive mappings manually by changing 'root (hd1,0)' to 'root (hd0,0)'

```
GNU nano 2.0.9      File: /mnt/boot/grub/menu.lst
# each is implicitly numbered from 0 in the order of appearance below
#
# TIP: If you want a 1024x768 framebuffer, add "vga=773" to your kernel line.
#-
# (0) Arch Linux
title Arch Linux [ /boot/vmlinuz26 ]
root (hd0,0)
kernel /vmlinuz26 root=/dev/hda3 ro
initrd /kernel26.img

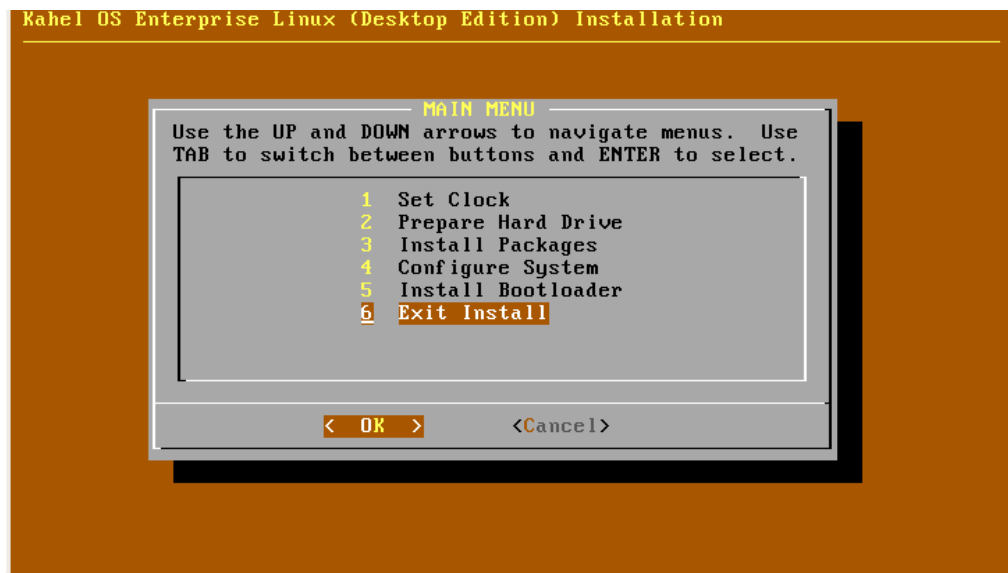
# (1) Windows
#title Windows
#rootnoverify (hd0,0)
#makeactive
#chainloader +1

^G Get Help  ^O WriteOut  ^R Read File  ^V Prev Page  ^K Cut Text   ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^U Next Page  ^U UnCut Text ^T To Spell
```

c. Select your Grub bootloader mounting point.



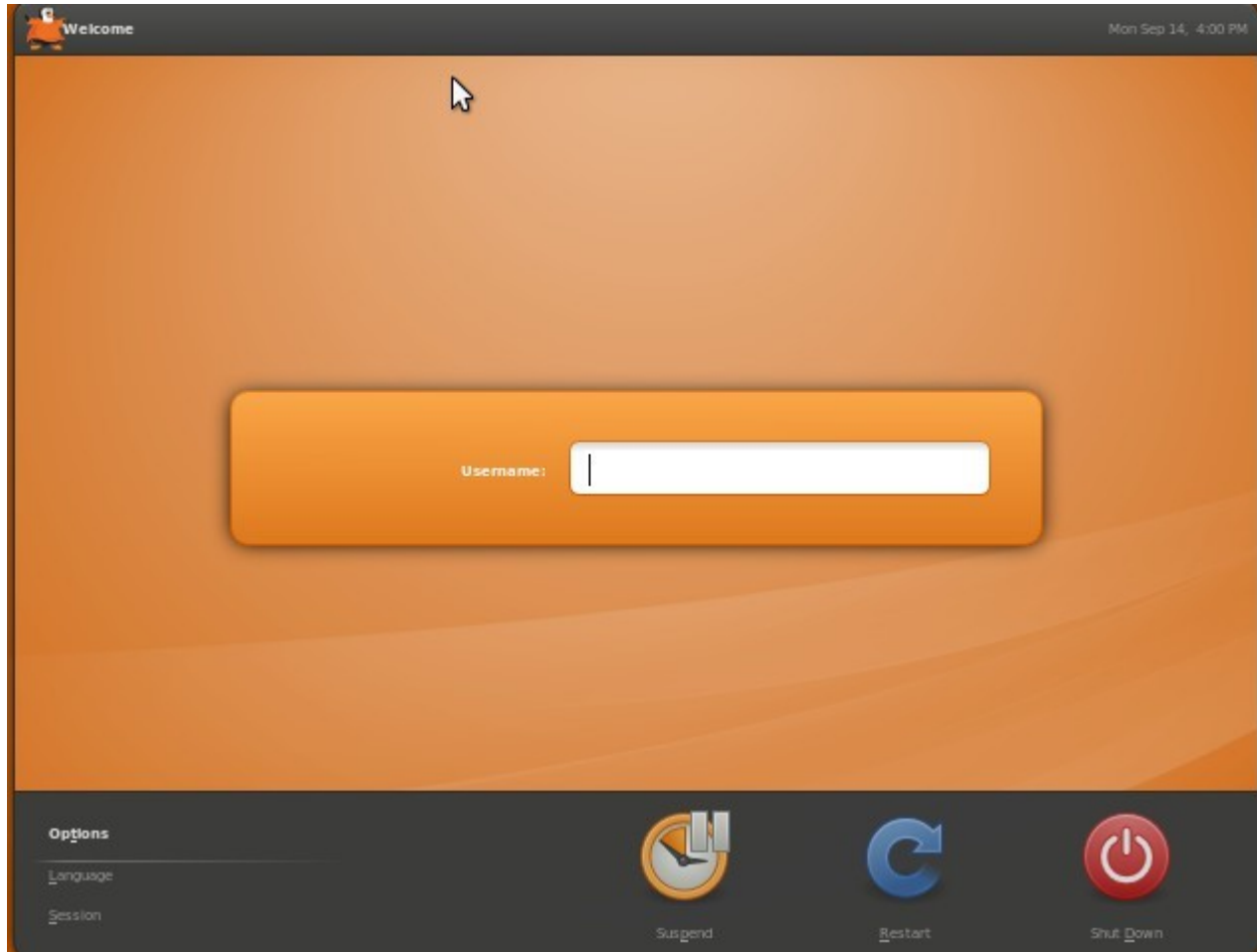
d. When Grub bootloader is done, the next window prompts for successful installation. Select **OK** to go back to the **Main Menu**. Choose **Exit install** on the **Main Menu** and select **OK**.



e. Type "reboot" on the terminal to restart the system.

## SUCCESSFUL INSTALLATION

When your Kahel Desktop starts up, you will see this login screen you can now login :



## HELP AND SUPPORT

For any suggestions or comments regarding this documentation, please email us at [feedback@8layertech.com](mailto:feedback@8layertech.com).

If you need technical support with regard Kahel OS, email us at [support@8layertech.com](mailto:support@8layertech.com).

Be in the Kahel loop!

- Kahel OS Website <http://www.kahelos.org/>
- Bugs, Fixes and Feature Requests <http://www.kahelos.org/issue/>
- Forum and Discussion <http://www.kahelos.org/forum/>
- Mailing List <http://groups.google.com/group/kahel/>