

Slim and sleek Linux distro

SLITAZ



Franck Boston, Fotolia

In a world of multi-gigabyte Linux distributions, it's refreshing to see lightweight distributions like Puppy Linux and Damn Small Linux. But even these distributions look fat next to SliTaz. **BY DMITRI POPOV**

The tiny SliTaz [1] Linux distribution weighs in at less than 30MB, but it packs a graphical desktop environment and an amazing array of applications. Similar to Puppy Linux, SliTaz loads entirely to RAM, so it runs blazingly fast even on older hardware. Because SliTaz is a Live CD Linux distribution, getting it running on your machine is a breeze. Before you do that, however, you have to choose which version of SliTaz you want to run.

Stable and Cooking

SliTaz is available in two versions: stable and cooking. As you might have guessed, the former has been fully tested and includes stable packages, whereas the latter contains bleeding-edge kernel, features, and software.

After choosing the version you like, you can download the appropriate *.iso* image, burn it on a CD, and then boot your machine from it.

Alternatively, you can use the excellent UNetbootin utility to create a Live USB stick [2]. UNetbootin provides built-

in support for SliTaz, which makes it easy to install the distro on a USB stick (Figure 1). Simply plug the USB stick, launch UNetbootin, select *SliTaz* from the *Distribution* list, press *OK*, and the tool handles the rest.

Also, you can run SliTaz from a Windows partition. To do this, install GRUB for DOS [3], copy the SliTaz *.iso* image to the *C:\boot* directory, and add the following lines to the *C:\menu.lst* file:

```
title SliTaz cooking
map (hd0,0)/boot/ ↵
slitaz-cooking.iso (hd1)
map --hook
kernel (hd1)/boot/ ↵
bzImage rw ↵
root=/dev/null vga=normal
initrd (hd1)/boot/rootfs.gz
```

The cooking version of SliTaz also allows you to boot the system from the web. To do so, download the GPXE package to *C:\boot* and add the following code to *C:\menu.lst*:

```
title SliTaz web
kernel (hd0,0)/boot/gpxe
```

This will boot the latest version of SliTaz. But that's not all: You can also perform a so-called frugal install, which is explained in the SliTaz Wiki [4].

Boot Parameters

Because it's a Live CD Linux distribution, SliTaz supports a number of boot parameters. Using, for example, the

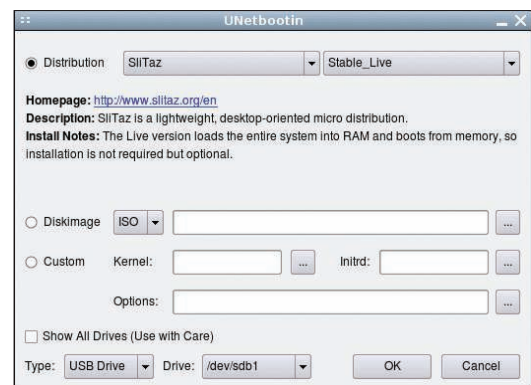


Figure 1: With UNetbootin, you can make a bootable SliTaz USB stick.

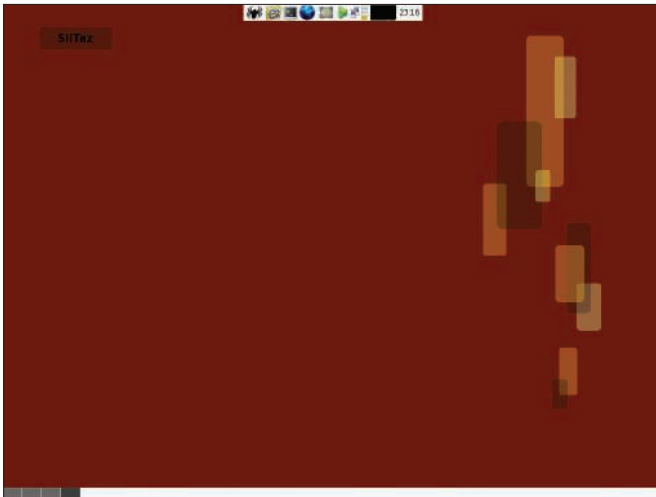


Figure 2: SliTaz uses the Joe's Window Manager (JWM) graphical desktop environment.

home boot parameter, you can specify on which USB device SliTaz should save your user data, such as settings, bookmarks, downloads, etc.:

```
slitaz home=sdal
```

Keep in mind, though, that the USB device you want to use for that must be formatted as ext3. Another useful boot parameter is *screen*, which you can use to specify the screen resolution:

```
slitaz screen=1280x1024x24
```

If you are running SliTaz on a laptop, you can use the *laptop* boot parameter to load laptop-specific kernel modules.

SliTaz also features two boot parameters that allow you to run the distribution on a machine with limited RAM. The *slitaz-loram* parameter lets you load SliTaz on a machine with 64MB of RAM, and the *slitaz-loram-cdrom* parameter forces SliTaz to run from the CD without loading the system to RAM. This way, you can run SliTaz on computers with 16MB of RAM.

