

CentOS 5 Installation From DVD

Version: 0.7
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Prepared by Adiguna

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Goal:

Install CentOS 5 from DVD with the following specifications (requirements):

- Hardware specification:
 - 1GB RAM
 - 20GB harddisk
 - File System Specification:
 - /boot 256MB ext3
 - /swap 1GB
 - / the rest of the available space
 - Update the packages to the latest level.
-

Assumption:

- You have CentOS 5 DVD available
-

Installation Process:

1. Boot From DVD.

Put CentOS 5 DVD into DVD drive then reboot the machine. You may have to change the boot sequence so it will boot from DVD.

In my system, I have to press 'F2' when the system is booting. You may have a different key to enter.

2. Grub Menu.

After the machine reboot from DVD, you will be greeted by Grub Menu:



Press <ENTER> to continue.

3. CD Found Dialog.



The system found the DVD and asking whether we want to test the media.
Since I know the media is good then I will skip this offer.
Click <Skip> to continue.

4. CentOS Welcome Dialog.

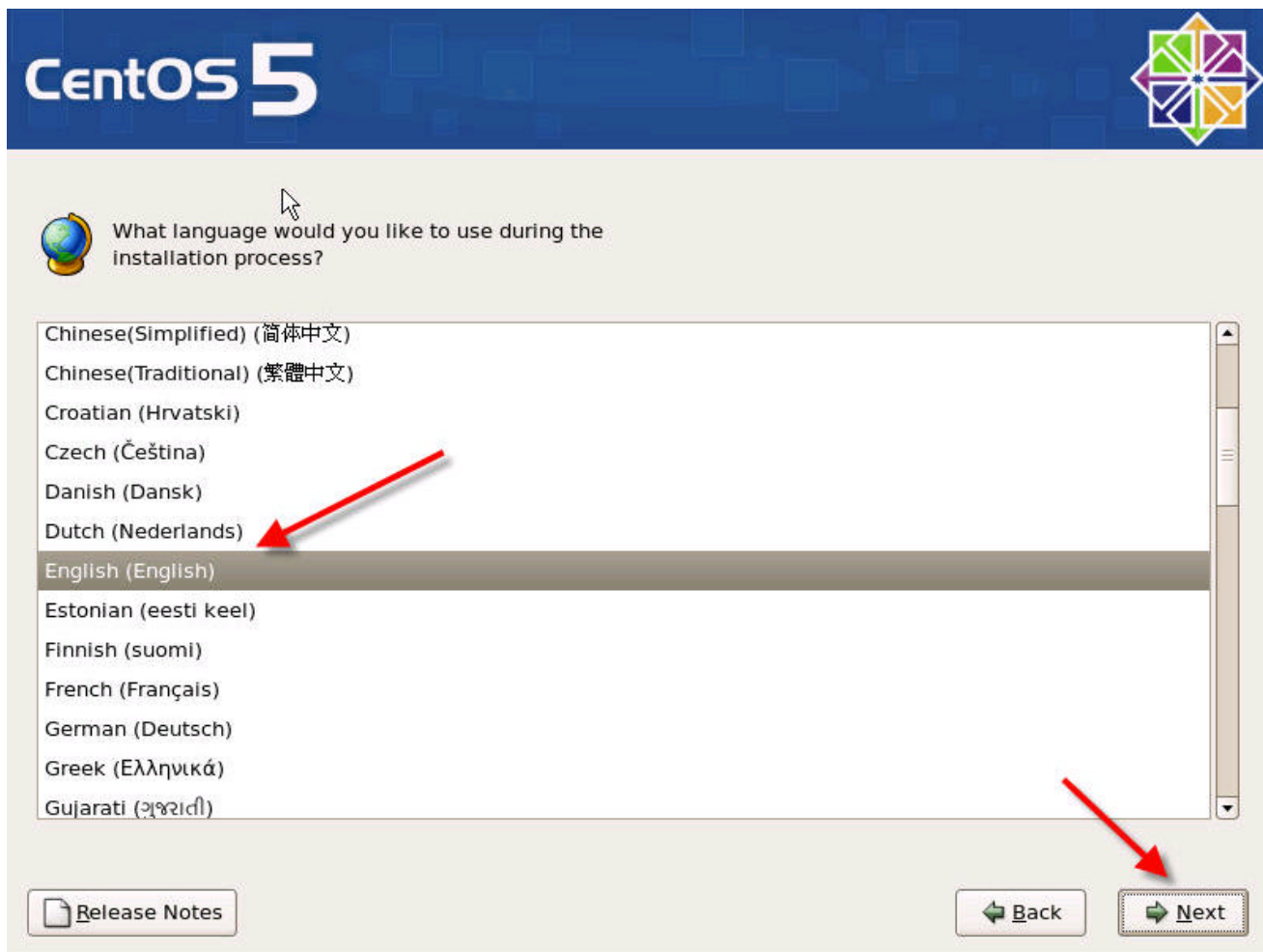
We are ready to start with the installation of CentOS 5.



Click <Next> to continue.

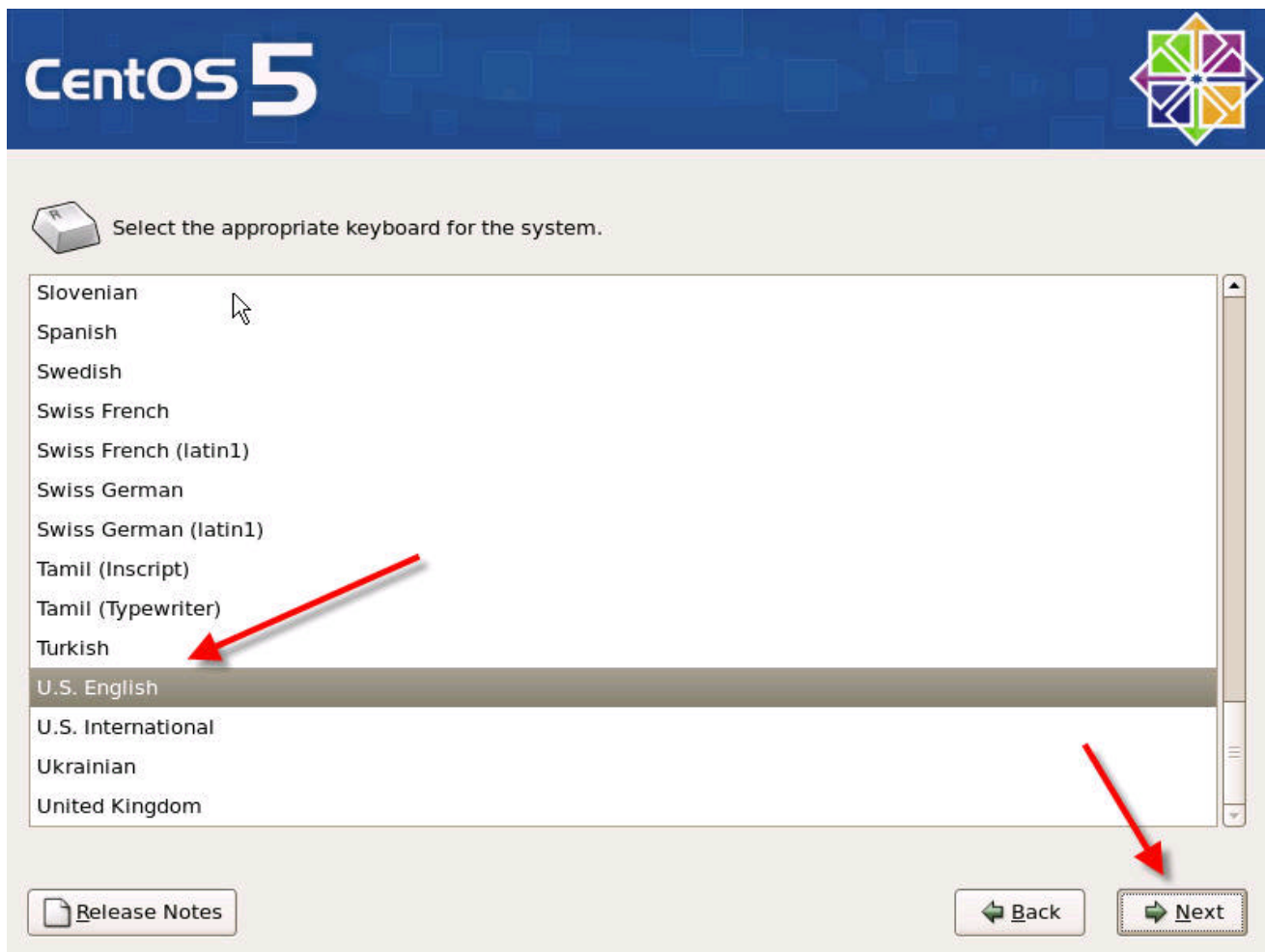
5. Select Language.

Select the language to <English> and click <Next> to continue.



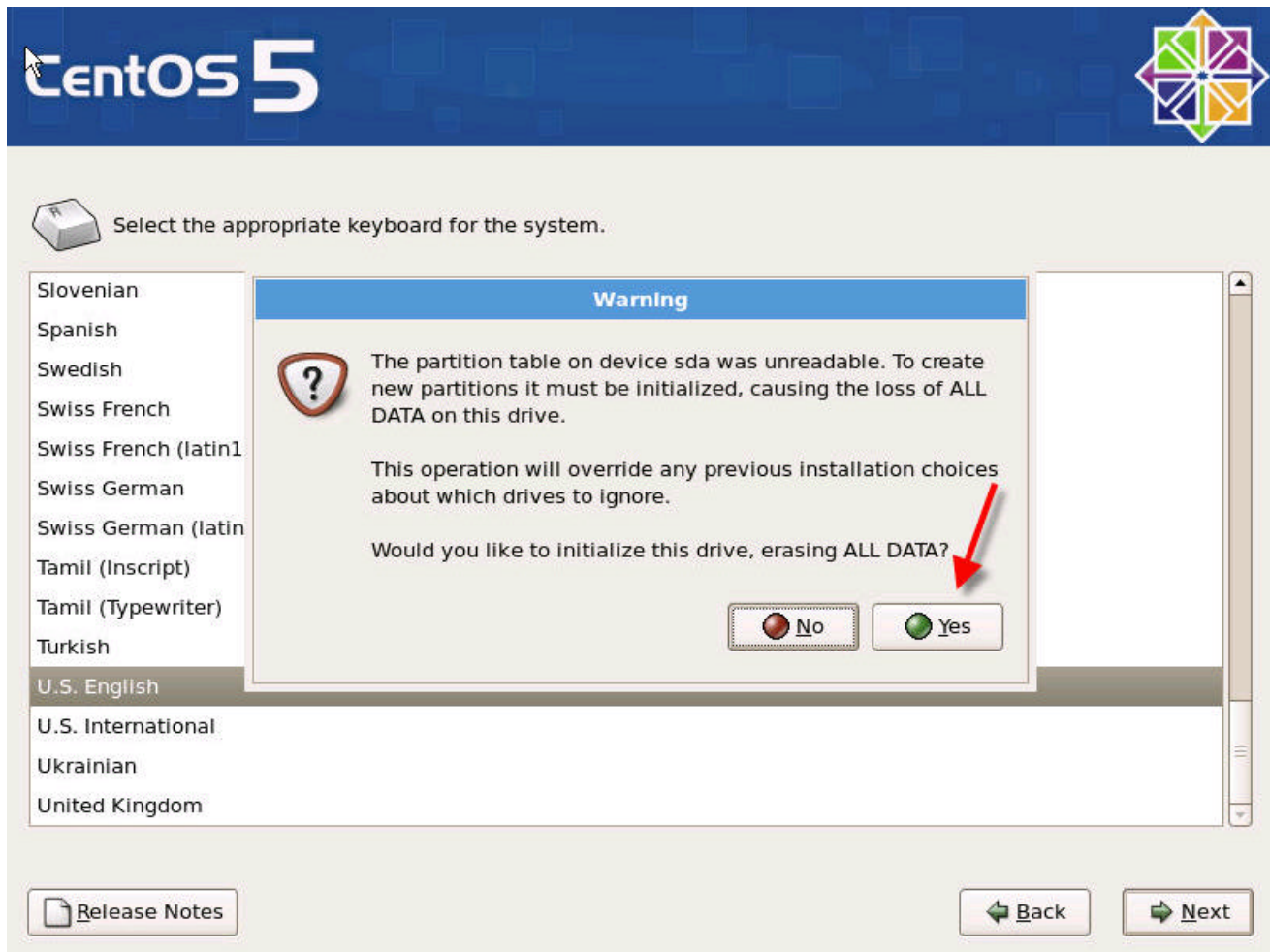
6. Select Keyboard Type.

Select keyboard to <U.S. English> and click <Next> to continue.



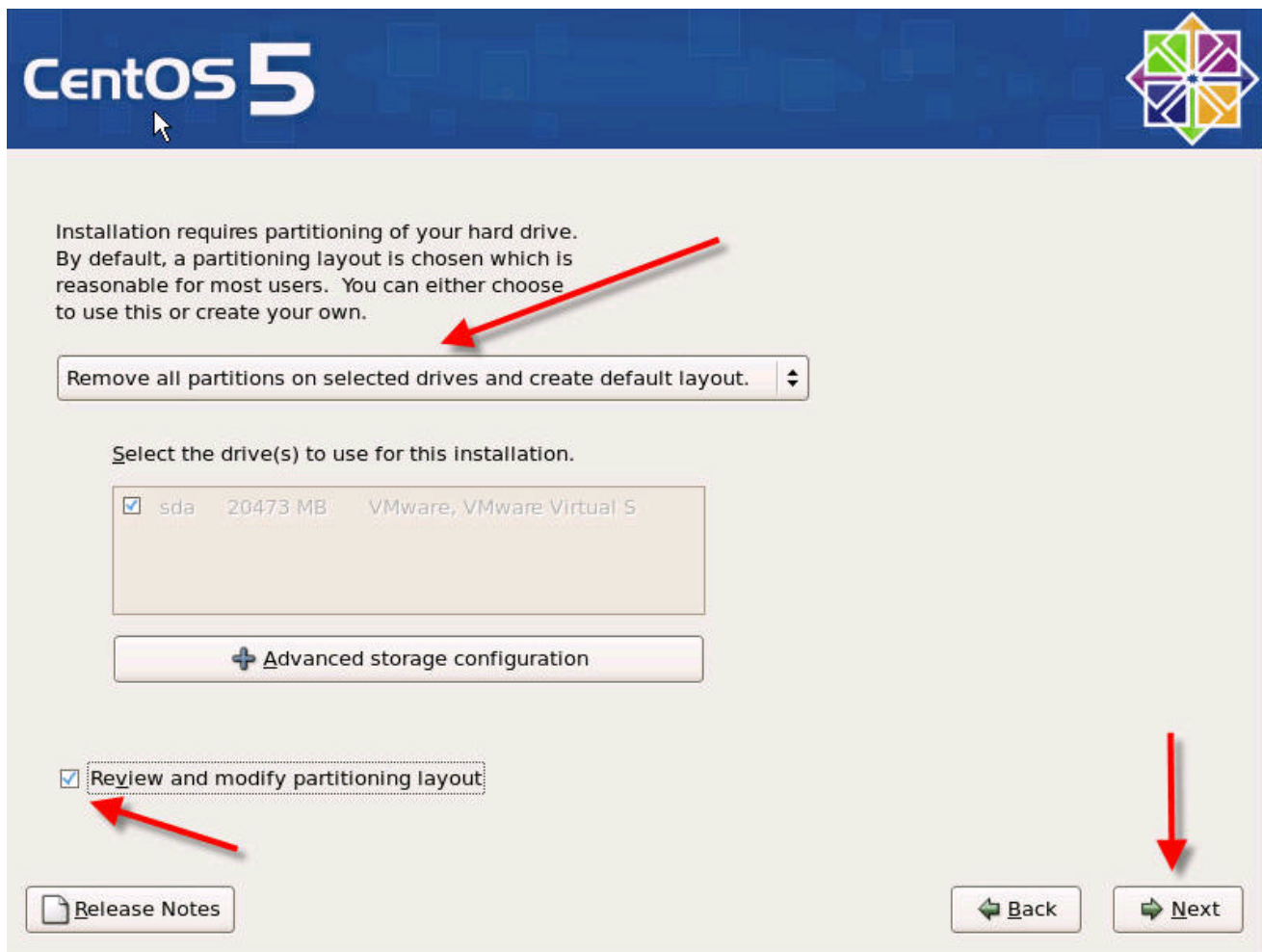
7. Disk Drive Warning.

