

Getting Started

NexentaOS is an [OpenSolaris](#) distribution for your x86/x64 desktop, laptop, or server - with a fast and easy-to-install regular releases and a selection of tightly-integrated excellent applications. All software packages are available from our network-based APT repository. Please visit the [Packages](#) page to search, browse, evaluate, and try-out.

NexentaOS includes the best free [Open Source Software \(OSS\)](#). Each new release incorporates new features and bug fixes from the global development community.

1. [System Requirements](#)
2. [Installation](#)
 1. [Step #1: Loading HDD Installation CD](#)
 1. [Logging In](#)
 2. [Step #2: Starting NexentaOS Installation](#)
 3. [Step #2.1: Configuring Time Zone](#)
 4. [Step #3: Selecting Bootable Device and Creating NexentaOS Partition](#)
 1. [Fresh Install](#)
 2. [Copying packages](#)
 3. [Fresh Install: creating root password and non-root user](#)
 4. [Fresh Install: configuring Host and Network](#)
 5. [Fresh Install: Writing GRUB](#)
 6. [Install: the final step](#)
 7. [Fresh Install: the End](#)
 5. [Step #4: Booting](#)
3. [Feedback](#)

System Requirements

NexentaOS currently requires 32- or 64-bit x86/x64 platform with at least 256MB RAM, and a CD-ROM drive. For the latest updates on hardware-related issues, see the Release Notes in our [Download](#) page.

LiveCD needs 512MB RAM for root partition's ramdisk and kernel loaded at the same time. In theory it should come up on a 384MB machine; if that's what you have give it a try and let us know.

Installation

From the user perspective, NexentaOS Installer consists of several simple dialogs. Here's a quick introduction: keys that Installer understands, and the corresponding actions.

Use:

- Up and Down arrows - to navigate up and down between input fields and checkboxes;
- SPACEBAR - to mark your selection;
- TAB - to move to a command at the bottom of the screen (e.g., <Select>), and between the

commands;

- Enter - to execute, and proceed to the next step.

The following Step #1 through Step #3 information is specific to InstallCD. There is no installation or upgrade for LiveCD; simply download the ISO (see [Download](#) and proceed to [Step #4](#) below.

The same applies to the pre-installed NexentaOS VMware image - download it and see the rest instructions at [Step #4](#) below.

Step #1: Loading HDD Installation CD

For installing on a hard drive or upgrading your system, download and burn a bootable InstallCD image. Note that we supply gzipped InstallCD ISO. Make sure to gunzip it *prior* to burning. Make sure to check its size and/or MD5 *prior* to uncompressing. Visit our [Download](#) page for more details.

The InstallCD requires that the target machine have at least 128MB RAM, as well as a CD-ROM drive.

Below are some example steps; we've highlighted the areas of interest on the screenshots to help illustrate the corresponding procedure. The system we use for the steps below consists of a VMware virtual machine environment with 512MB RAM and 8GB IDE drive.

Logging In

You will be greeted by the GRUB screen:



Note a new entry: "CD-ROM DMA off". For those who have ATA/ATAPI devices, this will take care of the known issue:

<http://www.gnusolaris.org/gswiki/FAQ#head-afb5cea5d4aa72019ff2a2767dd4397ae8461b9f>

Unless you wish to perform some debugging, simply invoke the default selection. The OS will then start booting...

```
SunOS Release 5.11 Version NexentaOS_20060515 32-bit
Copyright 1983-2006 Sun Microsystems, Inc. All rights reserved.
Use is subject to license terms.
Hostname: elatte_installed
CD-ROM: /devices/pci@0,0/pci-ide@7,1/ide@1/sd@0,0:g
Configuring devices.
-
```

Until finally it'll come up with the the Installer's Welcome screen:

```
NexentaOS-Installer
Welcome

Welcome to the NexentaOS installer.

If you intend on installing NexentaOS onto a removable drive
(e.g. USB memory stick, portable hard drive, etc.), please
make sure that the drive is currently inserted, powered on,
and isn't write protected before proceeding any further.

You can press 'CTRL-A :quit' at anytime to quit the installer.
Use SPACEBAR to select an entry, and TAB-UP-DOWN keys to navigate.
Use only UP-DOWN arrow keys to navigate between input fields.
You can also cycle through the Installer, Shell or Tetris by
pressing F1-F2-F3 keys.

** IMPORTANT: Please backup any important data before continuing **

< OK >

(0*$ [F1]Installer) 1$ [F2]Shell 2-$ [F3]Tetris 11 14:47
```

From start to that point it typically takes less than a minute. Note that the Installer has started automatically. The previous NexentaOS releases required knowing the name of the installation program, typing it in... Not anymore!