During boot, the system prompts you to choose your language, keyboard layout, and screen resolution (provided you haven't specified these settings with boot parameters), and after SliTaz is up and running, you are presented with an uncluttered desktop based on the Joe's Window Manager (JWM) graphical desktop environment (Figure 2).

The panel at the top provides quick access to all essential tools and applications. Here, you will find shortcuts to the

Mozilla web browser and an emelfM2 file manager, as well as a volume control, a network applet, a CPU monitor, and a clock. The SliTaz menu gives you access to all the installed applications.

Applications

Considering its size, SliTaz manages to squeeze in an impressive number of applications (Figure 3), including the Geany text editor, ePDFView PDF viewer, gFTP FTP client, GPicView image viewer, and the Transmission BitTorrent client.

Also, it has the Burnbox utility for burning CDs and DVDs, Osmo organizer, ListPatron list manager, mtPaint image editor, LightTPD web server, and WiKiss wiki. To keep the size small, SliTaz doesn't include any office application or an email client, but you can install additional packages with SliTaz's own package management tool.

Hard-Disk Install

Although SliTaz is a Live CD Linux distribution, you can install it easily on your hard disk, and the distribution includes its own graphical installer that makes the installation process a breeze (Figure 4). Unfortunately, the SliTaz Installer is in French (the developers plan to fix this issue soon), but it's so easy to use that you should be able to figure out most of its options.

Before you can install SliTaz onto a hard disk, make sure that it has a separate ext3 partition. If it doesn't, you can use the GParted disk partitioner to create one. Launch the SliTaz Installer tool and

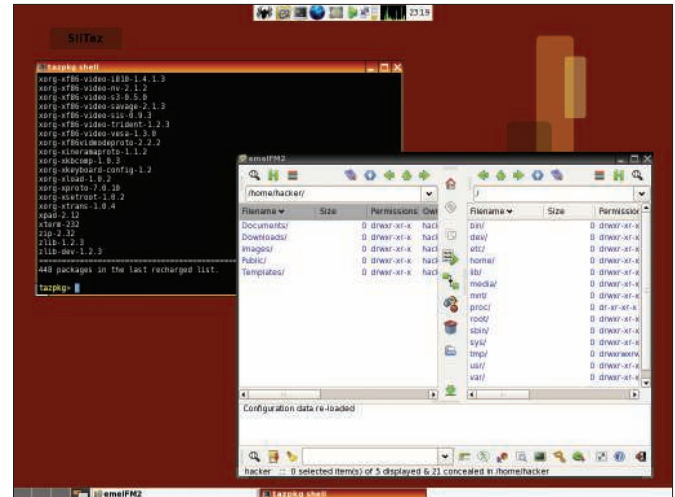


Figure 3: Despite its diminutive size, SliTaz packs a lot of useful applications.

press *OK* in the first screen to choose the option to install SliTaz. In the next screen, specify the installation partition; press the *List* button to display a list of available partitions. To begin the installation, press *OK*. After the installation is complete, the system prompts you to choose where to install the GRUB boot-loader. After you choose the default option, you are done.

Tazpkg

One of the major advantages of installing SliTaz on the hard disk is that it allows you to tweak the system and install additional applications. To do the latter, SliTaz provides its own package manager called Tazpkg. Similar to apt-get on Debian, Tazpkg allows you to install and manage packages on your system easily.

To install a package with Tazpkg, launch the package manager by choosing *System Tools | Package manager* from the SliTaz menu. To become root, use the *su* command, then run the *recharge* command to refresh the list of packages available on the official mirror. To see whether the mirror contains the package you want to install, you can use the *search* command, for example:

```
search abiword
```

Alternatively, you can view a list of all packages available on the mirror with the *list-mirror* command. The *get-install* command lets you install the package you want:

```
get-install abiword
```

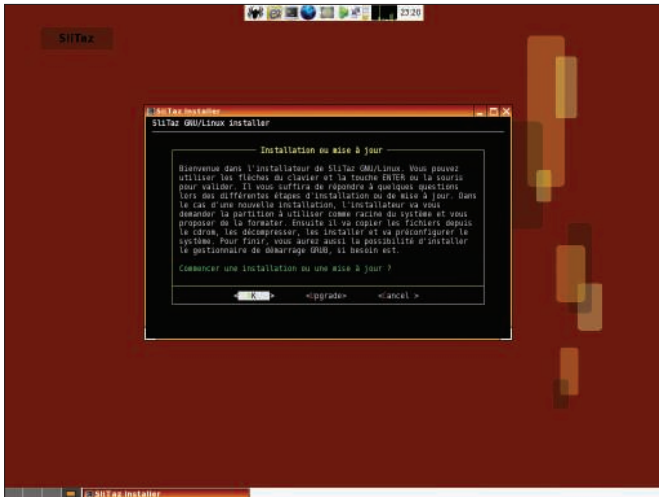


Figure 4: Although it is a Live CD distro, SliTaz features a graphical installer tool.

To remove installed packages from your system, use the `remove` command:

```
remove abiword
```

Two other useful commands are `clean-cache` and `upgrade`, which allow you to remove `.tazpkg` packages downloaded to the cache and upgrade the installed packages, respectively.

Although the list of available SliTaz packages is rather short compared with mainstream distributions such as Ubuntu or Mandriva, it does contain a few useful packages, including the Sylpheed email client, the Pidgin IM application, and the Inkscape vector graphics editor, as well as GCC, make, Perl, Python, and an assortment of utilities. The cooking version of SliTaz provides access to even more packages, including the HomeBank personal finance manager, the NoteCase note manager, the XSane scanning front end, and others.

After you've tweaked the system to your liking and installed the packages you need, you can turn it into a customized version of the SliTaz Live CD. To do so, use Tazlito [5], SliTaz's easy-to-use distribution remastering tool, which can generate a ready-to-use `.iso` image based on your current system (Figure 5). To launch the tool, choose *SliTaz Menu* | *System Tools* | *Tazlito LiveCD Tool* and press the *Gen running distro* button. It takes Tazlito about 5-10 minutes (or longer, depending on how many packages you have installed on your system) to generate the `.iso` image, which you can then burn onto a CD.

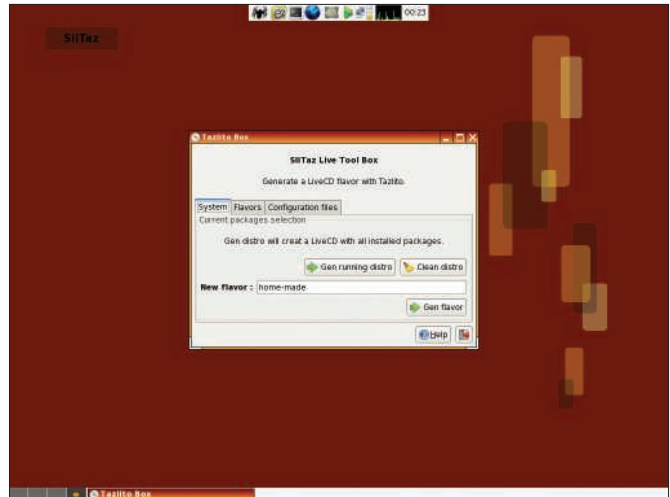


Figure 5: With the Tazlito tool, you can create your own version of SliTaz.

Tazlito has other clever tricks up its sleeve. For example, you can create a ready-to-burn disk image from the list of available SliTaz derivatives called flavors. To do this, switch to the Flavors section on the SliTaz LiveCD Tool and press the *Recharge list* button to refresh the list of available flavors. To view the list of SliTaz flavors, press *List flavors*, then pick the one you want and enter its name in the field. Next, press the *Get flavor* button to obtain the required configuration files, and press *Gen flavor distro* to generate an ISO image of the flavor. You can use Tazlito to burn the generated image to a CD, but this command is not accessible through the Tazlito LiveCD Tool, so you have to run the `tazlito burn-iso` command in the terminal.

Finally, SliTaz has yet another tool that deserves a brief mention. Although you can use third-party tools such as UNetbootin to create a bootable SliTaz USB stick, SliTaz comes with its own tool, TazUSB, that lets you install SliTaz on a USB stick. When you want to boot SliTaz on a machine without a CD-ROM drive (e.g., netbooks like the Asus Eee PC or Acer Aspire One), this utility can come in handy. TazUSB is a command-line tool, but it is easy to use. Just run the `tazusb gen-liveusb /dev/name` command (replace `/dev/name` with the actual USB device name), and TazUSB creates a ready-to-use bootable USB stick with SliTaz on it.

Final Word

Despite its size, SliTaz is a surprisingly well-featured Linux distribution. The

hand-picked software selection will help you stay productive, and nifty tools like Tazpkg and Tazlito allow you to install additional packages and roll out your own version of SliTaz.

Of course, the diminutive size means there are some trade-offs. For example, SliTaz doesn't contain any wireless drivers – although you can add them with Tazpkg – which makes it less suitable for laptops.

But if you are looking for a distribution to revive an old PC or you want a bootable Linux CD handy, SliTaz is just the ticket. ■

INFO

- [1] SliTaz: <http://www.slitaz.org/en/>
- [2] UNetbootin: <http://unetbootin.sourceforge.net/>
- [3] Grub4Dos: <http://gna.org/projects/grub4dos/>
- [4] SliTaz installation wiki page: <http://wiki.slitaz.org/doku.php?id=quickstart:winboot>
- [5] Tazlito: <http://www.slitaz.org/en/doc/manuals/tazlito.en.html>

THE AUTHOR

Dmitri Popov holds a degree in Russian language and computer linguistics. He has been writing exclusively about Linux and open source software for several years, and his articles have appeared in Danish, British, North American, German, and Russian magazines and websites.

