I was cleaning up my /home partition when I noticed I had several tiny distros hanging around waiting to be tested. So I thought this might be a good time to write an updated Mini-distro Roundup. Unlike last time, the five contestants are all less than 88 MB in download size. The five contestants are CDlinux 0.6.1, Damn Small Linux 4.3r2, Puppy 4.0rc, Slitaz 1.0, and Austrumi 1.6.5. All of these are the latest stable except Damn Small and Puppy, that are release candidates. So, we'll cut them just a bit of slack in the stability department if need be.

I've update the criterion for this article since the all distro are less than 100 MB and laptops have become much more prevalent these days than in 2005. So, this time the criterion are:

- **Ease of Use:**
  
  Is it easy to boot up and get into a gui? Are the tools and applications readily available and easy to find, and easy to use?

- **Looks:**
  
  Simply put, how pleasing is it to the eye?

- **Useful:**
  
  Are the apps included useful to a majority of users? Is there something included to complete most any basic task? This area is most simply put, how useful is the distro?

- **Stability and Functionality:**
  
  Are the distro and the applications stable? Do they function as designed and complete their tasks?

- **Laptop Support:**
  
  Is there support for the hardware and functions specific to notebooks such as wireless tools, CPU Frequency
Scaling support, battery monitoring, sleep options, WPA support, and perhaps ndiswrapper or fwcutter?

**CDlinux 0.6.1**

CDlinux is a mini live CD from China I believe. The default boot image is in English, so there was no problem there. It boots fast and straight into an XFCE 4.4.2 desktop. The fonts were a bit jagged, but otherwise the desktop looked pretty good. It had a nice background and an okay window decoration.

At 58 MB, the applications are scarce and light. However, there seems to be an application for the very most common tasks. Some of these apps include Firefox 2.0.0.14, Pidgin, Sylpheed, Xine, ePDFViewer, GPicView, Mousepad, and Vim. It could play Ogg, MP3s, AVIs, MPEGs, and audio CDs, but not encrypted DVDs. It automounted removable media, placed an icon on the desktop, and opened a file browser. I didn't find a hard drive installer, but I could have overlooked it I suppose. Under the hood is Linux 2.6.24.5 and I believe Xorg is 7.3. There were some commandline essentials as well such as scp, ssh, but no smb. There was no real package management system as we think of it today, but rpm was available.

Hardware support was okay. CDlinux booted to a resolution of 1280x800 as desired using the Xorg nv driver. Sound worked out of the box as did the wired ethernet and the connection is present at boot. There were some wireless tools for the commandline including wpa_supplicant, but no ndiswrapper or fwcutter for those of us with proprietary chips. I was able to load the modules and configure CPU Freq Scaling, but I wasn't able to get a battery readout going. No hibernate or suspend options were present either.

CDlinux was fast and stable. It seems like a nice little portable system for those wishing basic internet and multimedia capabilities.

**SliTaz 1.0**

SliTaz is the newcomer to the scene, storming in and already receiving some great reviews. It weighs in at a mere 25 MB. It appears to be French and you can issue some cheatcodes at startup if you can read French. But no worries cuz it asks about language and keymap during boot. It also confirms soundcard and lets you configure the gui. It offers some resolutions or you can download Xorg. I tried the Xorg route, but only got a big black screen, so next boot I just accepted the 1024x768 resolution. I wasn't impressed yet.

But then the gui with Joe's Window Manager started. It had a nice enough art deco wallpaper and a cool window decoration. The fonts were pretty good. To my surprize the menu was jammed packed with applications! It has too many to list, but some are ninvaders, mtPaint, Alsaplayer, Osmo, Burnbox, Gparted, Firefox 2.0.0.14, Transmission, Ghost in the Mail, and emelFM2. There wasn't a movie player present, but Xine is available in the software
repositories. Abiword is too. The kernel is 2.6.24.2. There is a hard drive installer as well as LiveCD creation and ISO Remaster tools.