Since the disk is new so there will be a warning whether we want to initialize and install in this disk. Click <Yes> to continue.



8. New Partition Dialog.

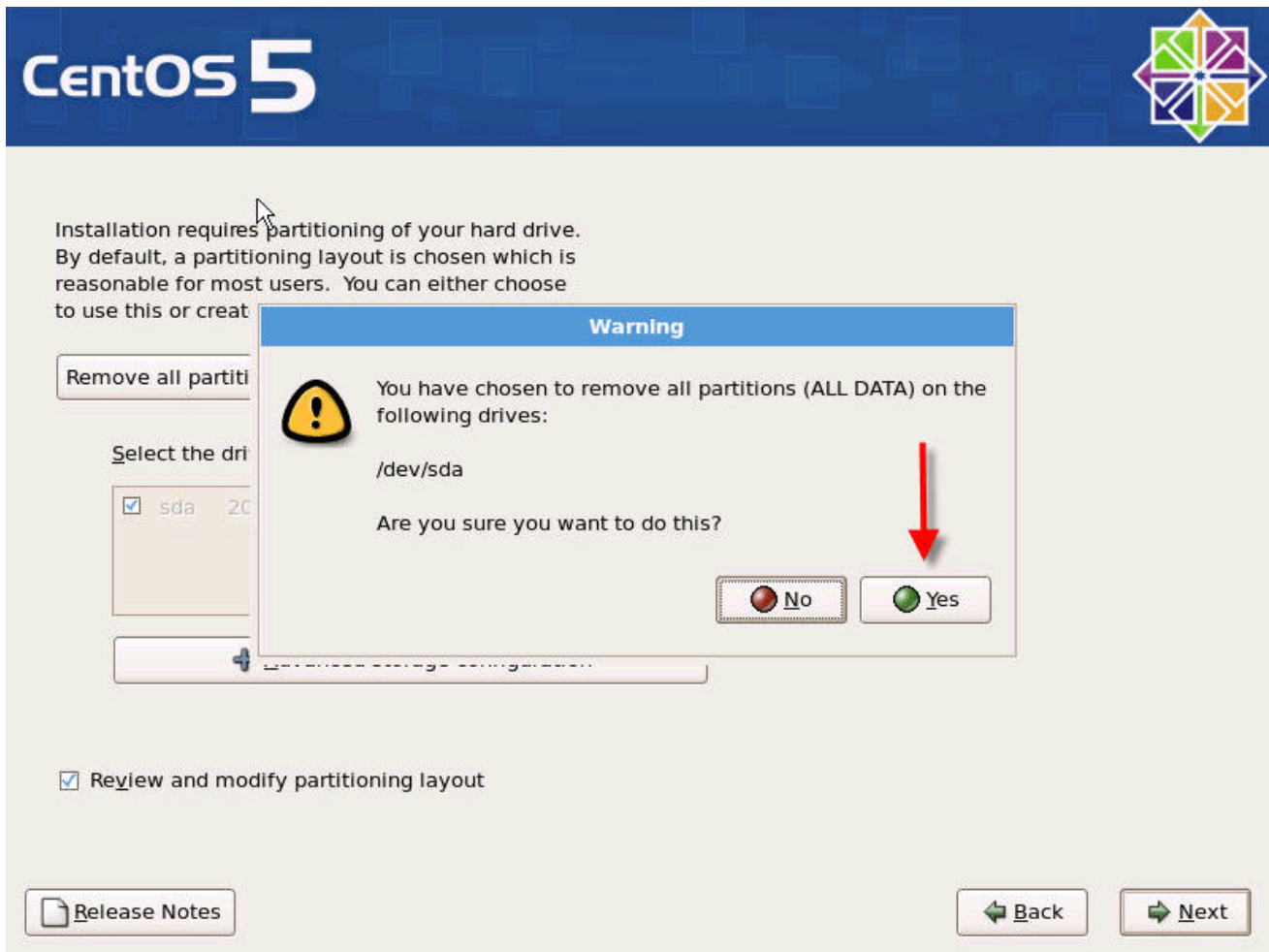
Select 'Remove all partitions on selected drives and create default layouts' and also check 'Review and modify partitioning layout' since we want to specify our own file system settings.



Click <Next> to continue.

9. Warning Remove All Partitions Dialog.

Because this is a new system so we should not be bothered with this warning.

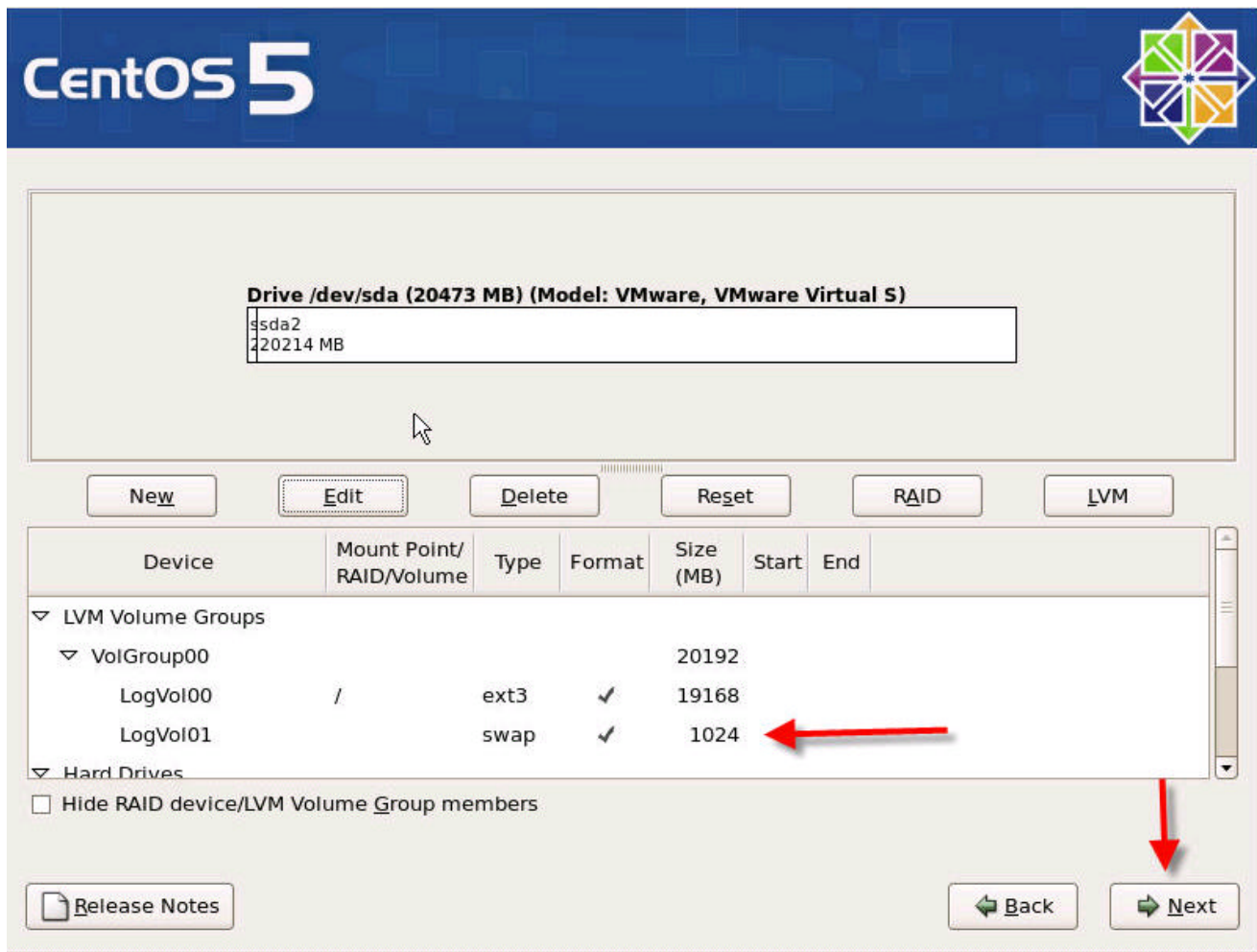


Click <Yes> to continue.

10. Partition Specification Dialog.

Set the partition table as follows:



- /boot 256MB
- /swap 1024MB
- / the rest of the available space



Note: The changes in the '/boot' partition didn't show up in the 'screen capture'.

11. GRUB Boot Loader dialog.

There will be no changes needed since we will install GRUB boot loader in the first disk, '/dev/sda'. If you have IDE disk, you may have '/dev/hda' instead.



☒ The GRUB boot loader will be installed on /dev/sda.

☐ No boot loader will be installed.

You can configure the boot loader to boot other operating systems. It will allow you to select an operating system to boot from the list. To add additional operating systems, which are not automatically detected, click 'Add.' To change the operating system booted by default, select 'Default' by the desired operating system.

Default	Label	Device
<input checked="" type="checkbox"/>	CentOS	/dev/VolGroup00/LogVol00

[Add](#)
[Edit](#)
[Delete](#)

A boot loader password prevents users from changing options passed to the kernel. For greater system security, it is recommended that you set a password.

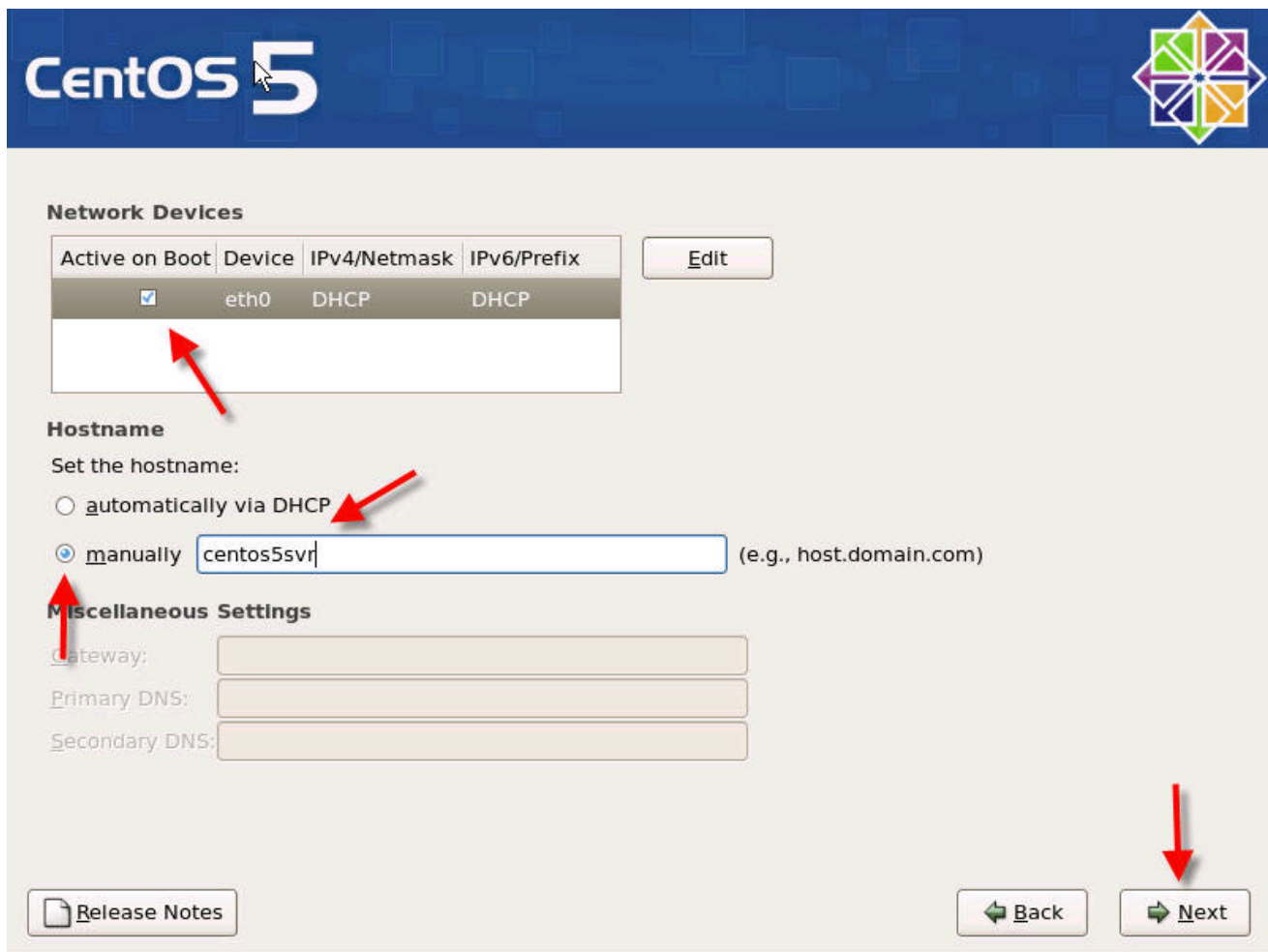
☐ Use a boot loader password [Change password](#)

☐ Configure advanced boot loader options

[Release Notes](#) [Back](#) [Next](#)

Click <Next> to continue.

12. Network Device Dialog.



The image shows the CentOS 5 Network Configuration window. At the top, there is a header with the CentOS 5 logo and a decorative icon. Below the header, the window is divided into several sections. The 'Network Devices' section contains a table with columns: 'Active on Boot', 'Device', 'IPv4/Netmask', and 'IPv6/Prefix'. The first row shows 'eth0' with 'DHCP' for both IPv4 and IPv6. A red arrow points to the 'eth0' device name. Below this table is an 'Edit' button. The 'Hostname' section has the text 'Set the hostname:' followed by two radio buttons: 'automatically via DHCP' and 'manually'. The 'manually' option is selected, and a text box next to it contains 'centos5svr'. A red arrow points to the 'manually' radio button. Below the hostname section is the 'Miscellaneous Settings' section, which includes fields for 'Gateway:', 'Primary DNS:', and 'Secondary DNS:'. At the bottom of the window, there are three buttons: 'Release Notes', 'Back', and 'Next'. A red arrow points to the 'Next' button.

