



The New Wave of Mobile Innovation

Foundations are now in place for developers to take mobile computing beyond what has come before. Moblin v2, now in beta, enables innovation that redefines software capabilities for netbooks, nettops, and mobile Internet devices.

At any given moment, millions of Internet users are blogging, tweeting, updating their social media pages, finding friends, and otherwise interacting or generating content. As Peter Kronowitz, a Software Strategist with the Intel Open Source Technology Center said recently, "The Internet is changing at light speed. With Moblin v2, developers now have a complete, optimized software stack that can keep them up with Internet trends. It's not just an Intel project. This represents the future."

The opportunity is huge for software that provides new ways for those users to extend their online activities. Released to beta in May and with fresh builds posted weekly, Moblin v2 is a major step in bringing forth the next rush of innovation.

"Moblin is an example of a platform from which you can launch your online adventures, whatever they may be. It's a jumping off point. It's the ultimate tool for online activities."

- Keir Thomas, Computer World!

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Moblin.org has provided open source innovation around mobile Linux* since the community was launched in 2007. Unifying the industry toward a common vision, the project has dramatically advanced the quality and reach of portable software. With the introduction of Moblin v2, key developments include social-networking integration, a new user-interface framework, a fast-boot environment, and graphics performance enhancements.

Power the Next-Generation User Experience

The Moblin project brings full-fidelity Internet to portable devices, allowing users to take advantage of all the media, information, and interactivity the world has to offer, wherever they are. Beyond robust connectivity, the Moblin project software stack is highly optimized for devices based on the powerful, energy-efficient Intel® Atom™ processor. As a result,

application makers can reduce development effort and cost, accelerate time to market, and broaden market reach through portability across netbooks, nettops, mobile Internet devices, in-vehicle infotainment, and embedded systems, such as the media phone.

Moblin v2 sets the stage for software that takes those capabilities to the next level, building the foundation of a completely new user experience. At the heart of that advance is a new user-interface engine based on Clutter* 1.0 that enables rich, 3D-animated environments while abstracting away the OpenGL* complexity of building them. Clutter provides a set of libraries that simplify the manipulation of 2D and 3D graphical elements in 3D space, so developers can focus on sophisticated features and functionality instead of the plumbing needed to support them.



**Open Source at Intel:
Building with the Ecosystem**

To enable a broad spectrum of software to run optimally, Intel offers deep technical expertise, makes significant contributions, and actively participates in standards bodies.

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User interfaces based on Moblin v2.0 enable innovative user experiences based on lifestyles and social media



Myzone provides a device and social networking snapshot



People Panel keeps track of contacts and who else is online



Media Panel manages media files and playlists



Status Panel updates social networking sites simultaneously



Internet Panel keeps track of Web activity, favorites, and more



Applications Panel provides easy access to applications

Social networking is the new reality that increasingly drives the consumer market segment, and the Moblin v2 user environment gives it the prominence it deserves. In fact, the Moblin community has identified social networking and social media as core unifying elements of the operating environment. As such, the user environment provides the basis for software innovation with capabilities such as the following:

- **Real-time social network monitoring:** Myzone tracks content in one place from Flickr*, Last.fm, and Twitter* (support for more is on the way)
- **Combined updating:** Status panel lets users write updates to multiple social networks from a single interface
- **Integrated social activity management:** People and Internet panels streamline information management about contacts and Web sites

Building from this foundation, software makers are poised to integrate social networking into novel usage models that will redefine computing for their customers. With the added end-user reach that comes from the rapid adoption of netbooks, Linux developers have begun to innovate around new usage models that converge around communication, entertainment, and social interaction.

Building Battery-Smart Apps

LessWatts.org is an Intel-sponsored community that complements the Moblin project with tools and code that help build power-efficient software for longer battery life.

Take Advantage of Cutting-Edge Engineering

Under the hood, the Moblin project adds further to the user experience with platform capabilities that help your applications shine. From the ground up, the Moblin environment has been built for the specific needs and capabilities of portable devices. For example, user interaction is based on highly graphical, intuitive controls, and the redesigned graphics subsystem in Moblin v2 helps to make the visual experience surrounding those interactions even richer than ever before.

"Instead of force-fitting general-purpose operating systems onto netbooks, Moblin offers a purpose-built environment, and that gives developers a better basis for their apps."

- Mark Skarpness, Software Technologist,
Intel Open Source Technology Center

Another area where the Moblin v2 software stack improves the user experience is the fast-boot environment, which targets system startup in 10 seconds or less.² For users on the go, rapid startup and shutdown is a must, and such capabilities benefit the whole ecosystem that depends on the Moblin software stack. The contribution of Intel hardware and software engineering expertise shines in this area, participating in the broader community effort to advance the state of mobile Linux technologies.

¹ http://www.computerworld.com/s/article/9135126/Moblin_a_First_Look_at_Intel_s_Open_Source_OS?taxonomyId=18&pageNumber=4

² System startup and shutdown times are dependent on individual device capabilities, configuration, and other factors.

Part of the advantage of the Moblin project's purpose-built environment is that developers automatically get the advantages of tools such as PowerTOP (which assists in optimizing software for power use), LatencyTOP (which helps identify and address system latency issues), and many others. The entire tool stack integrates with the GNU toolchain and other popular development environments, simplifying adoption.

With a purpose-built, robust foundation, a global community, and new capabilities poised to redefine the face of portable computing, Moblin is a sphere of extraordinary possibilities and opportunity for the software industry. As social networking and related usage models continue to take over the world, those who are ready will reap the rewards.

An Ecosystem of Innovation

Visit www.moblinzone.com, Moblin.org's sister site, for information on Moblin partners, blogging, press, events, and much more.

Take the Next Steps

The time is ripe for building the innovative next generation of portable applications.

Here's how to get started:

- **Download** the Moblin v2 SDK
- **Sign up** for the Moblin mailing list
- Build something wonderful and then contribute code back to the project

Contributors: Troy Allison, Intel ▪ Pete Kronowitt, Intel
Mark Skarpness, Intel ▪ Ted Zurcher, Intel