Step #2: Starting NexentaOS Installation

You could "poke around" prior to the installation. Hitting F2 key will get you into shell, where you could do a lot of things. For instance - display running processes:

```

PID USERNAME  SIZE  RSS STATE PRI NICE   TIME    CPU PROCESS/NLWP
  9 root      6272K 5160K sleep 59  0    0:00:08  2.6% svc.configd/15
  7 root      7064K 6112K sleep 59  0    0:00:03  0.5% svc.startd/12
303 root      3648K 2600K sleep 59  0    0:00:00  0.3% inetd/4
374 root      5296K 4068K sleep 59  0    0:00:00  0.1% intrd/1
389 root      2820K 2576K  cpu0 59  0    0:00:00  0.1% prstat/1
238 root      2980K 1628K sleep 59  0    0:00:00  0.1% screen/1
109 root      3084K 2036K sleep 59  0    0:00:00  0.0% nscd/23
  1 root      2040K 1088K sleep 59  0    0:00:00  0.0% init/1
240 root      3952K 1872K sleep 59  0    0:00:00  0.0% nexenta-install/1
243 root      3612K 1700K sleep 59  0    0:00:00  0.0% bash/1
266 root      5200K 2720K sleep 60  0    0:00:00  0.0% dialog/1
359 root      3372K 1520K sleep 59  0    0:00:00  0.0% syslogd/12
234 daemon    2112K 1360K sleep 60 -20   0:00:00  0.0% lockd/2
237 root      2544K 1264K sleep 59  0    0:00:00  0.0% screen/1
228 root      1744K  880K sleep 59  0    0:00:00  0.0% sac/1
107 root      2196K 1336K sleep 59  0    0:00:00  0.0% syseventd/14
250 root      2300K 1020K sleep 60  0    0:00:00  0.0% bastet/1
229 root      1884K 1032K sleep 59  0    0:00:00  0.0% ttymon/1
224 daemon    2316K 1464K sleep 59  0    0:00:00  0.0% statd/1
236 root      1092K  780K sleep 59  0    0:00:00  0.0% console-login/1
 96 root      2512K 1588K sleep 59  0    0:00:00  0.0% picld/4
Total: 29 processes, 111 lwps, load averages: 1.31, 0.55, 0.21
└─ 0-$ [F1]Installer (1*$ [F2]Shell) 2$ [F3]Tetris 01/29 1:34

```

Notice on the screenshot above that the screen utility is one of the active processes, along with a few services and bash. Keys F1, F2, and F3 shown at the bottom allow to do things in parallel with the installation by switching between screens. In particular, F3 allows to play Tetris!

Which brings us to the Tip of the Day:

- *Focus on getting over 100 Tetris points - and the installation process will commence in absolutely no time.*

Step #2.1: Configuring Time Zone

NexentaOS Installer makes it possible to interactively configure appropriate time zone during installation and upgrade. Once rebooted, the system will come up with the right local time.

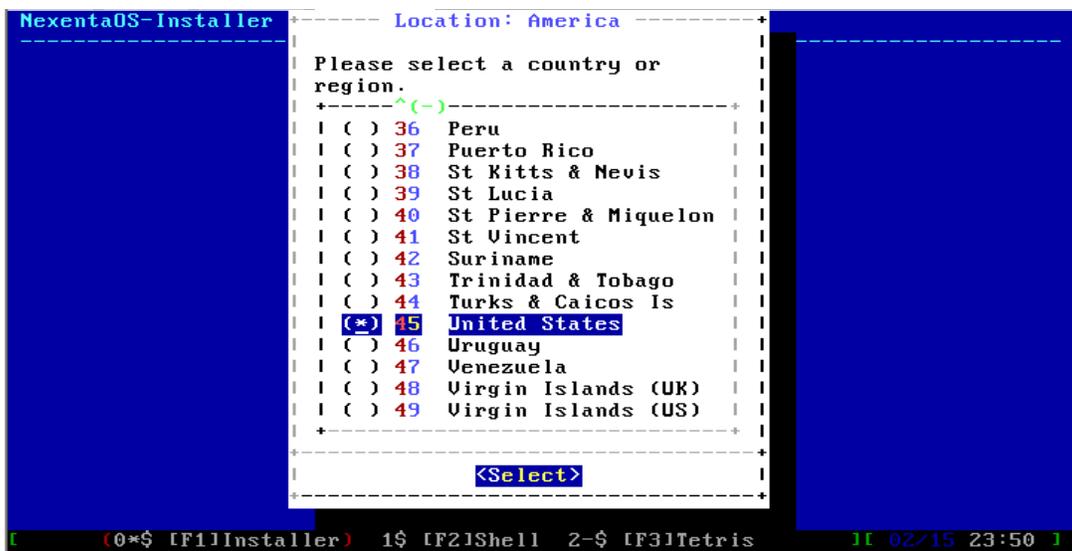
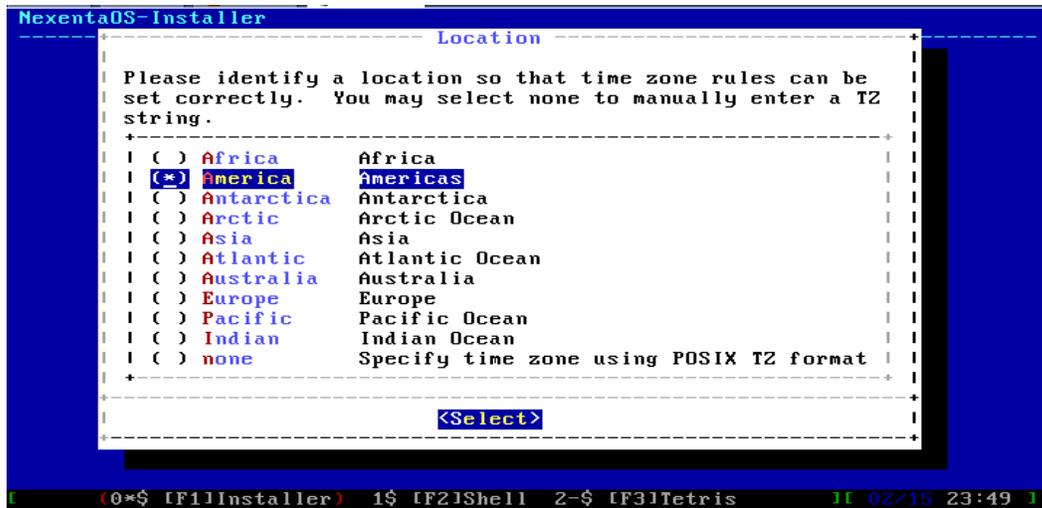
The time zone management facility welcomes you with the following screen:

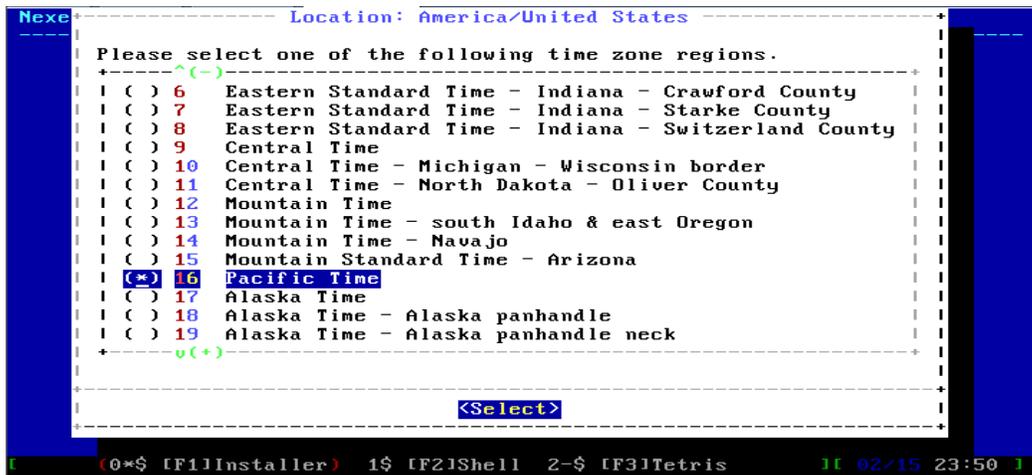
```

NexentaOS-Installer
----- Location -----
|
| Please identify a location so that time zone rules can be
| set correctly. You may select none to manually enter a TZ
| string.
|
| +-----+
| | ( ) Africa      Africa
| | ( ) America    Americas
| | ( ) Antarctica Antarctica
| | ( ) Arctic      Arctic Ocean
| | ( ) Asia        Asia
| | ( ) Atlantic    Atlantic Ocean
| | ( ) Australia   Australia
| | ( ) Europe      Europe
| | ( ) Pacific     Pacific Ocean
| | ( ) Indian      Indian Ocean
| | ( ) none        Specify time zone using POSIX TZ format
| |
| +-----+
|
|                                     <Select>
|
└─ (0*$ [F1]Installer) 1$ [F2]Shell 2-$ [F3]Tetris 02/15 23:47

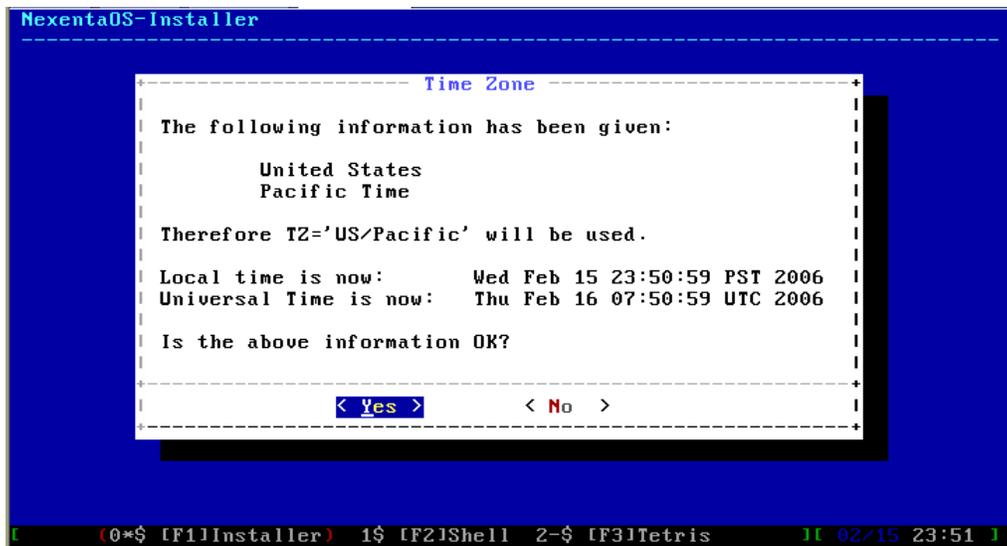
```

The following 3 screenshots simply illustrate time zone configuration for Western U.S.:





Based on the input, the Installer figures the local time. The result needs to be confirmed:



Step #3: Selecting Bootable Device and Creating NexentaOS Partition

There are two cases:

1. **Fresh installation:** NexentaOS is not installed on your system.
2. **Upgrade:** NexentaOS is installed on one of the bootable drives of your system.

The Installer will distinguish between the two.

- Upgrading by means of InstallCD - a.k.a. InstallCD upgrade - is temporarily disabled. However, we do provide the long-awaited **Live Upgrade** via the regular Debian 'apt-get dist-upgrade', 'apt-get upgrade', and Synaptic. Which means, starting from Alpha 5 you'll be able to upgrade your system without waiting for us to provide the next release.

For more details please refer to [Download](#), section **Known Problems**.

The rest of the page talks only about **fresh install**, and here's the corresponding screenshot:

```
NexentaOS-Installer
----- Fresh Installation -----
Automatic partitioning will repartition an entire disk with the layout
configured for NexentaOS. *WARNING*: All existing partition information on
the selected disk will be lost during the process! Backup existing
partition info or proceed with manual partitioning.

If you want to upgrade instead of reinstall, press ESC to go back. To quit
installer, press CTRL-C at anytime.

Please select the drive to be automatically partitioned:
+-----+
|      | /dev/dsk/c0d0s0 | 8192 MB (Gen-ATA VMware Virtual ID) |
+-----+

          < Auto >          < Manual >

(0*$ [F1]Installer) 1$ [F2]Shell 2-$ [F3]Tetris      14:48
```

Fresh Install

NexentaOS Installer can perform installation in the automated mode. Manual installation remains an option; for the exact steps please refer to [Getting Started pages for Alpha 1](#) (the relevant description starts at Step #3).

Unless you are completely comfortable with the low-level fdisk and format operation, manual installation is not advisable. And even if this is the case, please consider first taking a look on the related resources, which include instance "Install, Upgrade & Boot" Section of the [frequently asked questions](#).

To proceed in the **Auto** mode, select a bootable device by hitting SPACEBAR, and then press Enter. Confirm that you do want to use the selected device for NexentaOS:

```
NexentaOS-Installer
----- Question -----
You have selected a disk (/dev/dsk/c0d0s0) to be auto-partitioned.
This installer will assume a preconfigured layout for the file
system(s) in that disk.

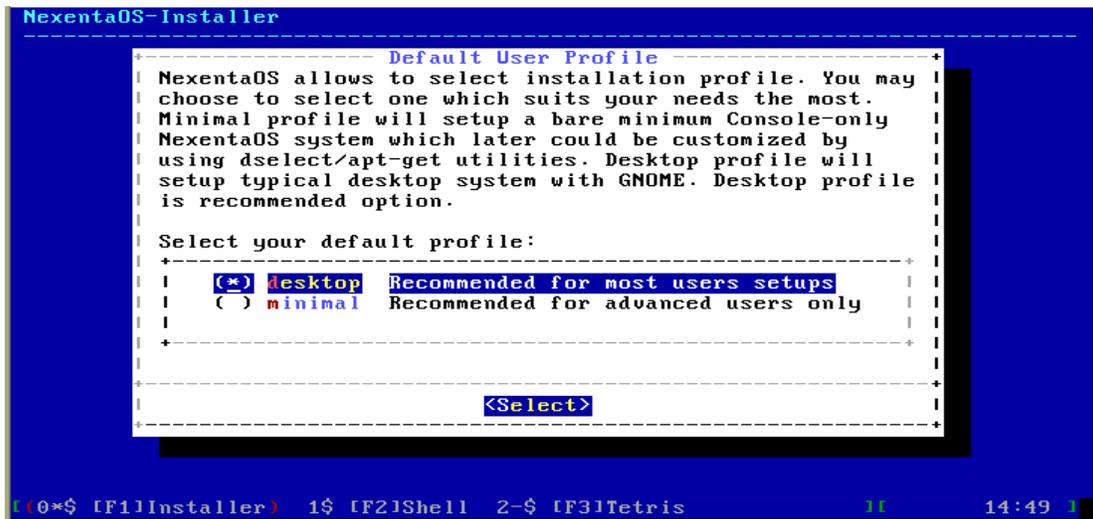
Are you sure you want to auto-partition this disk?

          < Yes >          < No >

(0*$ [F1]Installer) 1$ [F2]Shell 2-$ [F3]Tetris      14:48
```

It's not late at this point to change your mind: no harm done yet.

Confident that you do want to install Nexenta? Than hit Enter:

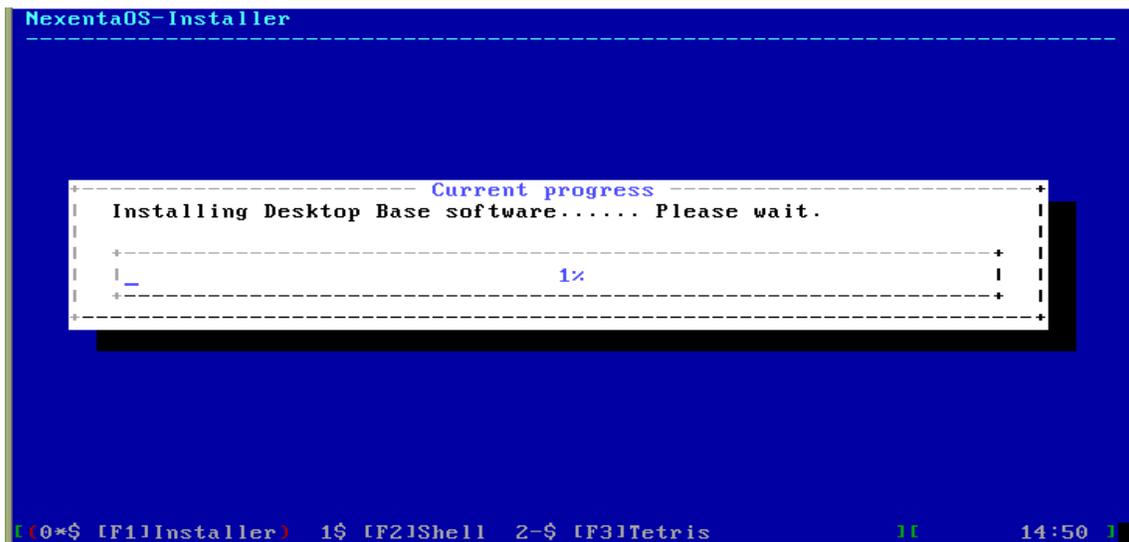


Obviously, the minimal system can be later "maximized", and vice versa, the fully installed system can be "minimized". The minimal installation does not include X, it could be a good starting point to tailor your system for the server.

Make your choice by using Up and Down arrows, and SPACEBAR. Hit Enter. Skip the next section and proceed directly to [copying packages](#).

Copying packages

The copying, or more exactly, installation of NexentaOS packages, begins:



Depending on the chosen profile (full/minimal), speed of your CD-ROM, and several other factors, and discounting extreme cases (e.g., Pentium II etc.) - the installation time varies anywhere between 5 to 45 minutes.

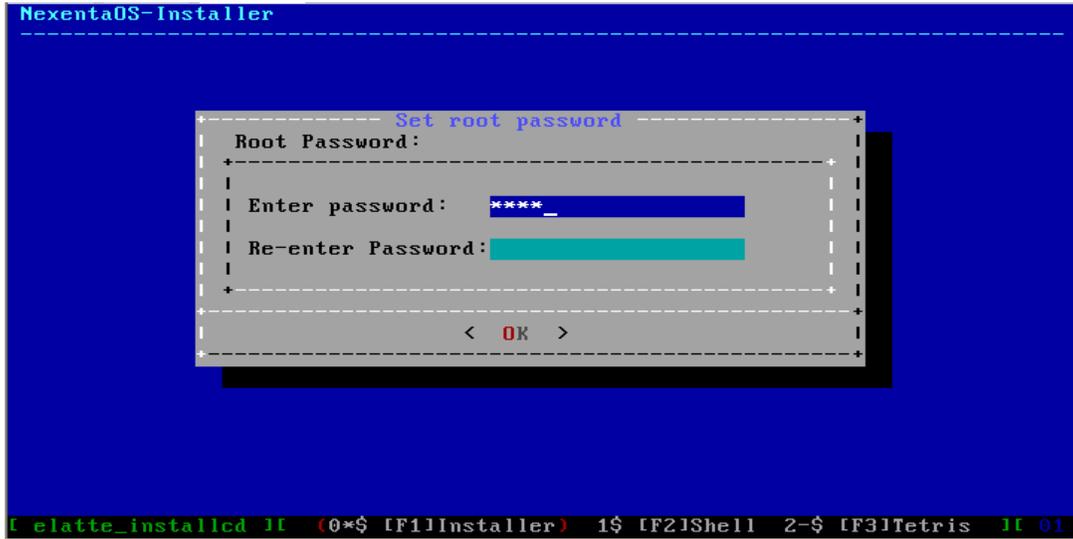
Remember the Tip of the Day? Yes, here's the chance to polish your Tetris skills. Press F3:

Once copying finishes, the Installer will ask you a few simple questions.

Fresh Install: creating root password and non-root user

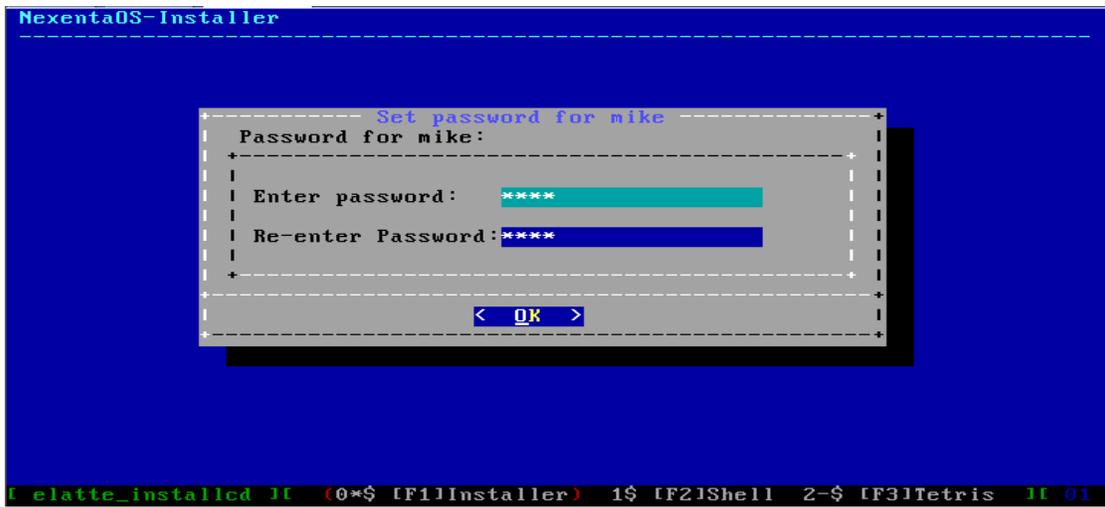
Skip this section if you are upgrading NexentaOS.

The root password does *not* have to be empty. Use the following dialog to create a real root:



Next, the Installer will ask you to create a non-root user account:

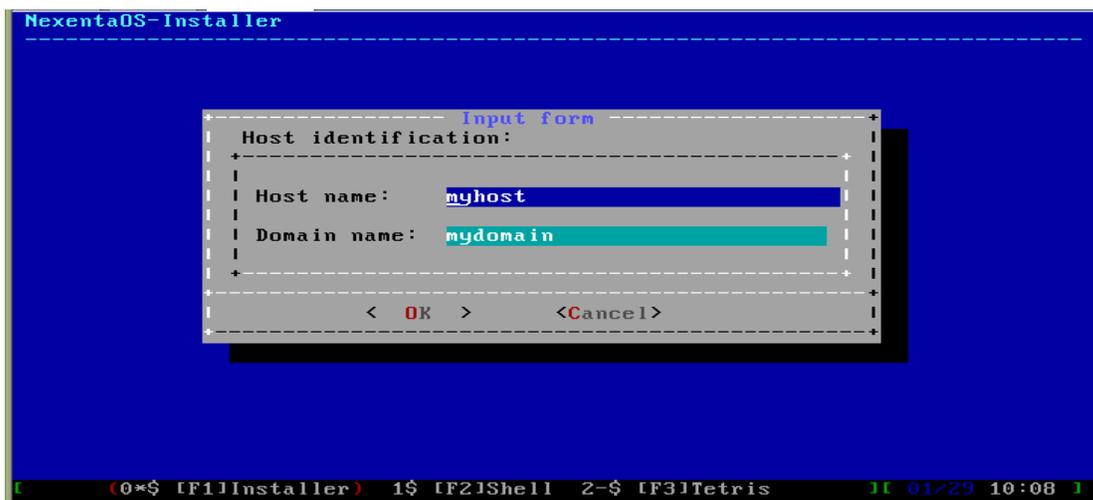


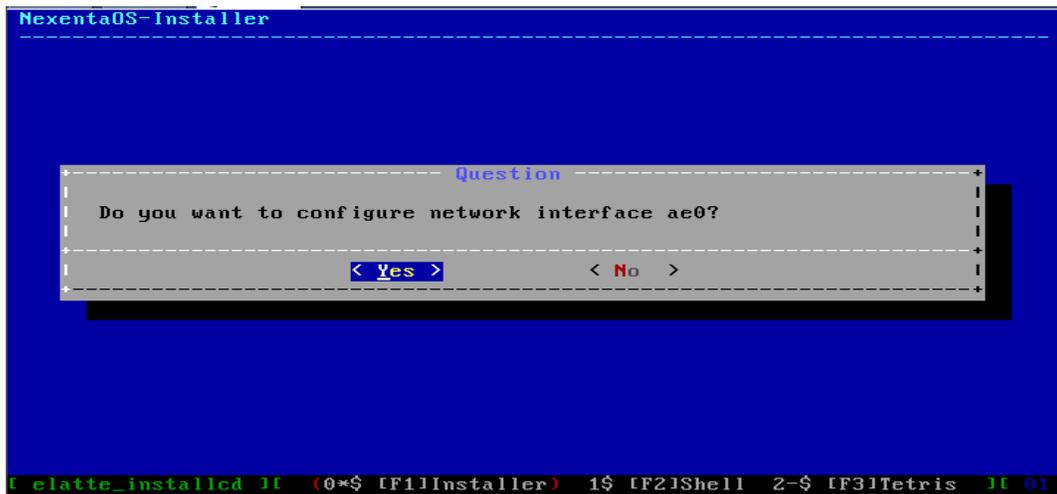


Fresh Install: configuring Host and Network

Skip this section if you are upgrading NexentaOS.

Following that, the Installer will proceed on to configure host, domain, and network:





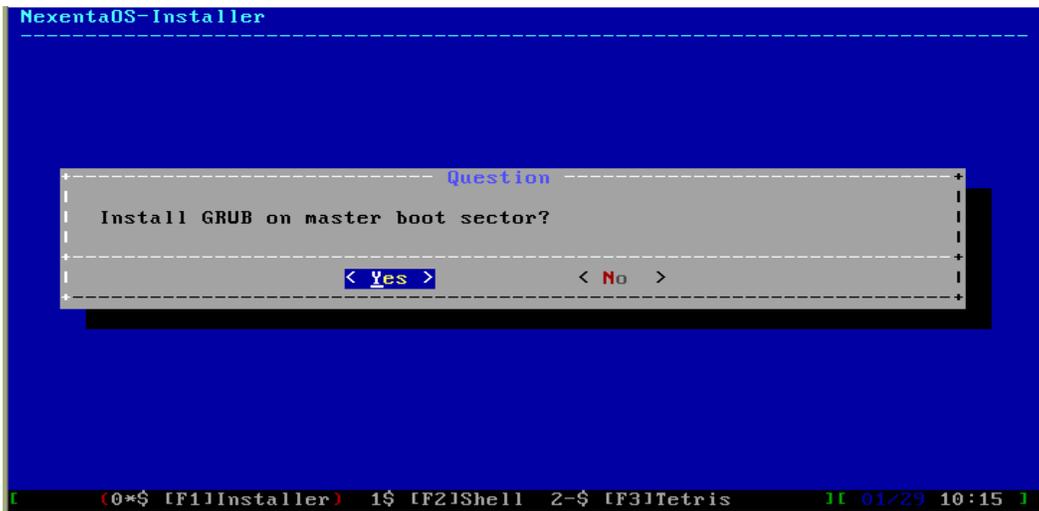
Fresh Install: Writing GRUB

Skip this section if you are upgrading NexentaOS.

Your permission is needed to install GRUB. If you already have GRUB (for instance, if you have Linux + GRUB), you need to install GRUB not on MBR, but inside NexentaOS partition. The rest is the same as what's already in our [frequently asked questions](#), i.e. you need to chain-load Solaris GRUB from Linux GRUB.

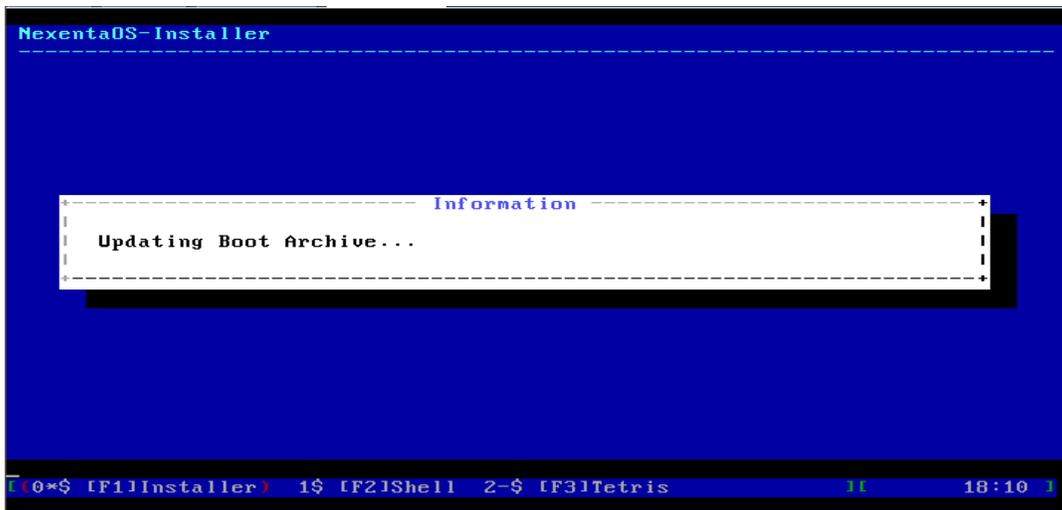


Say Yes:



Install: the final step

Updating boot-archive with the installed kernel bits completes both Install and Upgrade "transactions":



This is the final step. Prior to that you don't have a working system, and if you try to reboot, it'll fail, and you'll have to re-install from scratch. But once this step finishes, the entire lengthy operation is done.

Fresh Install: the End

If you are upgrading, skip this section.