Active on Boot	Device	IPv4/Netmask	IPv6/Prefix
<input checked="" type="checkbox"/>	eth0	DHCP	DHCP

Hostname
Set the hostname:

☐ automatically via DHCP

☒ manually (e.g., host.domain.com)

Miscellaneous Settings

Gateway:

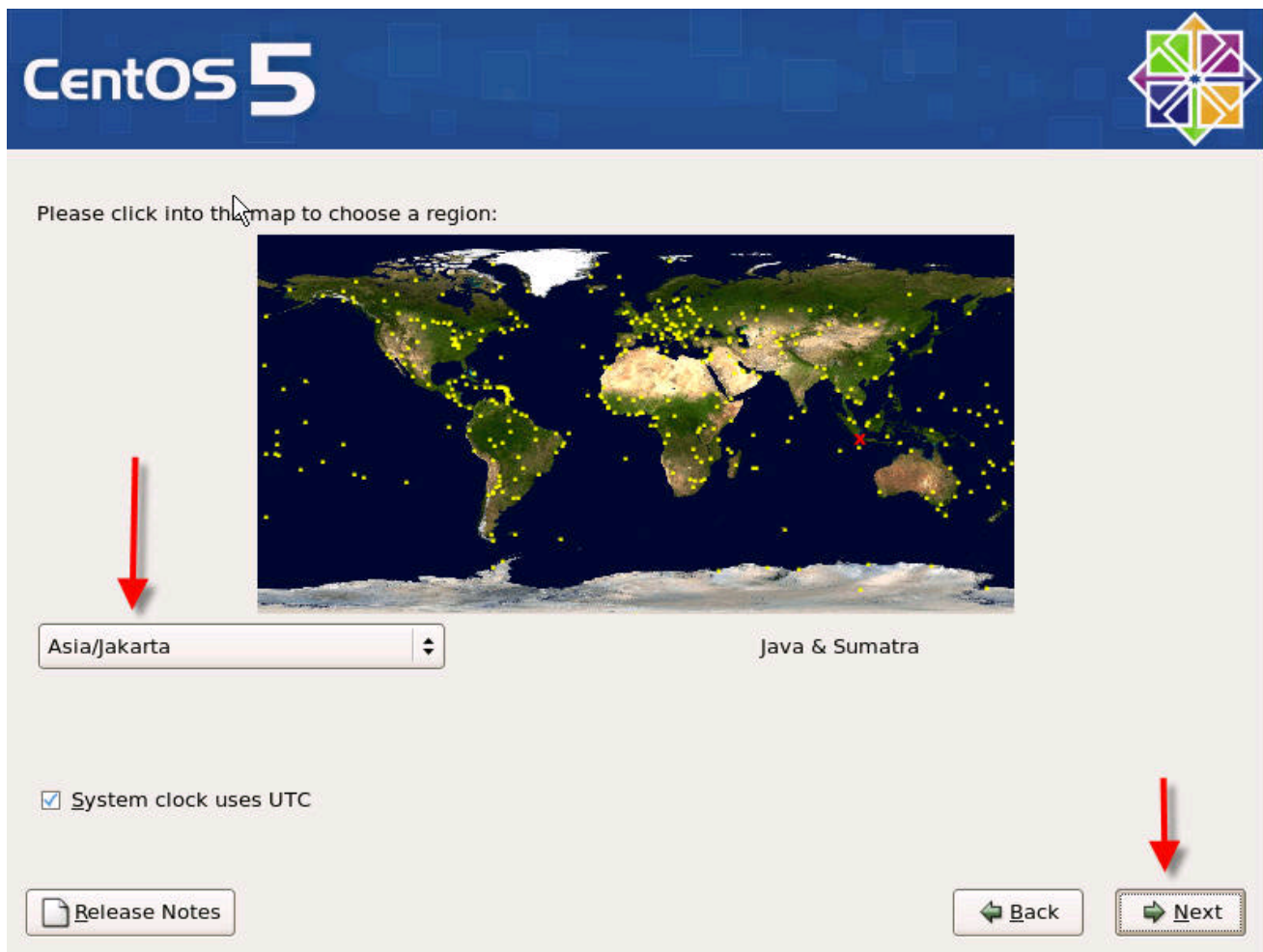
Primary DNS:

Secondary DNS:

Select 'DHCP' and set the hostname to 'centos5svr' then click <Next> to continue.

13. Timezone Dialog.

—



Select <Asia/Jakarta> and click <Next> to continue.

14. Root Password Dialog.



The image shows the CentOS 5 installation password setup screen. At the top, there is a blue header with the "CentOS 5" logo on the left and a colorful geometric logo on the right. Below the header, a yellow shield icon is followed by the text: "The root account is used for administering the system. Enter a password for the root user." Below this text are two input fields: "Root Password:" and "Confirm:". Both fields contain seven dots, indicating masked text. A red arrow points from the top of the "Root Password:" field to the text above it. Another red arrow points from the bottom of the "Confirm:" field to the text below it. At the bottom left, there is a button labeled "Release Notes" with a document icon. At the bottom right, there are two buttons: "Back" with a left arrow and "Next" with a right arrow. A red arrow points down to the "Next" button.

CentOS 5

The root account is used for administering the system. Enter a password for the root user.

Root Password:

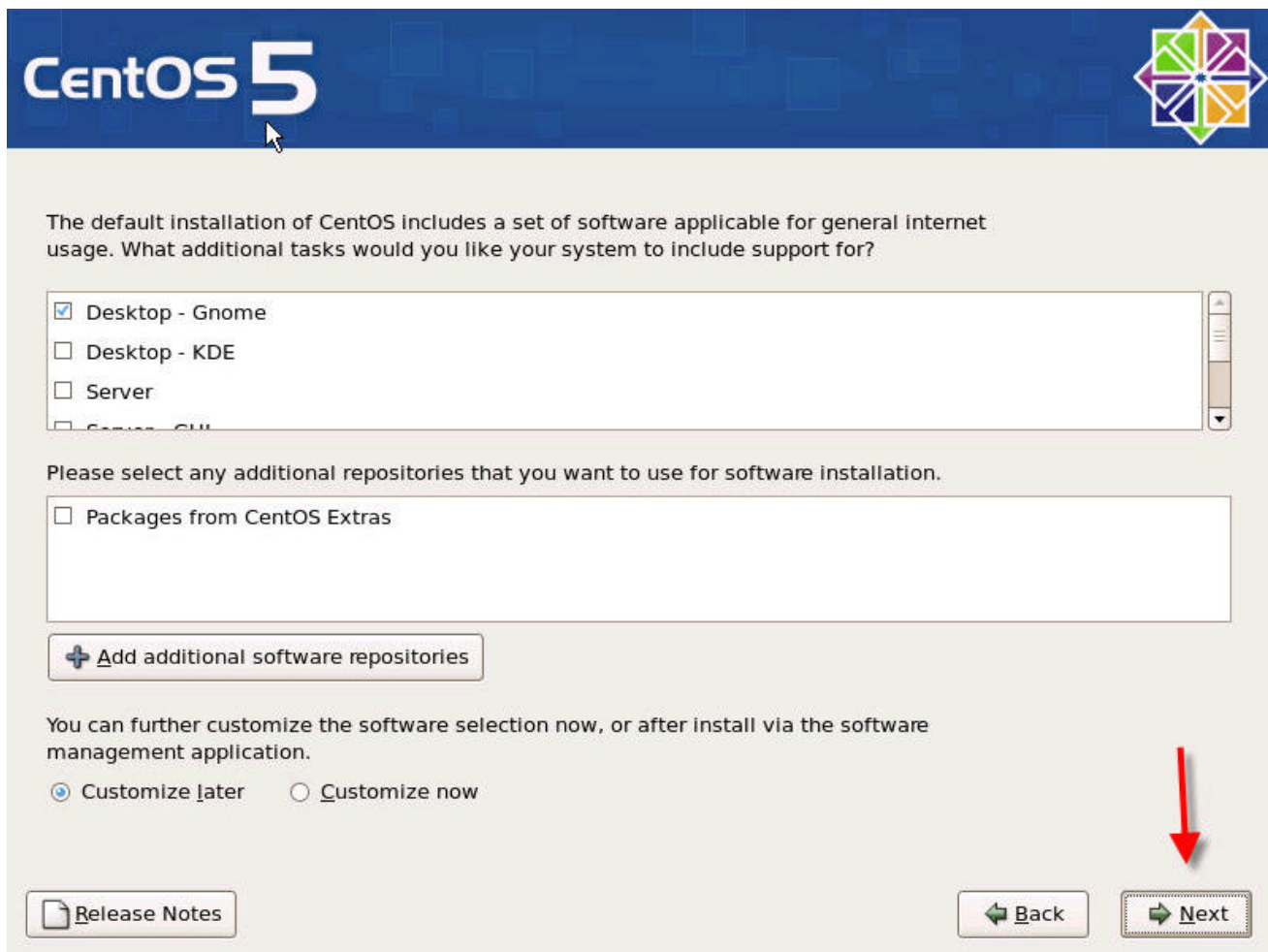
Confirm:

Release Notes

Back Next

Enter the root password and click <Next> to continue.

15. Package Selection Dialog.



The CentOS 5 logo is in the top left, and a colorful geometric logo is in the top right. The main text asks for additional tasks. A list box contains 'Desktop - Gnome' (checked), 'Desktop - KDE', 'Server', and 'Server - GUI'. Below, it asks for additional repositories, with 'Packages from CentOS Extras' listed. A button 'Add additional software repositories' is present. It then asks to customize software selection, with 'Customize later' selected. At the bottom are 'Release Notes', 'Back', and 'Next' buttons. A red arrow points to the 'Next' button.

CentOS 5

The default installation of CentOS includes a set of software applicable for general internet usage. What additional tasks would you like your system to include support for?

- ☒ Desktop - Gnome
- ☐ Desktop - KDE
- ☐ Server
- ☐ Server - GUI

Please select any additional repositories that you want to use for software installation.

- ☐ Packages from CentOS Extras

+ Add additional software repositories

You can further customize the software selection now, or after install via the software management application.