Yup, that's right. I said online repositories. SliTaz also comes with its own package manager called tazpkg. It's a commandline tool much like APT and it's equally easy to use. It will download the package and dependencies and install them. It doesn't automount removeable media, but one of the System Tools is Mount Devices - which will do it fairly easily for anyone.

Hardware support was basic. I had to live with the lower resolution, but it worked and sound worked after the quickie config during boot. The wired ethernet internet connection was enabled at boot. But there are no advanced laptop features. There wasn't even support in the kernel for CPU Freq or battery.

So, SliTaz would be nice for someone who wanted to be different from the rest of the crowd, or if they were trying to save an older computer with a small hard drive from the recycle bin. Despite the shortcomings, this distro still has a real high neato factor going for it. I liked it alot. If you'd like to read some more extensive reviews, Ladislav has linked to some here [6].

**Damn Small Linux 4.3r2**

[7]Damn Small used to be the king of the minis and it is probably the most widely known. In fact, at one time only a few floppy distros were smaller than DSL's 48 MB and then they disappeared. However, Damn Small is still stuck in that era. Using a 2.4 kernel has just about rendered DSL obsolete. It is still useful for really old hardware, but you can't really use it on anything from the last few years with much functionality. So far, two other distros have proven you can update the kernel to 2.6 with lots of hardware support and still come in at 50 MB or less. Why they won't upgrade is beyond speculation. I chose the latest development version in hopes, but nope. Actually, from a quickie look perspective, it appears very little has changed since my last full review [8].

That said, 4.3 does have a cool new wallpaper and a good looking windec and menu. They still have Conky in the upper right-hand corner. It didn't say too much for me cause it couldn't use much of my hardware, including the wired ethernet. It did come with a forcedeth driver, but it was too old - it wouldn't work. It comes with ndiswrapper, but I couldn't access my hard drive or usbkey - so it was useless.

It does come with lots of great little software. It features Ted Word Processor and Slag Spreadsheet. It has Xmms, Firefox 1.0.6 (which I heard was supposed to be upgraded to a 2.x), mtPaint, emelFM, and Slypheed. It has lots of configuration tools, their DSL package manager, and Enable APT. It also includes a few games and many more little apps - some terminal apps, but still handy (if you have supported hardware). They started using DFM for the main file manager replacing iDesk icons which feels like a big step backwards and detracts from the overall appearance with the folders on the desktop instead of nice icons. All in all, I just don't love DSL much anymore.

It would be great for really old hardware tho. It will work on hardware as old as x386 (them first pentiums) with 16 MB ram (if memory serves). But if you have anything much newer than 2 or 3 years old, I'd say skip this DSL for one of the others featured here today.

**Austrumi 1.6.5**
Austrumi is a bit heavier, weighing in at 81 MB. So, they have a bit of an unfair advantage, but I decided to take a look anyway. I last tested Austrumi at version 1.2.0 and a bit has changed since then. Austrumi hails from Latvia, so the best change is now an easy way to set your language at boot. But the most obvious change is in window managers (again). When last I visited Austrumi they were using Enlightenment, but now they seem to be using Metacity. This makes for a really light-weight, fast, and attractive interface. They have supplied a really cool, if a bit busy, wallpaper in shades of gray, charcoal, blue, and white. The 3D appearance of the panel, menu, and windecs give Austrumi a modern look and makes it one of the most attractive offerings discussed here today. The live CD boots directly into the window manager as root and I found my desired 1280x800 resolution and my wired ethernet connection ready for web surfing. I was liking it already.

There is no support for laptop specific hardware such as sleep, battery, or CPU Freq. There were some wireless tools, so those with linux supported hardware and don't use WPA (support not included) on their access point will probably find their connection at boot as well. My sound worked fine, and I was able to watch and listen to all sorts of formats except DVDs with the included MPlayer. Which I think is related to not being able to mount my USB key, until I opened the Install to USB tool. The 2.6.23 kernel sees the removeable media, but no devices are made.