NexentaOS is installed on your system. You may now reboot:

```

NexentaOS-Installer
-----
Question
-----
NexentaOS installation is complete.
Would you like to reboot now?
-----
< Yes >    < No  >
-----

((0*$ [F1]Installer) 1$ [F2]Shell 2-$ [F3]Tetris           || 18:15 |

```

Alternatively you can say No and poke around for a bit. For instance, display the list of installed packages:

```

ii sunwtnetd 5.11.30-1 Telnet Server Daemon (Usr)
ii sunwugen 5.11.30-1 USB Generic Driver
ii sunwuksp 5.11.30-1 USB Keyspan serial driver
ii sunwuprl 5.11.30-1 Prolific PL2303 USB-to-serial driver
ii sunwusb 5.11.30-1 USB Device Drivers
ii sunwusbs 5.11.30-1 USB generic serial module
ii sunwvolr 5.11.30-1 Volume Management, (Root)
ii sunwvolu 5.11.30-1 Volume Management, (Usr)
ii sunwwlanr 5.11.30-1 wifi config tool
ii sunwwlanu 5.11.30-1 wifi config tool
ii sunwxge 5.11.30-1 Xframe 10GE NIC Driver
ii sunwxwdu 5.11.30-1 X Windows System Window Drivers
ii sunwzfsr 5.11.30-1 ZFS (Root)
ii sunwzfsu 5.11.30-1 ZFS (Usr)
ii sysv-rc 5.11.30-1 Debian SysV-RC compatibility scripts
ii sysvinit 5.11.30-1 Debian SysV init compatibility scripts
ii tar 1.15.1-2 GNU tar
ii tcpd 7.6.dbs-8 Wietse Venema's TCP wrapper utilities
ii util-linux 2.12p-5.2.1 Miscellaneous system utilities
ii wget 1.10-2 retrieves files from the web
ii whiptail 0.51.6-31gnuso Displays user-friendly dialog boxes from she
ii xaperture 1.00-1 XFree86 aperture driver
ii zlib1g 1.2.3-6gnusol3 compression library - runtime
root@elatte_installed:~# dpkg -l
[ elatte_installed ] (1*$ [F2]Shell) 2-$ [F3]Tetris || 01/28 0:38 |

```

If you think everything is installed OK, type:

```
sync; reboot
```

Don't forget to eject the InstallCD afterwards.

Step #4: Booting

For the LiveCD - burn a bootable LiveCD image, put the LiveCD into your CD-ROM drive, and make sure to select CD-ROM as your boot device.

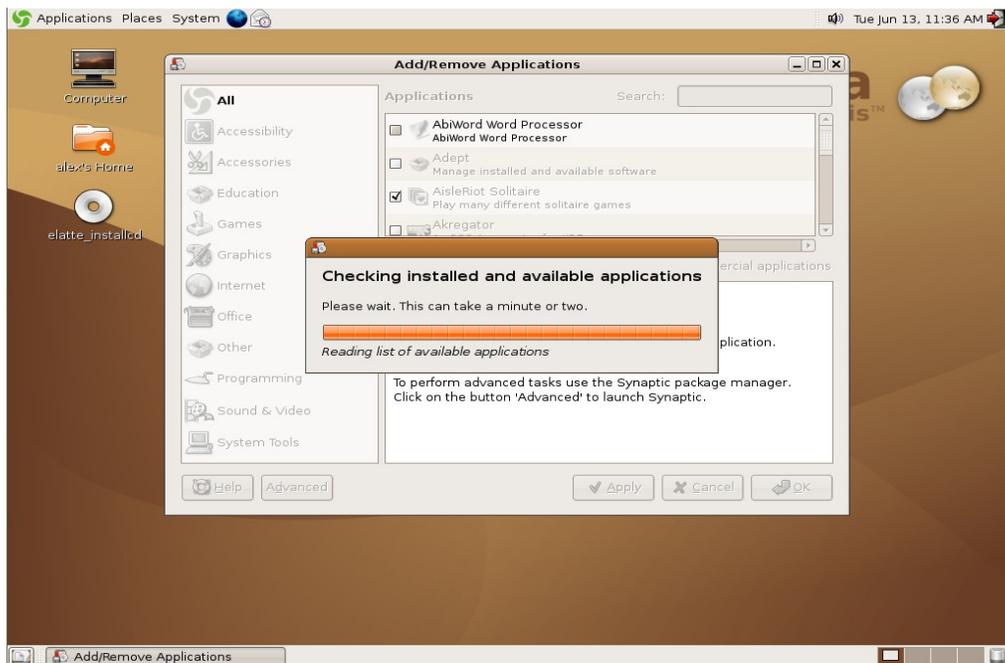
For VMware image - simply download and run it in [VMware Player](#).

Note that the images are zipped. Make sure to unzip them *prior* to burning. Make sure to check its size and/or MD5 *prior* to uncompressing. Visit our [Download](#) page for more details.

Booting from CD does take some patience - prepare yourself for a few minutes of waiting. Alternatively, you could boot the downloaded ISO in [VMware](#) environment.

First, you will be again greeted by the familiar GRUB screen from section [Loggin In](#). Next, the system will start booting. The GNOME Display Manager (GDM) will soon appear, and you will be asked for a password. For both the LiveCD and VMware image - type "root" and enter "livedcd" as a password.

Once logged in, put the system to work. For instance, use the latest GNOME feature to install new applications:





Thank you for choosing NexentaOS!

Feedback

We are very interested in your feedback. Please let us know how your installation or upgrade goes, what could be improved, and what problems you've encountered.

Enjoy, and thanks for using NexentaOS!

last edited 2006-06-14 10:02:11 by Admin