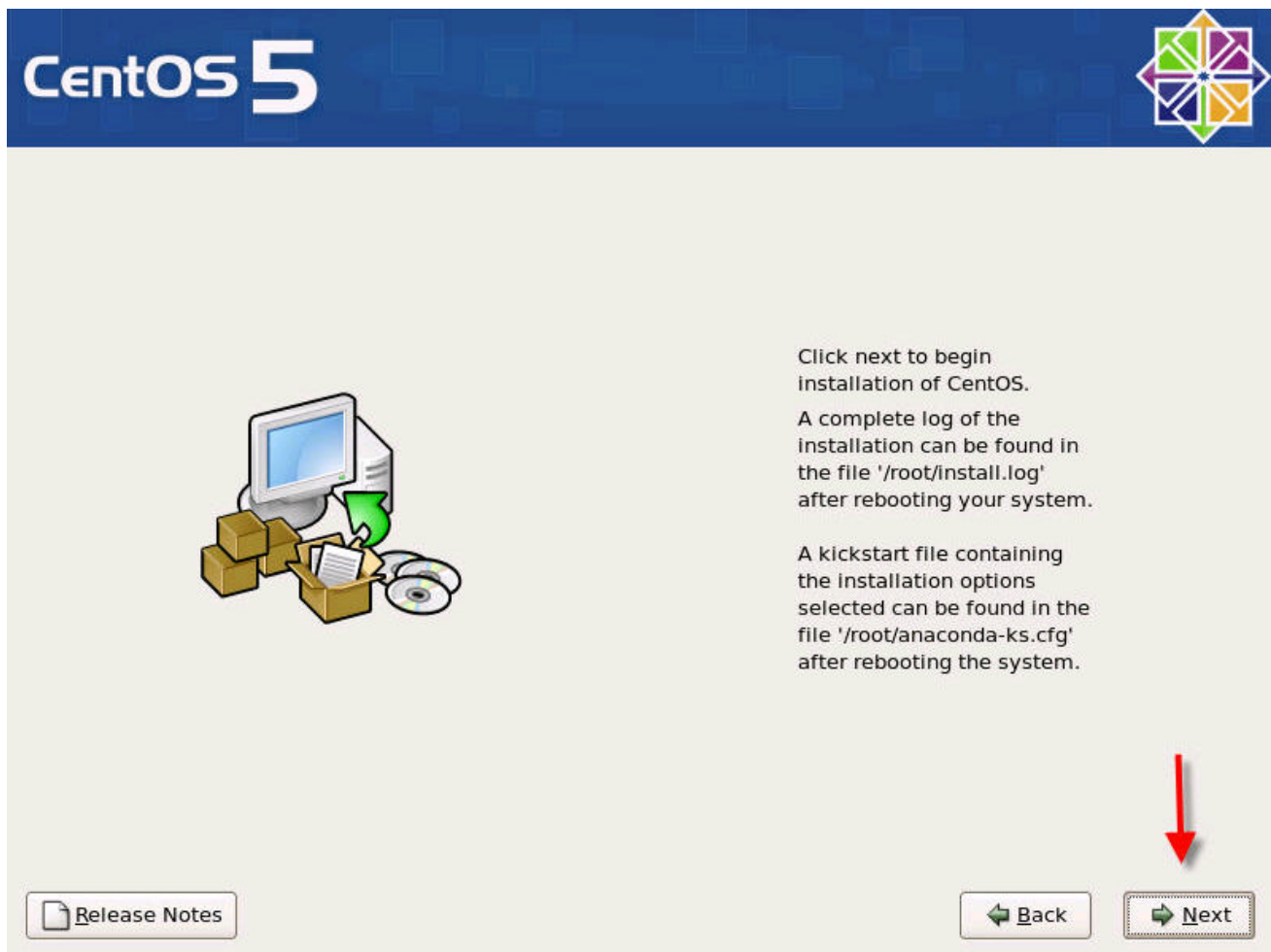
☒ Customize later ☐ Customize now

Release Notes Back Next

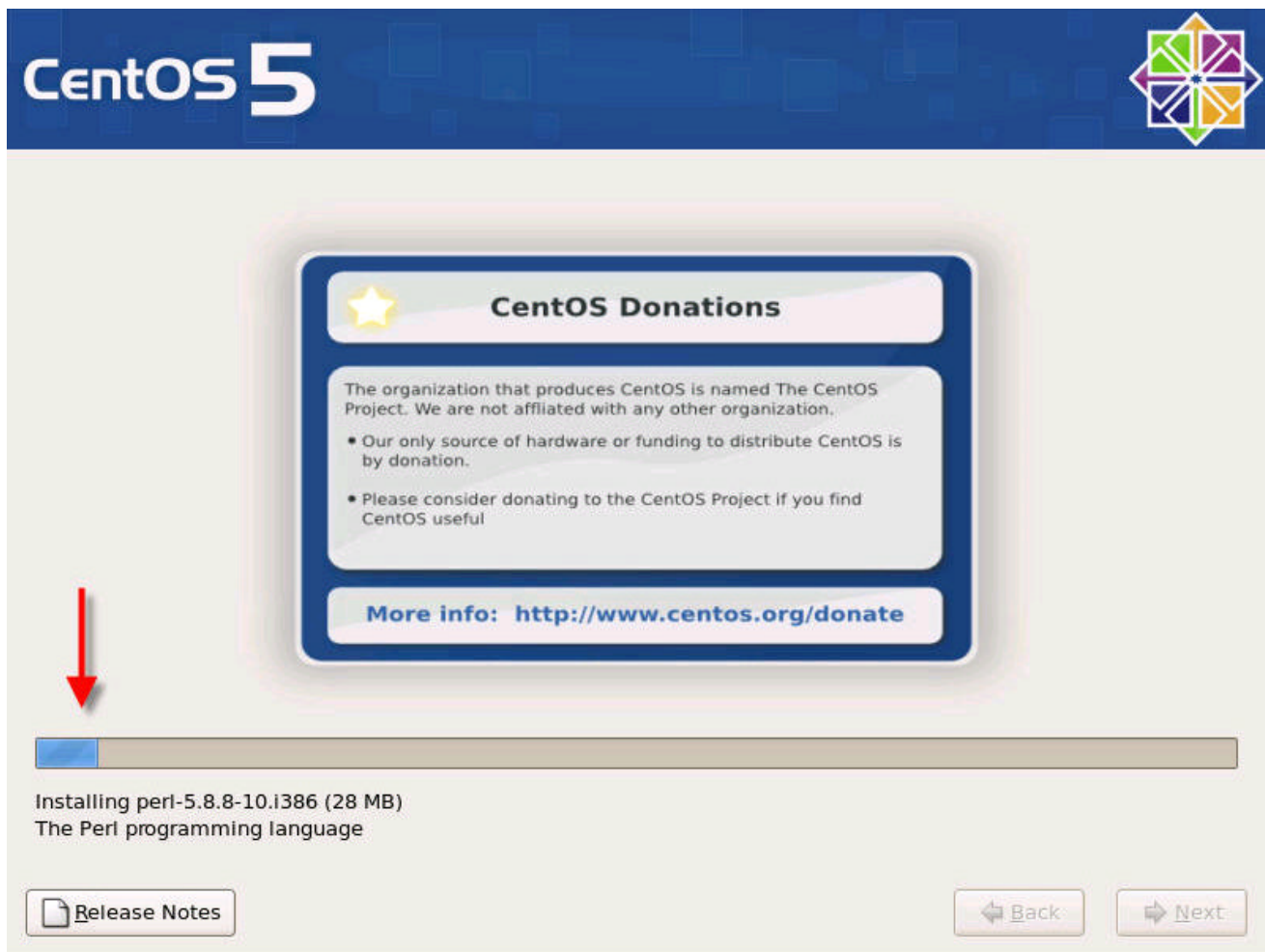
We will use the default package selections so there is no changes which need to be done. Click <Next> to continue.

16. Ready For Installation Dialog.

OK, we ready to install CentOS 5. Wish me luck ;-). Click <Next> to continue.



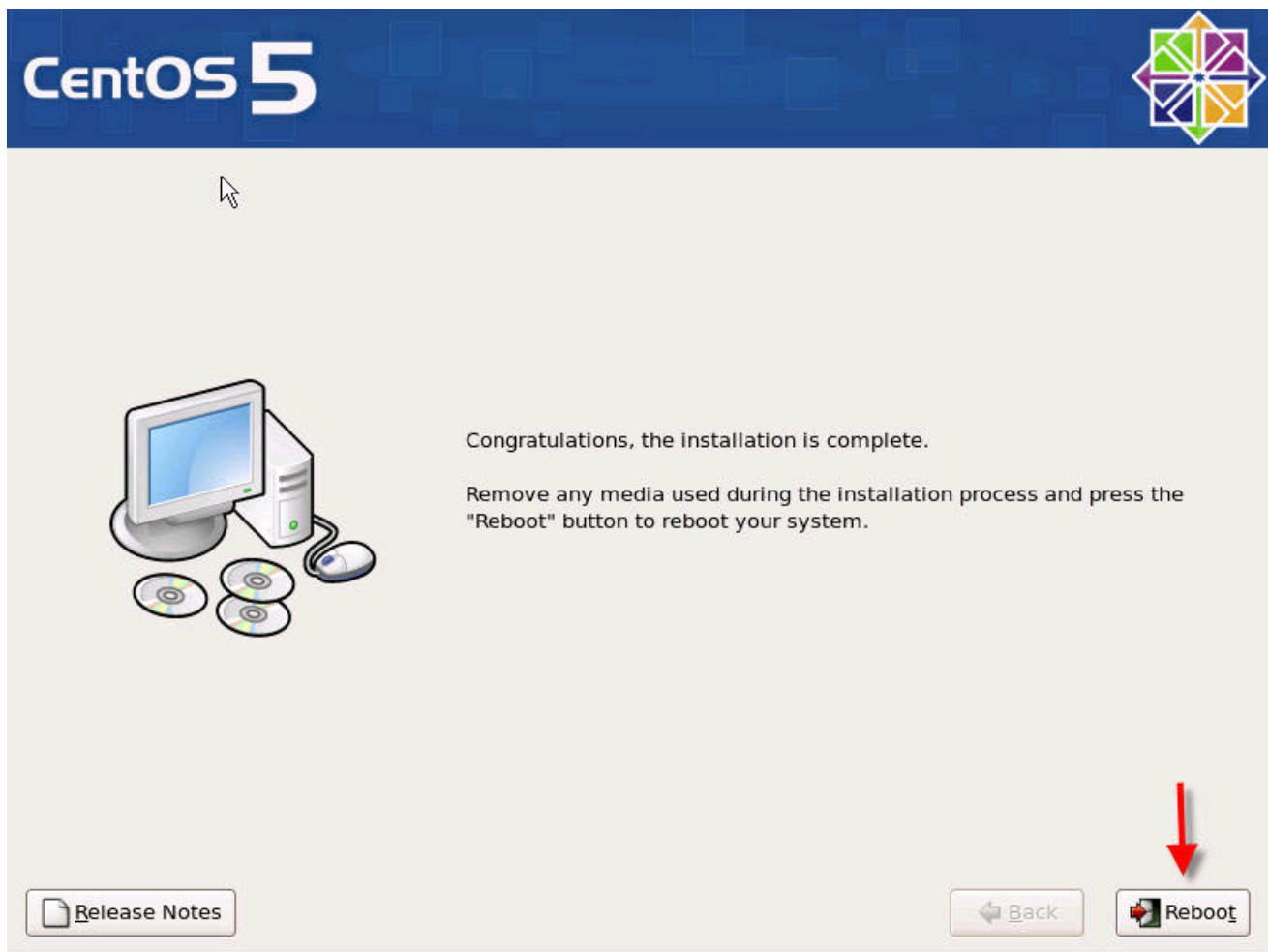
17. The Installation Dialog.



Wait until the installation finish.

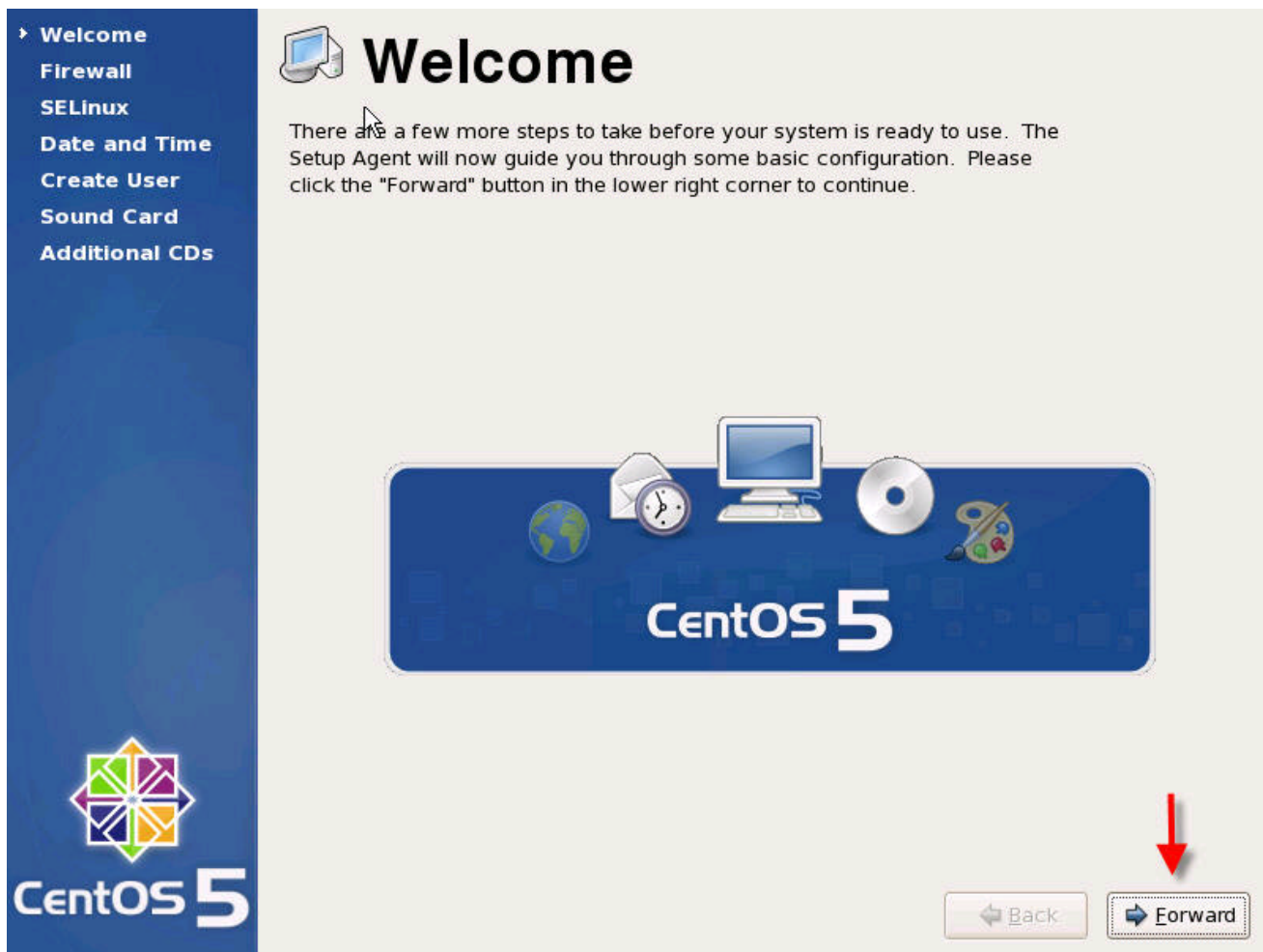
18. Reboot Dialog.

The installation has been completed and we are ready for our first reboot. Click <Reboot> to continue.



19. Firstboot.

After the reboot completed, we have couple of stuffs which need to be configured.



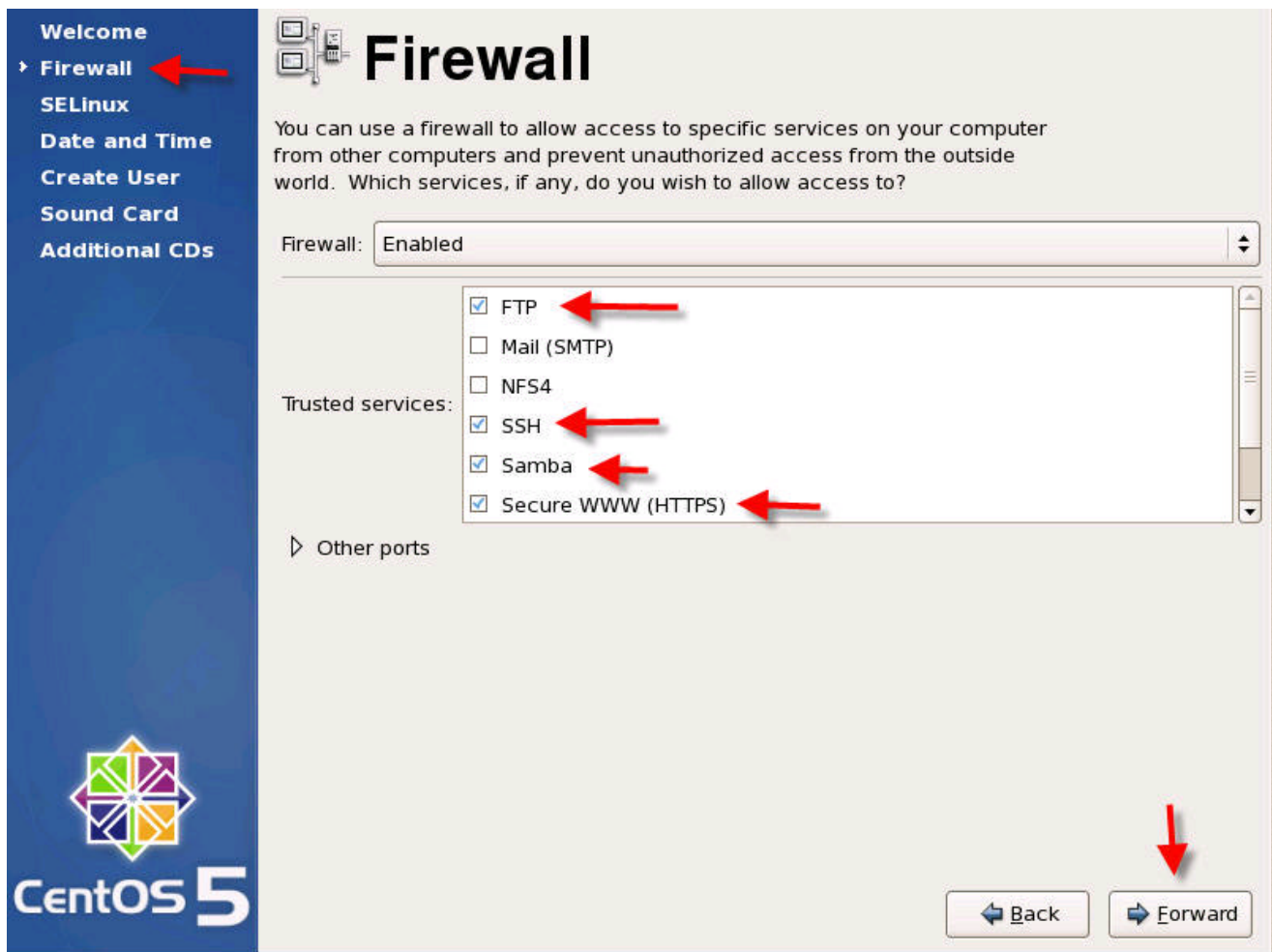
Press <Forward> to continue.