Austrumi comes with lots of applications. Some include Firefox 2.0.0.11 (in Latvian) with the Simple Mail add-on. Bluefish Editor, Atomix, GIMP, Abiword, Gnumeric, Partimage, emelFM2, and Skype are just a few. Austrumi also ships with NVIDIA driver and Compiz, but when I restarted X with NVIDIA drivers, I lost my cursor. Wbar, a launcher with exploding icons, is also available. Austrumi has quite a few system tools and accessories as well, but I didn't find a terminal text editor.

Austrumi makes a real good first impression, but it has it issues. It's attractive with lots of functionality and is fast and stable. It's fairly nice, but it has some stiff competition.

Puppy Linux 4.0rc

Puppy is probably the most popular of the mini distros, and for good reason. It really is just awesome. This being a release candidate, the current appearance may not be the one when it goes final, but as it is it's much improved over the last version I'd tested. This wallpaper has an image of a snowy mountain and a placid lake with lots of blue. It looks so tranquil. The window manager is JMW and they've loaded a nice enough theme. The icons are a great match with blue being the primary color. It'll do.

It booted into my preferred 1280x800 resolution, sound worked automagically, but the biggest problem I had: my USB mouse wasn't functional. I had to resort to my touchpad. I probably could have fiddled around with it and got it to work, although the Puppy mouse/keyboard tool didn't bring it to life. The wired ethernet wasn't connected at boot, but there is a "Connect" icon on the desktop which opens a little wizard that will connect for you. This way you can input some preferences if you wish. In fact, I used that little Network Wizard to connect my wireless ethernet to my WPA protected router. Puppy comes with the b43 driver for my Broadcom wireless nic that brings that proprietary hardware to life, which is a very good thing cuz Puppy 4.0 is using Linux 2.6.25 and ndiswrapper won't work with it. The wizard
said that b43 doesn't support WPA, but I negotiated that at the commandline and used the network tool for all the rest.

Puppy has a battery monitor is the lower panel by default and I was able to scale down my CPU frequency to 800 MHz. I didn't see any suspend or hibernate though.

Puppy comes with lots of software such as Seamonkey, Pidgin, Sylpheed, PicPuz, Gnumeric, HomeBank, mtPaint, Abiword, InkLite, Xine, and OSMO. I could watch and listen to all sorts of media including encrypted DVDs. It uses ROX-filer as the main graphical file manager. Puppy also comes with lots and lots of Puppy tools for configuration and set up of various hardware and software. Some are Pbackup, Pmount, and Pupscan. It comes with lots of utilities and accessories too. Some commandline essentials were included as well such as scp, ssh, smbclient, and wget, although I didn't find a console text editor. There is even a little help file.

It's fairly complete for a tiny distro, although Puppy 4.0 is weighing in at a colossal 88 MB. It's blazing fast as well as stable. Puppy probably is your best bet if you're looking for a tiny distro. I would go as far as to say it is more than adequate to be your everyday system if you wanted.

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The Verdict

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Conclusion

All of these tiny distros are pretty cool just for being able to bring a system to you in such a small package. SliTaz wins the metal for smallest ever since the floppy distro days, and probably the smallest with a fully functional gui and so many apps. It's just really amazing. But size wasn't one of the criterion this time. Overall functionality including laptop support was really what the tests boiled down to.

And of course that honor goes to Puppy Linux. I found it probably to be the most complete and definitely the most functional. Being able to use my wireless ethernet just really impressed me. And I've always been impressed by those Puppy tools. These guys are writing their own software instead of using others' in many cases. I think that's cool.

So Puppy wins this competition today. They placed very high last time [3] as well. They kept improving while others remained stagnant and even found some new competition. I wonder how things will look in 3 more years.

(UPDATE: I supposed I should have mentioned the testing hardware used [13].)
Linux -s

Source URL: http://www.tuxmachines.org/node/26480

Links: