

Moblin: Radically Different Netbook Distro

SMALL WONDER

Yang Mingqi, 123RF

This alternative desktop is designed specifically for computers harboring Intel's Atom processor.

BY DMITRI POPOV

Almost all currently available netbooks have one thing in common: They are powered by Intel's Atom processor designed specifically for low-cost, ultra-portable devices. To help hardware manufacturers and users get the most out of machines based on the new processor, Intel launched the Moblin project [1], a Linux-based operating system heavily optimized for the Atom chip. The goal of the project is not only to build an OS that boots and works fast, but also to design a radically new and more efficient interface. Although it was conceived by Intel, the Moblin project is now managed by the Linux Foundation. Moblin is still in beta, but it's pretty usable and gives a good impression of what you can expect from this new distribution.

Getting Started

Moblin is distributed as an image file that you can directly write to a USB stick by running as root:

```
dd bs=4096 if=path/to/imagefile \
of=/path/to/usbdrive
```

Then you can use that USB stick to boot Moblin in Live mode or install it on your netbook. After a short boot sequence, Moblin drops you into a graphical desk-

top environment that differs radically from conventional desktops such as KDE, Gnome, and Xfce. The new interface is based on Clutter, an open source software library for creating fast, visually rich, portable, and animated graphical user interfaces. Moblin does away with

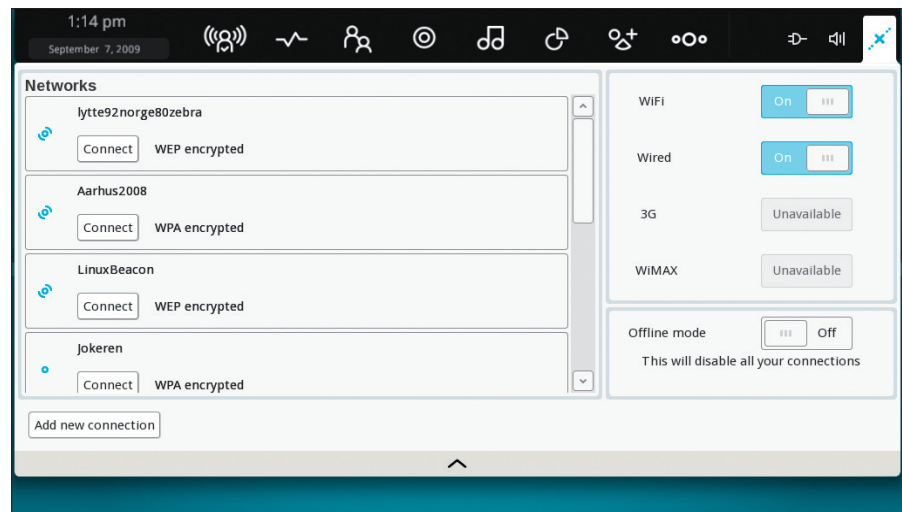


Figure 1: Managing network interfaces in Moblin.

the desktop metaphor and introduces instead a tabbed drop-down toolbar that provides quick access to the system's key multimedia, web, and social networking features.

Designed for devices that rely heavily on an Internet connection, Moblin provides a dedicated user-friendly connection manager that lets you configure and manage different types of Internet connections, including WiFi, wired, 3G, and WiMAX. To open the manager, click on the Networks icon in the main toolbar. This opens the Networks panel, where you can configure the available network connections (Figure 1). Also, you can turn specific network interfaces on and off or disable all network connections altogether. The latter can come in handy when you work offline and want to save battery power.

Zones

All applications and activities in Moblin are organized in zones, which are vaguely similar to the virtual desktops of the traditional graphical environments. When you launch an application, Moblin prompts you to choose a zone for it. Closing all applications in a specific zone automatically closes the zone itself.

The *myzone* home screen, however, is different (Figure 2): It comprises a static three-column layout that provides access to your favorite applications and aggregates your activities. The left column offers a quick overview of your upcoming calendar events and contains shortcuts to your favorite applications (the default favorites include the media player, web browser, and calendar applications).

The middle column acts as a container that stores shortcuts to recently used applications and documents. For example, when you open a web page in the built-in browser, a shortcut of the page, complete with thumbnail image, is automatically added to the middle column of the *myzone* window. Finally, the right column displays data from the active web services. By default, this column contains a shortcut to the web services panel where you can configure your Last.fm and Twitter accounts. Once you've done that, the updates from both services appear in the right column of *myzone*.

Basically, *myzone* combines the functions of an application launcher, a social



Figure 2: Myzone acts as a home screen.

aggregator, and a shortcut manager. This might sound like Moblin's developers tried to cram too many features into one small screen, but thanks to the clever design, the *myzone* concept works surprisingly well.

The main toolbar also provides quick access to key applications and tasks. As the name suggests, the *Internet* tab opens the Web browsing interface, consisting of a launchpad and a browser (Figure 3). You can use the *Internet* field in the launchpad to enter a direct URL or a search term. Entering a URL opens the specified URL in the browser window, whereas entering a search term returns search results from Yahoo!.

The launchpad also displays currently opened browser tabs and the most visited web sites as thumbnails, so all your favorite destinations and currently viewed pages are only a click away. The

browser is based on Mozilla's Gecko HTML rendering engine, so it's fast and does an excellent job of rendering web pages (Figure 4). The browser supports tabs, and it comes bundled with the Flash plugin. Other features are few: You can bookmark a current page by clicking on the pin icon in the address bar, but that's pretty much it.

The built-in media player is also light on features, but it offers a slick and easy way to browse and play media content. The *Pasteboard* utility allows you to store items from the clipboard for later use. Unlike a traditional clipboard, *Pasteboard* is not cleared between reboots, so your items stay there until you delete them manually.

Applications

The *Applications* tab opens the software management and system settings section

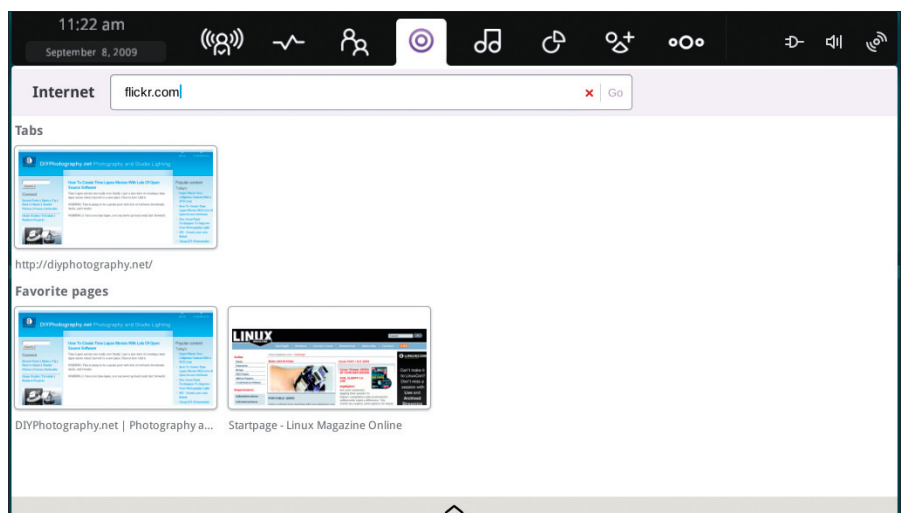


Figure 3: Browser launchpad.

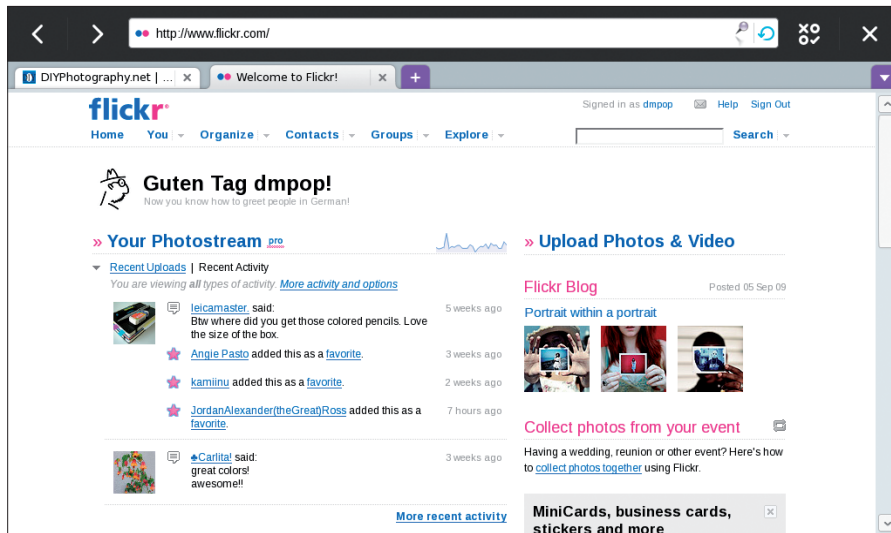


Figure 4: The built-in browser supports tabs and sports a clean, functional interface.

(Figure 5). All preinstalled applications are organized into the *Accessories*, *Games*, *Internet*, *Media*, and *Office* groups. The default software selection covers all the basics: The File Browser

lets you browse the local storage devices; the Terminal lets you access the command line; and the Messenger application takes care of all your messaging needs. Clicking on the pin icon next to

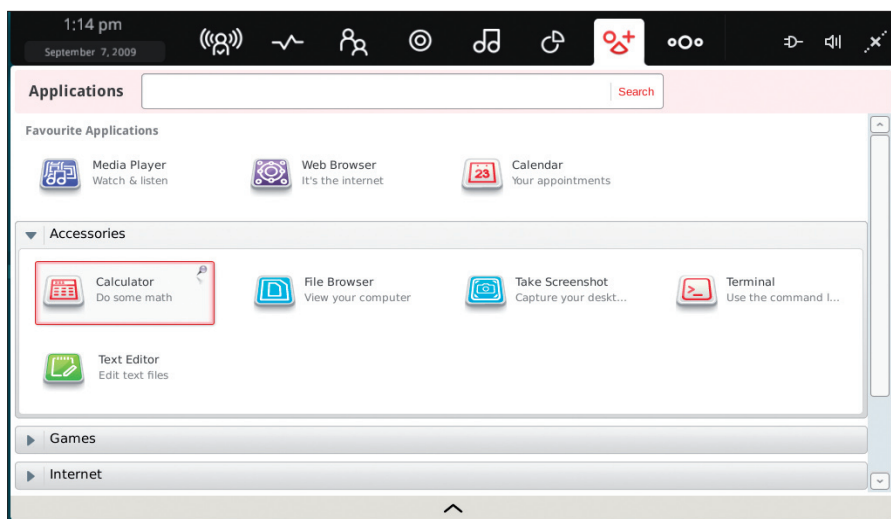


Figure 5: Applications in Moblin are organized into groups.

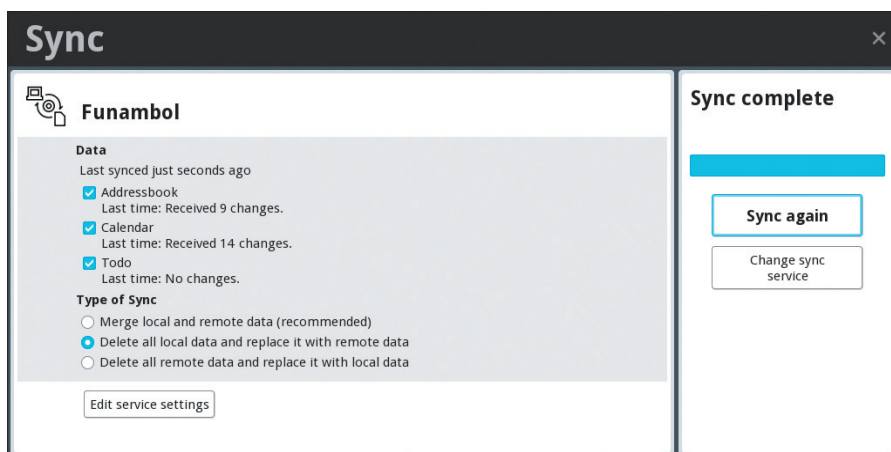


Figure 6: The Sync app lets you synchronize data between your netbook and any SyncML-compatible service.

the desired application adds it to the *myzone* home screen.

Sync and Settings

One of the most interesting tools bundled with Moblin is *Sync*, which lets you synchronize data between your netbook and any service that supports the SyncML standard (Figure 6). Out of the box, Sync works with the Funambol, Google, and ScheduleWorld services. Depending on which service you use, you can sync calendar data, contacts, tasks, and to-do lists. Configuring any of the default services is as easy as providing your credentials and specifying the sync direction.

The *Settings* group acts as a control panel that lets you configure different aspects of the system. The *Manage Applications* applet lets you install and remove applications from Moblin's software repository with the *gpk-application* tool. Currently, the software repository doesn't offer a lot, but expect this to change as Moblin matures and gets more traction.

Using the *Update Your Computer* applet, you can install the available updates, whereas the *Software Update Preferences* applet allows you to schedule automatic update checks.

Final Word

Of all netbook-specific Linux distros currently in development, Moblin is without a doubt the most interesting. It represents a bold attempt to replace the traditional desktop with an alternative shell designed specifically for small-screen devices. The intuitive interface provides quick access to all essential features and activities, making the computing experience both efficient and enjoyable.

The learning curve is virtually flat, which makes the transition from the traditional desktop pretty painless and could be the key to Moblin's success among typical netbook users. Under-the-hood optimizations and tweaks make Moblin one of the fastest distros around. It boots in a matter of seconds and performs very well. Overall, although Moblin is still not ready for prime time, it shows a lot of promise. ■

INFO

[1] Moblin: <http://moblin.org/>