20. Enable Firewall.

We will enable firewall and select couple of services to be enabled.

Check on

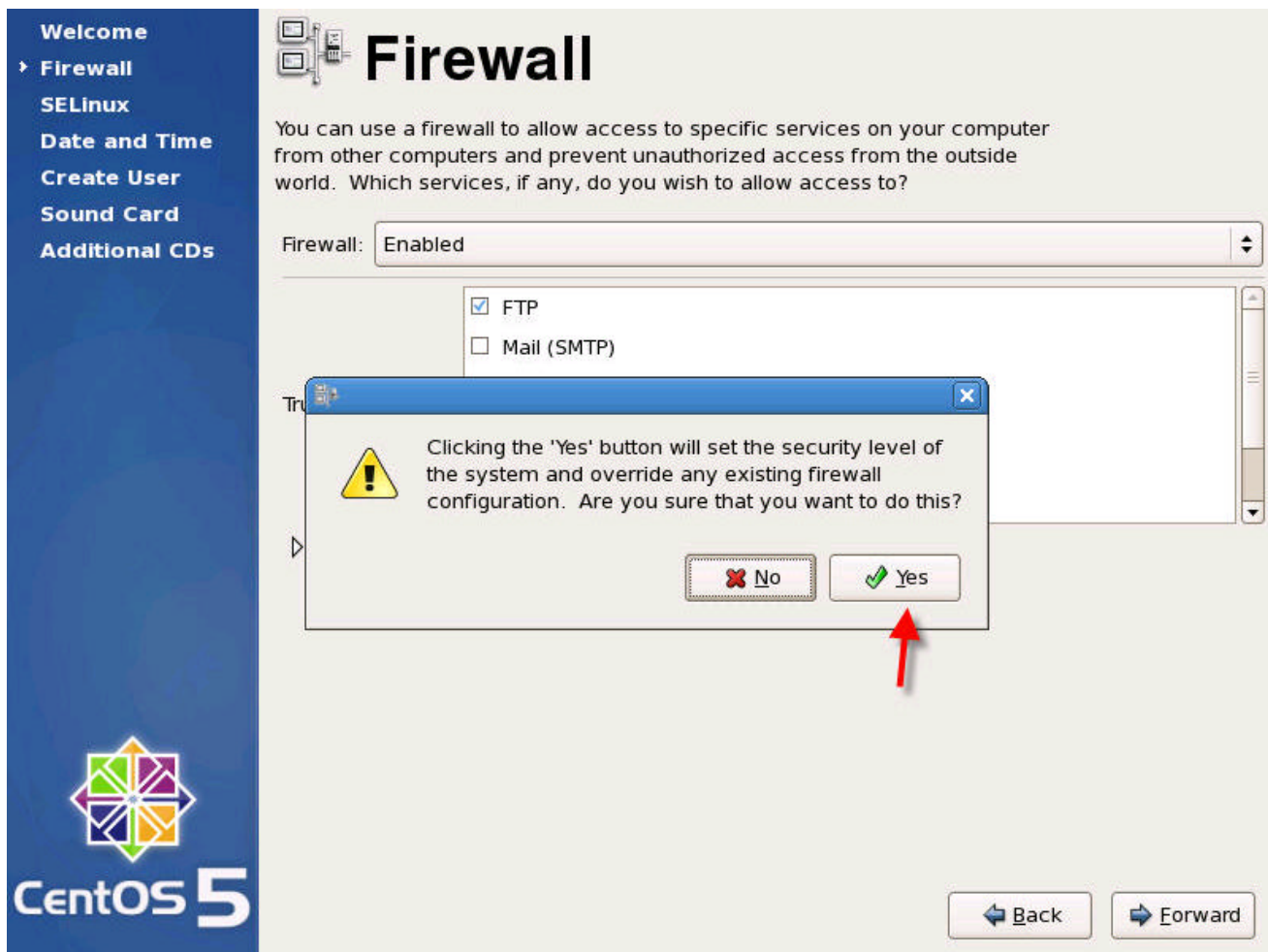
- FTP
- SSH
- Samba
- Secure WWW (HTTPS)
- WWW (HTTP).



Note: WWW (HTTP) setting didn't show up in the screen capture.

Click <Forward> to continue.

There will be a firewall warning dialog. Just "ignore" it and click <Yes> to continue.

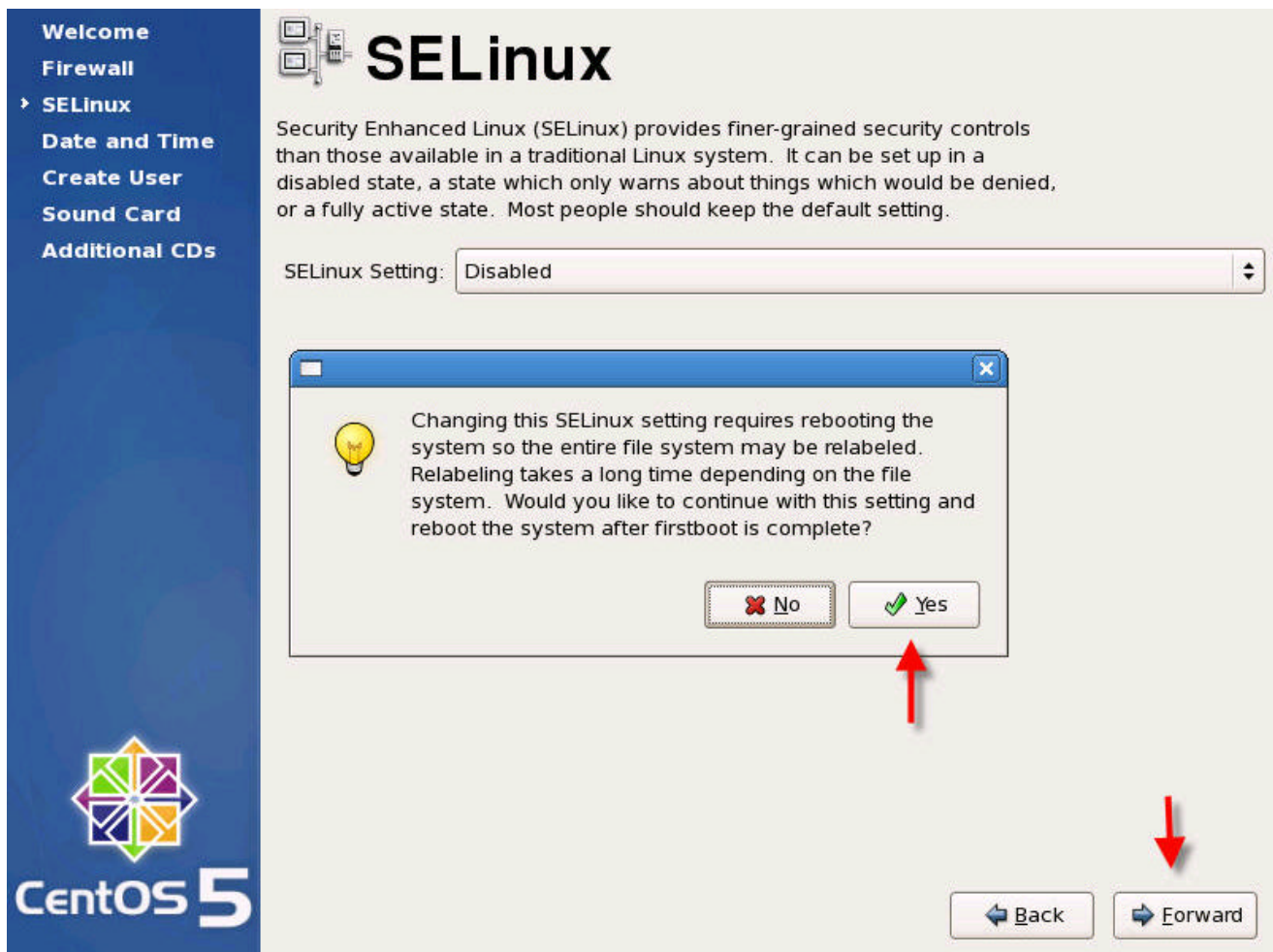


21. SELinux Dialog.

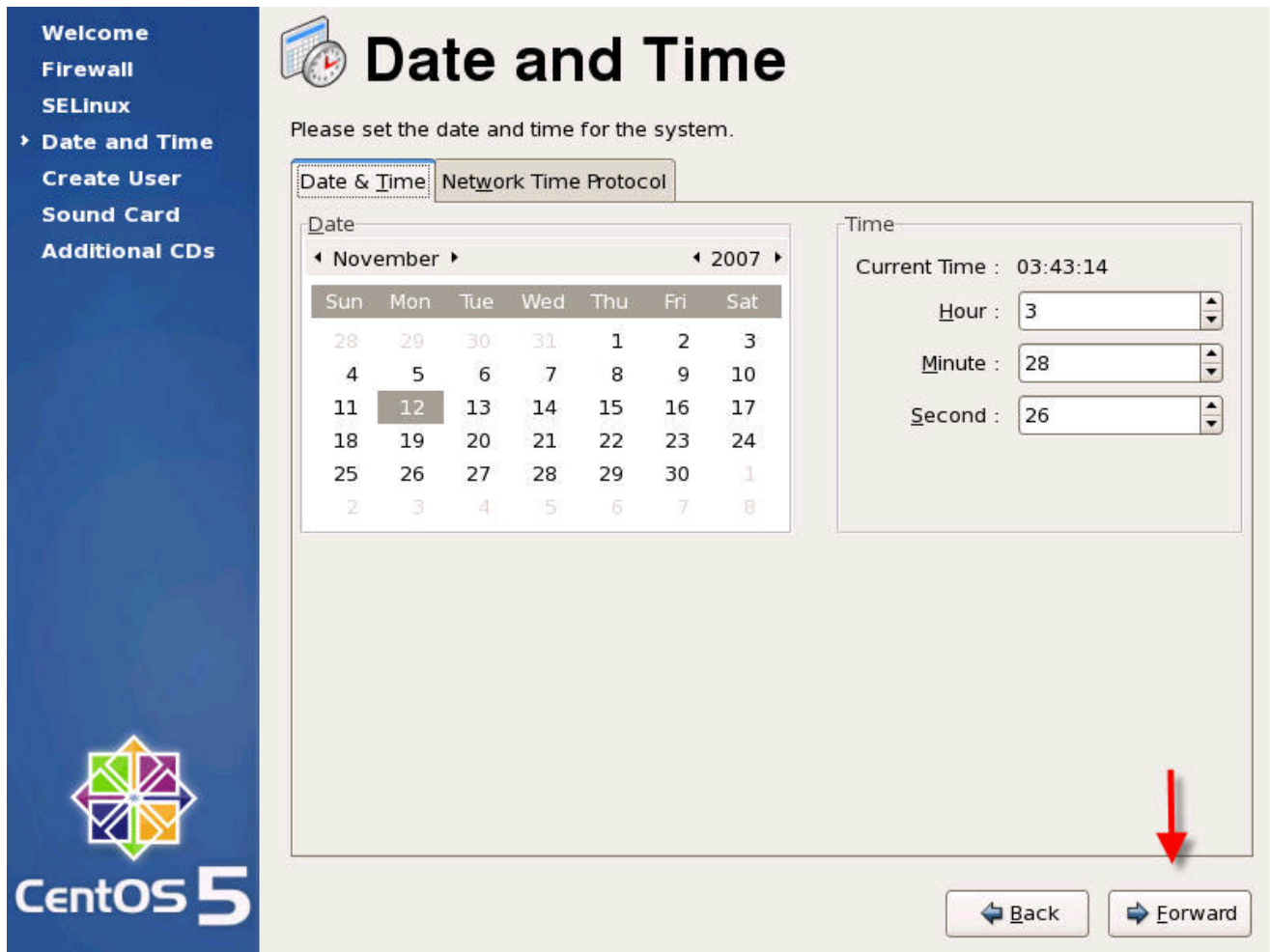
We will disable SELinux for now and click <Forward> to continue.



There will be an SELinux warning dialog which basically tell us to reboot the system in order the new setting to take effect.



22. Date And Time Setting.



The image shows the 'Date and Time' configuration window during CentOS 5 installation. On the left is a blue sidebar with a menu: Welcome, Firewall, SELinux, Date and Time (highlighted), Create User, Sound Card, and Additional CDs. At the bottom of the sidebar is the CentOS 5 logo. The main window has a title bar with a calendar icon and the title 'Date and Time'. Below the title bar is the instruction 'Please set the date and time for the system.' There are two tabs: 'Date & Time' (active) and 'Network Time Protocol'. The 'Date & Time' tab contains a 'Date' section with a calendar for November 2007, where the 12th is selected. To the right of the calendar is a 'Time' section showing 'Current Time : 03:43:14' and three spinners for Hour (3), Minute (28), and Second (26). A red arrow points to the 'Forward' button at the bottom right. At the bottom of the window are 'Back' and 'Forward' buttons.

Welcome
Firewall
SELinux
► **Date and Time**
Create User
Sound Card
Additional CDs

Date and Time

Please set the date and time for the system.

Date & Time Network Time Protocol

Date

◀ November ▶ 2007 ▶

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2	3	4	5	6	7	8

Time

Current Time : 03:43:14

Hour : 3

Minute : 28

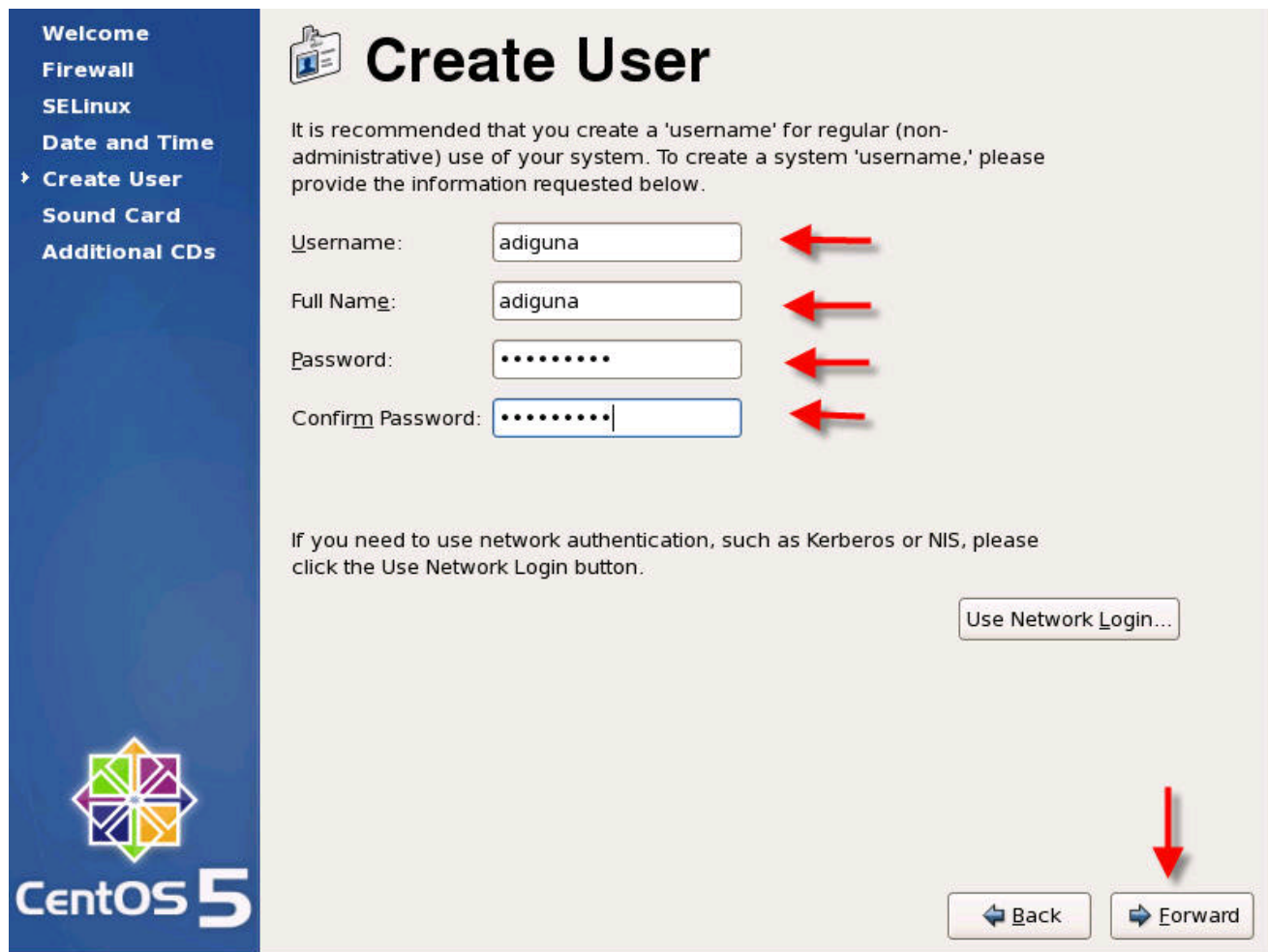
Second : 26

Back Forward

Use default setting and click <Forward> to continue.

23. Create The First Regular Userid.

We will create the first regular userid in the system. Fill out all the fields and click <Forward> to continue.



The image shows the 'Create User' dialog in the CentOS 5 installation process. On the left is a blue sidebar with a list of installation steps: Welcome, Firewall, SELinux, Date and Time, Create User (highlighted with a right-pointing arrow), Sound Card, and Additional CDs. At the bottom of the sidebar is the CentOS 5 logo. The main area has a title 'Create User' with a clipboard icon. Below the title is a paragraph: 'It is recommended that you create a 'username' for regular (non-administrative) use of your system. To create a system 'username,' please provide the information requested below.' There are four input fields: 'Username:' with 'adiguna', 'Full Name:' with 'adiguna', 'Password:' with seven dots, and 'Confirm Password:' with seven dots. Red arrows point to each of these fields. Below the fields is a paragraph: 'If you need to use network authentication, such as Kerberos or NIS, please click the Use Network Login button.' To the right of this text is a button labeled 'Use Network Login...'. At the bottom right are two buttons: 'Back' and 'Forward'. A red arrow points down to the 'Forward' button.

Welcome
Firewall
SELinux
Date and Time
→ Create User
Sound Card
Additional CDs

Create User

It is recommended that you create a 'username' for regular (non-administrative) use of your system. To create a system 'username,' please provide the information requested below.

Username:

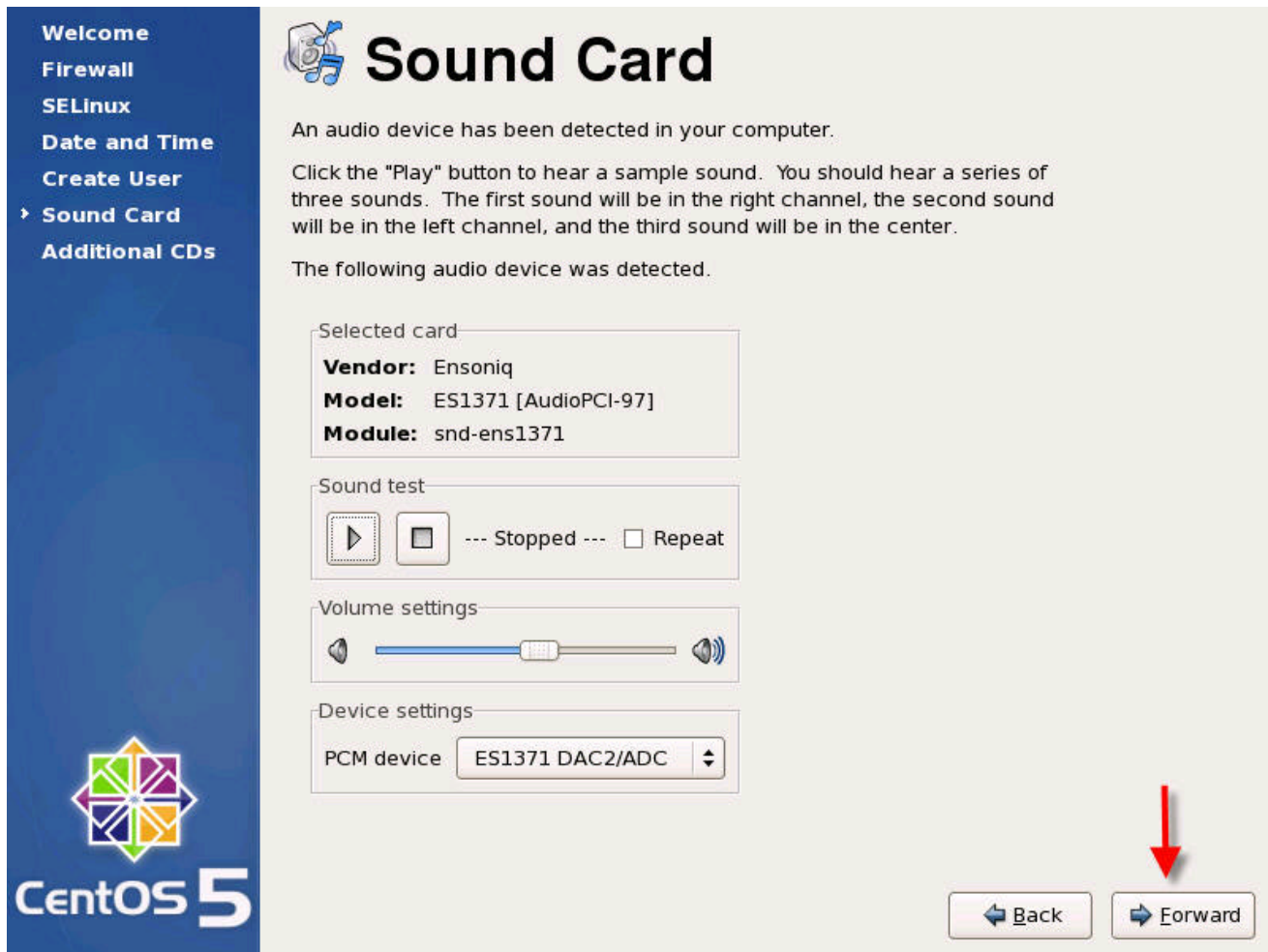
Full Name:

Password:

Confirm Password:

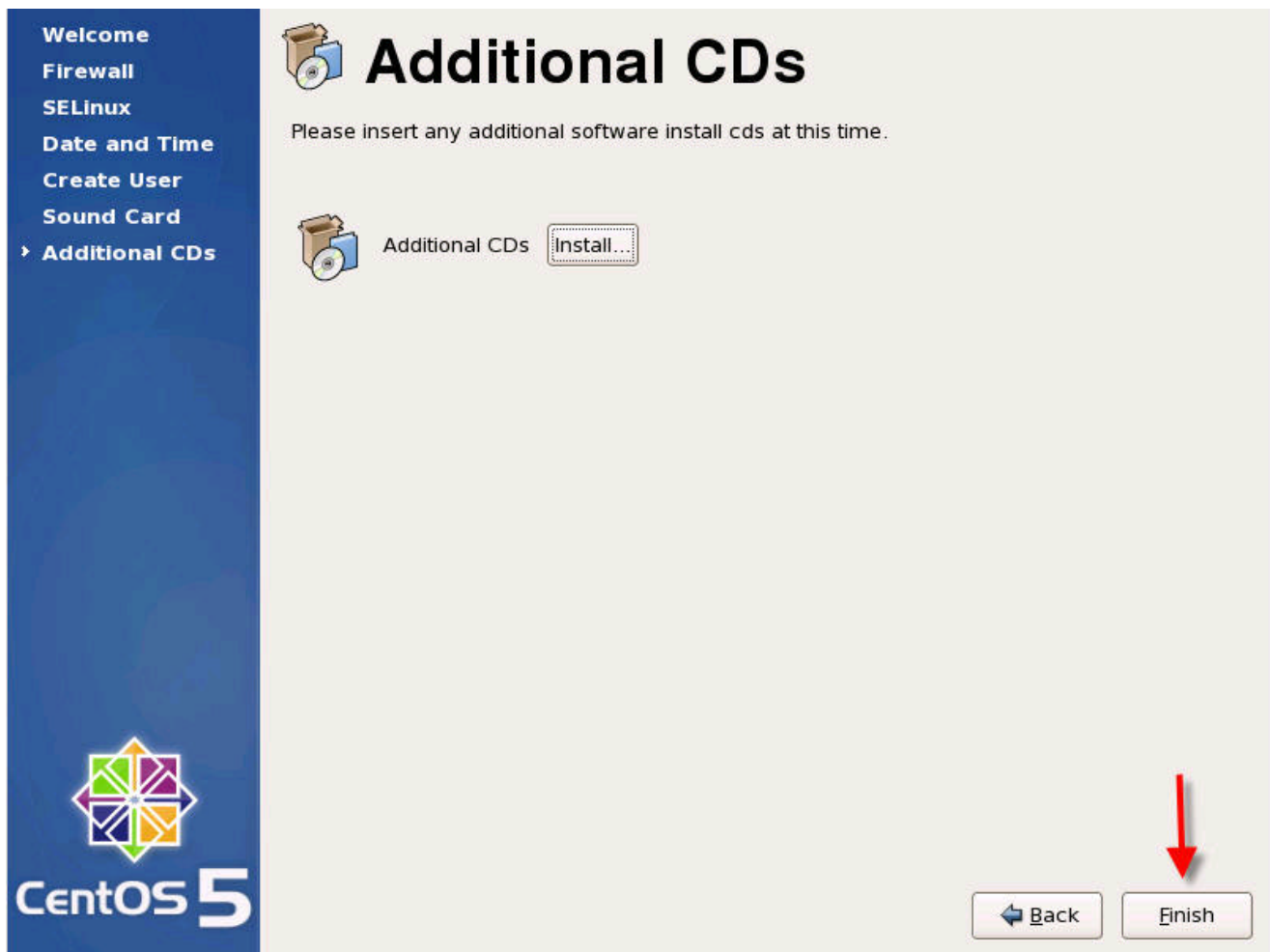
If you need to use network authentication, such as Kerberos or NIS, please click the Use Network Login button.

24. Sound Card Dialog.



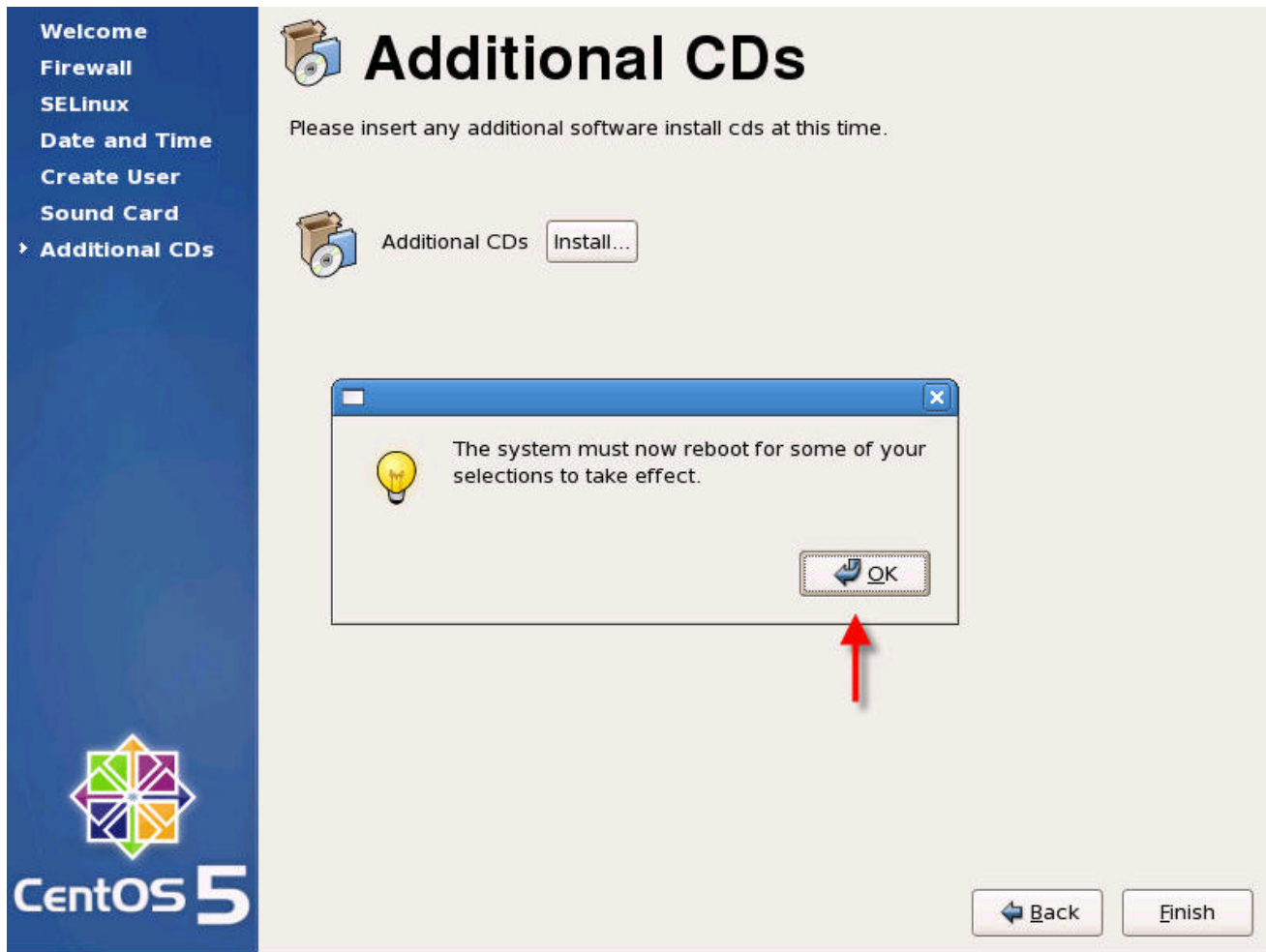
Use the default settings and click <Forward> to continue.

25. Additional CD Dialog.



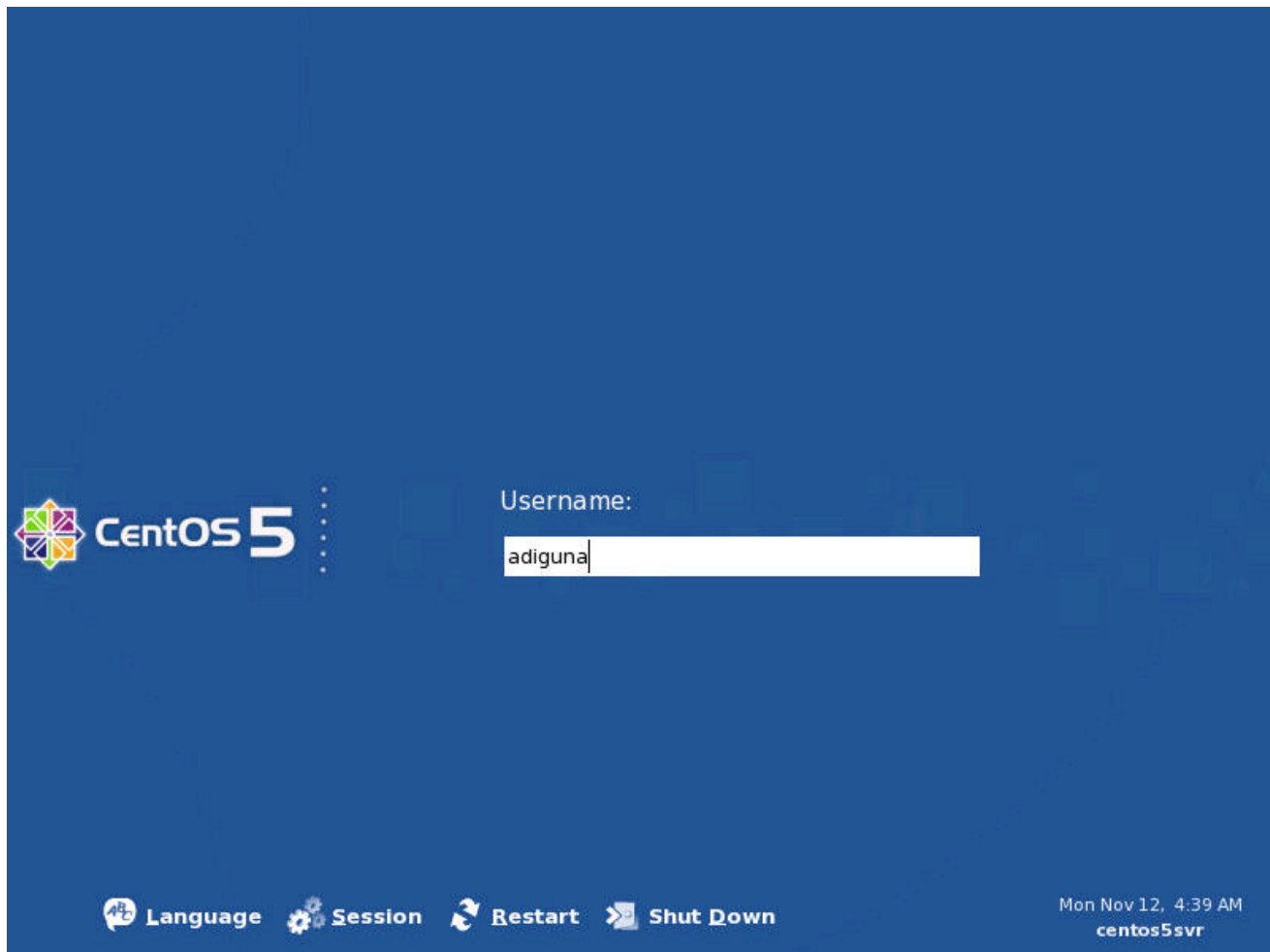
We will not install other packages. Click <Forward> to continue.

26. Reboot Dialog.



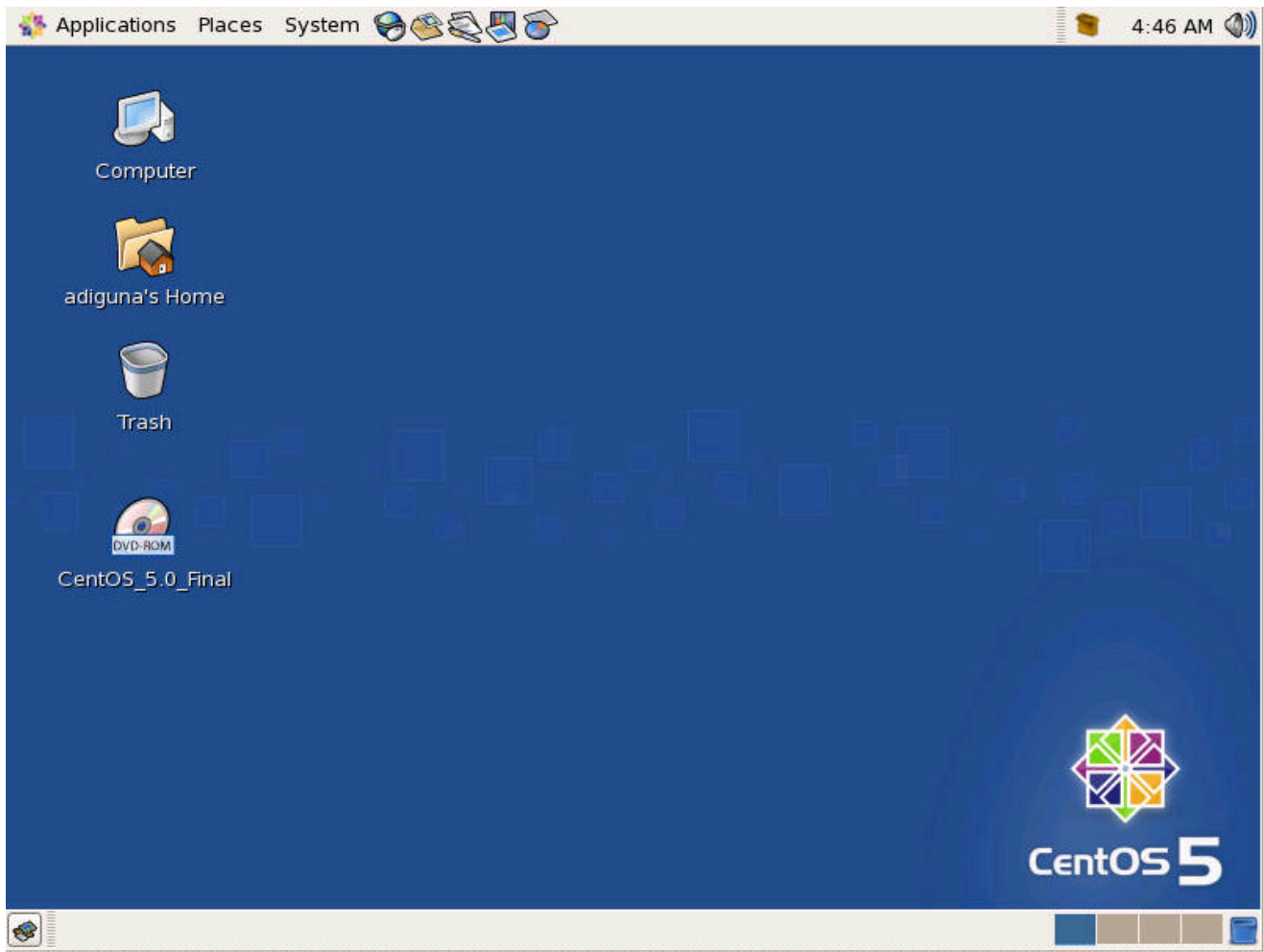
We have to reboot the machine again ;-). Click <OK> to reboot the system.

27. First Login.



After the reboot completed, we will be greeted by login prompt. Login as a regular user (adiguna).

28. CentOS Gnome Desktop Environment.



Whohoo, finally I get into my first CentOS 5 desktop environment ;-).

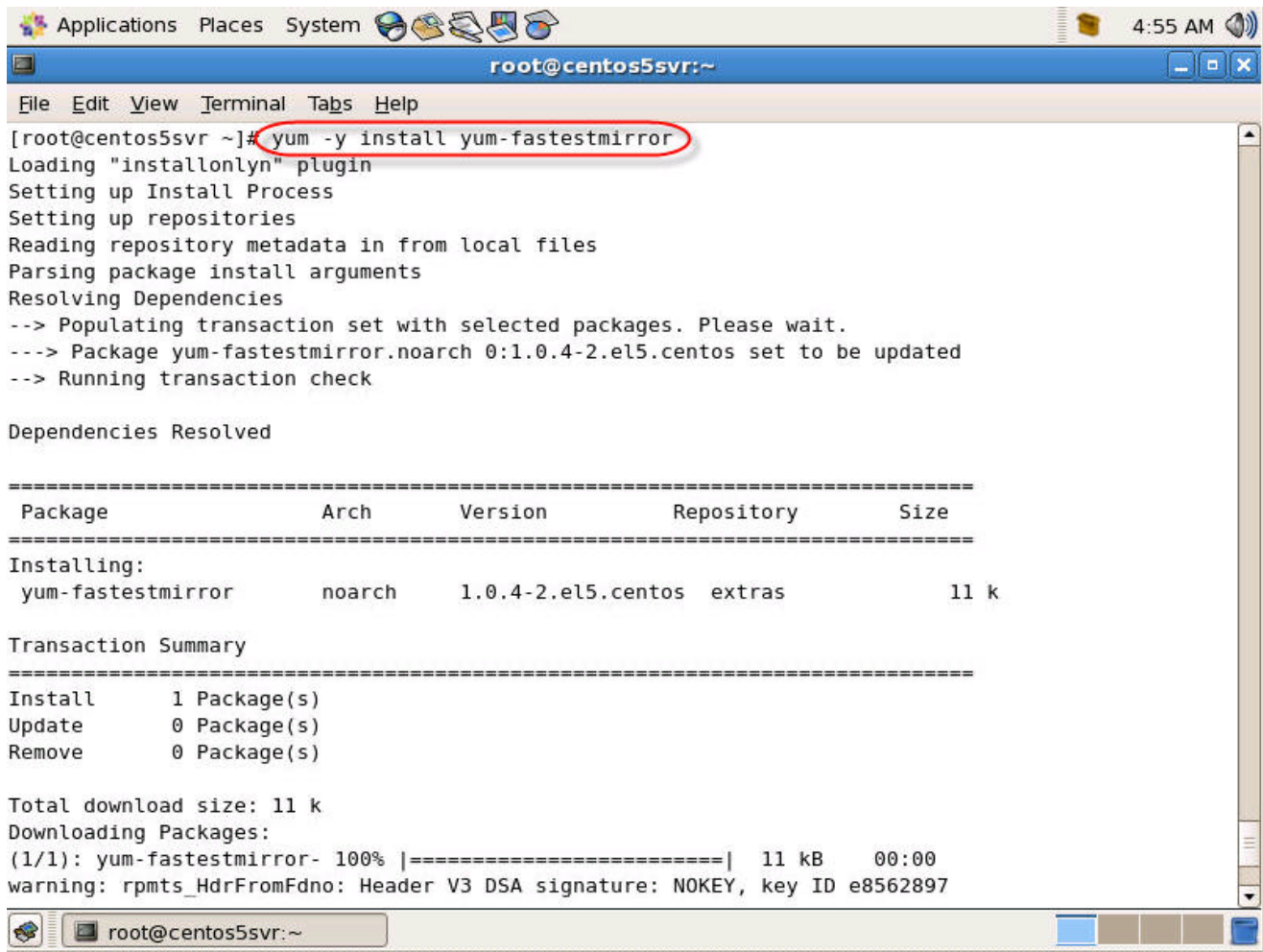
29. Install Yum Plugin.

We will install yum plugin, 'yum-fastestmirror', package so next time when we install a package from yum repositories, we will be connected to the fastest yum mirror repositories available.

This machine is connected to the Internet so we can access CentOS repositories and use yum command to install the plugin.

First, right click in the desktop and open the terminal window and then 'su' to root.

Install 'yum-fastestmirror' package.



The screenshot shows a terminal window titled 'root@centos5svr:~'. The command 'yum -y install yum-fastestmirror' is entered and highlighted with a red circle. The terminal output shows the yum process: loading the 'installonlyn' plugin, setting up the install process and repositories, reading repository metadata, parsing arguments, and resolving dependencies. It indicates that the package 'yum-fastestmirror.noarch 0:1.0.4-2.el5.centos' is set to be updated. A table shows the package details: Package (yum-fastestmirror), Arch (noarch), Version (1.0.4-2.el5.centos), Repository (extras), and Size (11 k). The transaction summary shows 1 package installed. The download progress is shown as 100% complete, with a warning about the rpmts_HdrFromFdno header V3 DSA signature.

```
[root@centos5svr ~]# yum -y install yum-fastestmirror
Loading "installonlyn" plugin
Setting up Install Process
Setting up repositories
Reading repository metadata in from local files
Parsing package install arguments
Resolving Dependencies
--> Populating transaction set with selected packages. Please wait.
---> Package yum-fastestmirror.noarch 0:1.0.4-2.el5.centos set to be updated
--> Running transaction check

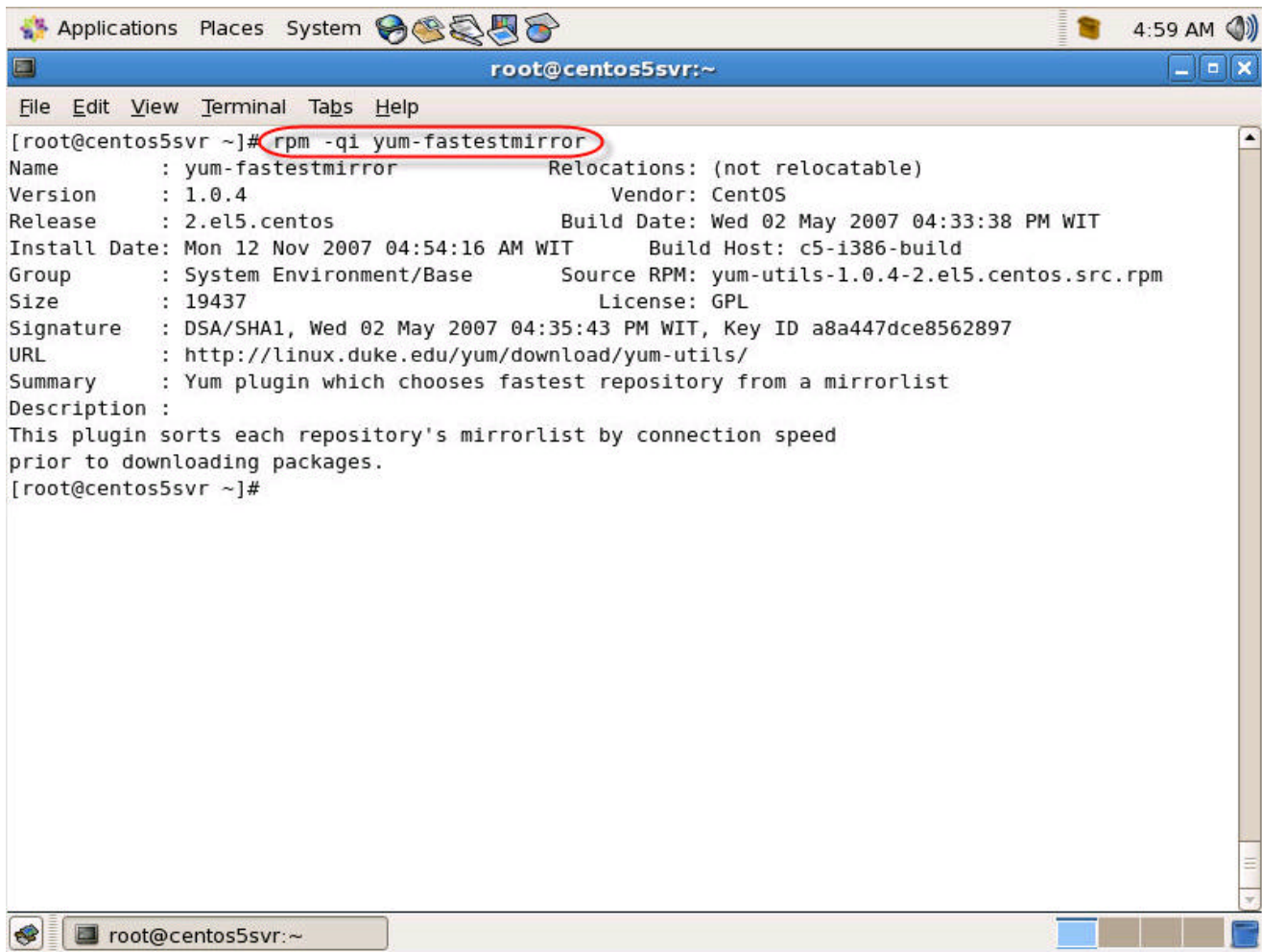
Dependencies Resolved

=====
Package                Arch      Version           Repository        Size
=====
Installing:
yum-fastestmirror      noarch    1.0.4-2.el5.centos extras            11 k

Transaction Summary
=====
Install      1 Package(s)
Update      0 Package(s)
Remove      0 Package(s)

Total download size: 11 k
Downloading Packages:
(1/1): yum-fastestmirror- 100% |=====| 11 kB    00:00
warning: rpmts_HdrFromFdno: Header V3 DSA signature: NOKEY, key ID e8562897
```

30. Check Whether The Package Has Been Installed Properly.



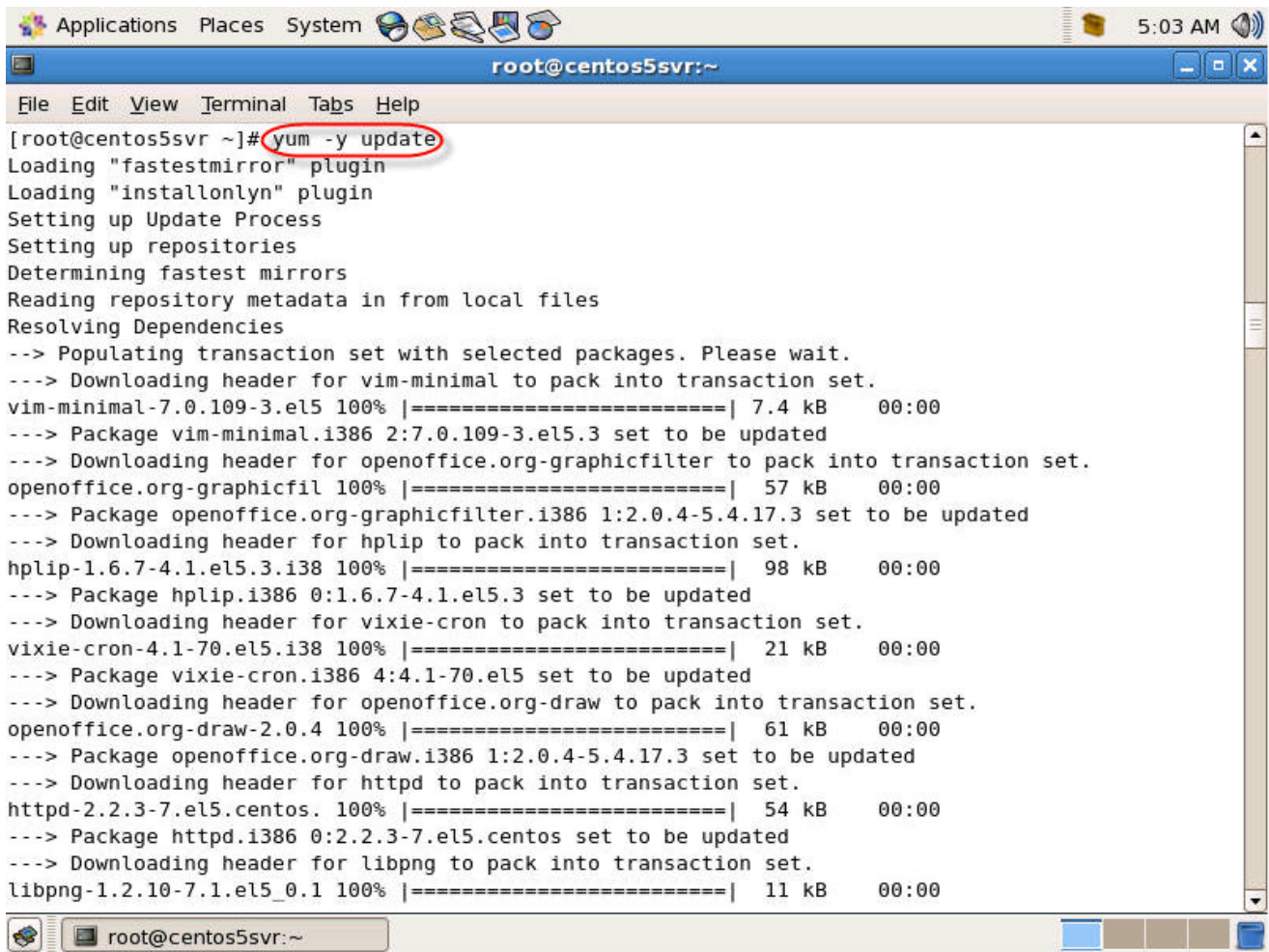
The screenshot shows a CentOS 5 desktop environment. The top panel includes icons for Applications, Places, and System, along with a clock showing 4:59 AM. The terminal window, titled 'root@centos5svr:~', displays the command 'rpm -qi yum-fastestmirror' which has been executed. The output provides detailed information about the 'yum-fastestmirror' package, including its name, version (1.0.4), release (2.el5.centos), and a description of its function as a Yum plugin for selecting the fastest repository.

```
[root@centos5svr ~]# rpm -qi yum-fastestmirror
Name       : yum-fastestmirror                Relocations: (not relocatable)
Version    : 1.0.4                          Vendor: CentOS
Release    : 2.el5.centos                    Build Date: Wed 02 May 2007 04:33:38 PM WIT
Install Date: Mon 12 Nov 2007 04:54:16 AM WIT Build Host: c5-i386-build
Group      : System Environment/Base         Source RPM: yum-utils-1.0.4-2.el5.centos.src.rpm
Size       : 19437                           License: GPL
Signature  : DSA/SHA1, Wed 02 May 2007 04:35:43 PM WIT, Key ID a8a447dce8562897
URL        : http://linux.duke.edu/yum/download/yum-utils/
Summary    : Yum plugin which chooses fastest repository from a mirrorlist
Description:
This plugin sorts each repository's mirrorlist by connection speed
prior to downloading packages.
[root@centos5svr ~]#
```

31. Update To The Latest Level.

As stated in the goal that we will update the system to the latest level of CentOS 5 as of "now".

In order to do that, we will run 'yum update' command.

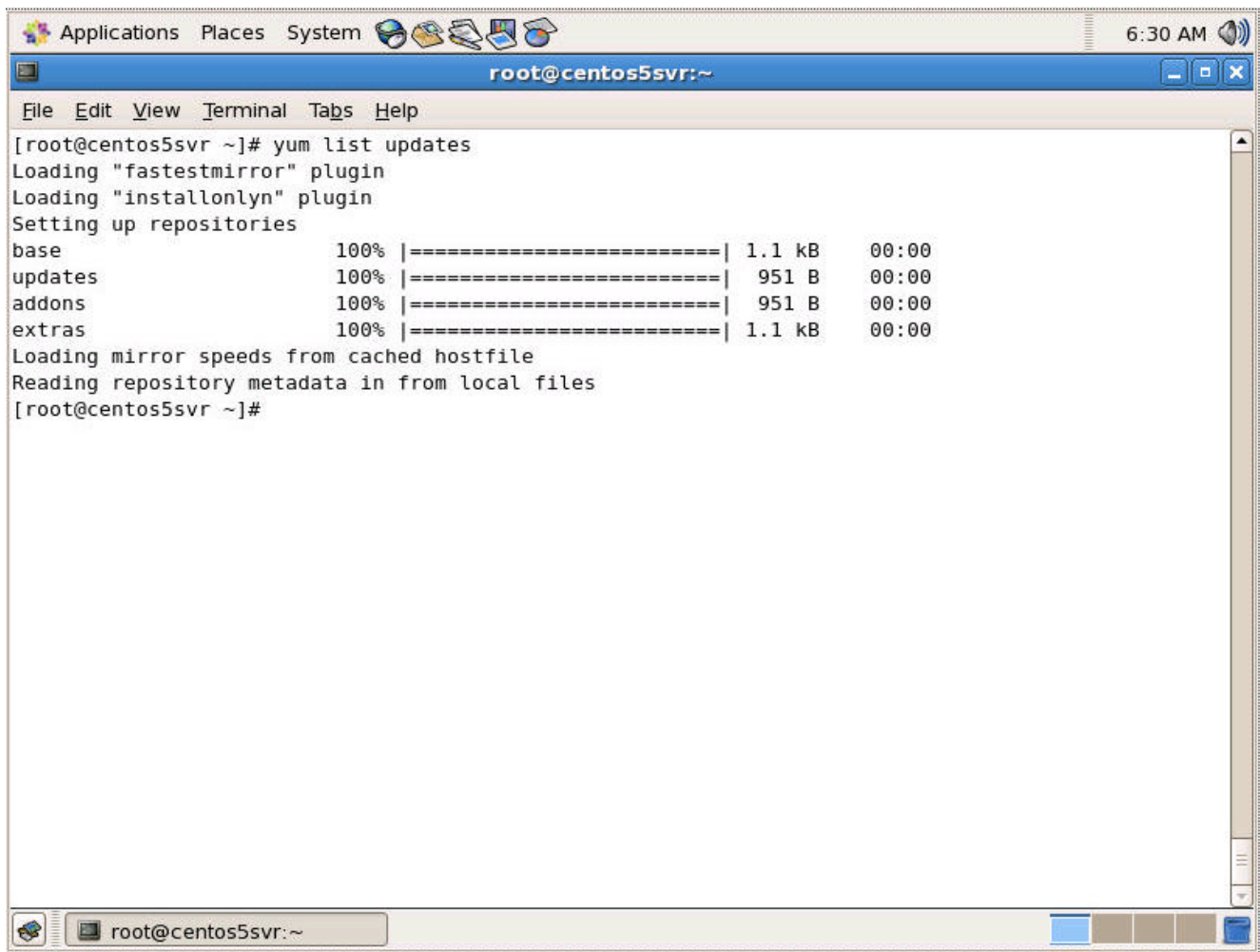


```
root@centos5svr:~  
File Edit View Terminal Tabs Help  
[root@centos5svr ~]# yum -y update  
Loading "fastestmirror" plugin  
Loading "installonlyn" plugin  
Setting up Update Process  
Setting up repositories  
Determining fastest mirrors  
Reading repository metadata in from local files  
Resolving Dependencies  
--> Populating transaction set with selected packages. Please wait.  
---> Downloading header for vim-minimal to pack into transaction set.  
vim-minimal-7.0.109-3.el5 100% |=====| 7.4 kB 00:00  
---> Package vim-minimal.i386 2:7.0.109-3.el5.3 set to be updated  
---> Downloading header for openoffice.org-graphicsfilter to pack into transaction set.  
openoffice.org-graphicsfil 100% |=====| 57 kB 00:00  
---> Package openoffice.org-graphicsfilter.i386 1:2.0.4-5.4.17.3 set to be updated  
---> Downloading header for hplip to pack into transaction set.  
hplip-1.6.7-4.1.el5.3.i386 100% |=====| 98 kB 00:00  
---> Package hplip.i386 0:1.6.7-4.1.el5.3 set to be updated  
---> Downloading header for vixie-cron to pack into transaction set.  
vixie-cron-4.1-70.el5.i386 100% |=====| 21 kB 00:00  
---> Package vixie-cron.i386 4:4.1-70.el5 set to be updated  
---> Downloading header for openoffice.org-draw to pack into transaction set.  
openoffice.org-draw-2.0.4 100% |=====| 61 kB 00:00  
---> Package openoffice.org-draw.i386 1:2.0.4-5.4.17.3 set to be updated  
---> Downloading header for httpd to pack into transaction set.  
httpd-2.2.3-7.el5.centos. 100% |=====| 54 kB 00:00  
---> Package httpd.i386 0:2.2.3-7.el5.centos set to be updated  
---> Downloading header for libpng to pack into transaction set.  
libpng-1.2.10-7.1.el5_0.1 100% |=====| 11 kB 00:00
```

32. Verify Whether No More Updates Available.

In order to make sure that we are in the latest level, we will run 'yum list updates' command.

If there is no output then we are 'up-to-date'.



The screenshot shows a terminal window titled 'root@centos5svr:~' with a menu bar (File, Edit, View, Terminal, Tabs, Help) and a system tray at the top right showing the time as 6:30 AM. The terminal output is as follows:

```
[root@centos5svr ~]# yum list updates
Loading "fastestmirror" plugin
Loading "installonlyn" plugin
Setting up repositories
base                               100% |=====| 1.1 kB    00:00
updates                           100% |=====| 951 B    00:00
addons                            100% |=====| 951 B    00:00
extras                            100% |=====| 1.1 kB    00:00
Loading mirror speeds from cached hostfile
Reading repository metadata in from local files
[root@centos5svr ~]#
```

33. Done.

We have successfully install CentOS 5 from DVD and update the system to the latest level. Now, we are ready to use the system to do our work ;-).

Conclusion:

Install CentOS 5 from DVD can be done relatively quick and easy. After we finish with the base operating system and yum plugin (fastestmirror) installation then we update the system into the latest level so the system is an up-to-date and ready to be used for the next iteration.