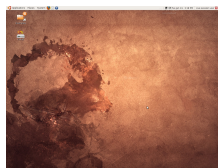


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Ubuntu 9.04 Alpha  
(Jaunty Jackalope)

## Ubuntu 9.04 Boots in 21.4 Seconds

*With EXT4 as the default filesystem.*

There are only two days left until the third Alpha version of the upcoming Ubuntu 9.04 (Jaunty Jackalope) will be available (for testing), and... we couldn't resist the temptation to take the current daily build for a test drive, before our usual [screenshot tour](#), and taste the "sweetness" of that evolutionary EXT4 Linux filesystem. Announced on Christmas Eve, the EXT4 filesystem is now declared stable and it is distributed with version 2.6.28 of the Linux kernel and later. However, the good news is that the EXT4 filesystem was implemented in the upcoming Ubuntu 9.04 Alpha 3 a couple of days ago and it will be available in the Ubuntu Installer, if you choose manual partitioning (see the screenshot below for details). The bad news is that EXT4 will not be the default filesystem for the Ubuntu OS until version 9.10, due for release in late October this year.

OK, OK... so how will the end user benefit from this EXT4 filesystem? Well, first of all, the whole system will be much faster and more reliable compared to one with EXT3 (I guess that some of you still remember the [Firefox/Ext3 issue](#)), it will boot faster (the current article proves that) and it's able to handle files with sizes of up to 16 [TB \(terabytes\)](#). But these are just a few of the features brought by the fourth extended filesystem, for more details you can check the [Wikipedia entry for EXT4](#).

We've tested the boot process of a default Ubuntu 8.10 and 9.04 Alpha (Build 20090112.1) installation on two machines, an AMD Sempron 1.8 Ghz, 80 GB IDE hard drive with 512 RAM DDR and an Intel Core 2 Duo E4300 running at 2.2 Ghz, 250 GB SATA hard drive with 4 GB RAM DDR2. Here are the results of our tests:

- Ubuntu 8.10 with EXT3 filesystem boots in 31.8 seconds (on the AMD Sempron system);
- Ubuntu 9.04 Alpha (Build 20090112.1) with EXT3 filesystem boots in 28.3 seconds (on the AMD Sempron system);
- Ubuntu 9.04 Alpha (Build 20090112.1) with EXT4 filesystem boots in 23.1 seconds (on the AMD Sempron system).
  
- Ubuntu 8.10 with EXT3 filesystem boots in 26.8 seconds (on the Intel Core 2 Duo system);
- Ubuntu 9.04 Alpha (Build 20090112.1) with EXT3 filesystem boots in 24.5 seconds (on the Intel Core 2 Duo system);
- Ubuntu 9.04 Alpha (Build 20090112.1) with EXT4 filesystem boots in 21.4 seconds (on the Intel Core 2 Duo system)!

The boot times were calculated from the moment the GRUB boot loader appeared on the screen and until the login manager was displayed. As you can see, there is an approximately 8.7 second difference between an Ubuntu 8.10 (Intrepid Ibex) installation and an Ubuntu 9.04 Alpha (Jaunty Jackalope) one on the first system and 5.4 second difference on the second system. But this does not stop us from hoping that the boot times will decrease even more until the final version of Ubuntu 9.04 hits the streets.

Currently, EXT4 can only be applied from the text mode installation of Ubuntu 9.04 (the Alternate CD). Don't forget to check our website on Thursday for the screenshot tour of

Ubuntu 9.04 (Jaunty Jackalope) Alpha 3 when we will reveal even more goodies from the Ubuntu land.

Later Edit: We apologise for not having listed all the results of our tests. Therefore, we've added the missing two tests: Ubuntu 8.10 and Ubuntu 9.04 Alpha (Build 20090112.1) with EXT3 on the Intel Core 2 Duo system.