

# Kuneri Eases S60 3rd Edition Application Development with Flash Lite RAD Toolkit



The KuneriLite Emulator runs on top of the S60 SDK emulator, acting as a localhost HTTP server. It allows you to test a Shockwave Flash (SWF) file without having the S60 device present.

How cool would it be if developers and designers could create great-looking S60 applications without any special technical knowledge? Creating mobile applications for S60 devices generally requires knowledge of Symbian OS, the platform's underlying operating system, and the C++ programming language. However, simplicity is the promise of Kuneri Ltd.'s KuneriLite, a rapid application development toolkit that lets users create S60 applications on a PC using only Flash Lite from Adobe. "There is no need to know anything about Symbian OS, since the developer never touches any Symbian code," says Ugur Kaner, CEO and co-founder of Kuneri Ltd.

"We aim to make a difference to the mobile development community. With KuneriLite, everyone can create great-looking applications for S60 devices, and this is possible without huge budgets or technical knowledge," Kaner says. "You just have to be a little bit motivated. Then you can bring your ideas to life in a simple way. This is the simplest way that I know to create S60 applications."

*"This is the simplest way that I know to create S60 applications."  
— Ugur Kaner, CEO and co-founder of Kuneri Ltd.*

## KuneriLite toolkit makes it easy to develop Flash applications on S60 devices

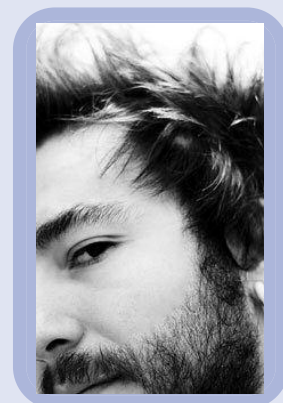
Flash Lite is a runtime engine for mobile devices and consumer electronic devices. Device manufacturers, operators, and resellers use Flash Lite to differentiate their devices with customized user interfaces and the ability to access Web, video, and mobile content. Today more than 60 Nokia devices support Flash Lite, and three of the world's leading content aggregators — Handango, iGunaMobile, and Mobibase — accept Flash Lite content. By 2010, as many as 1 billion mobile devices will be able to run Flash Lite software, predicts the software's supplier, Adobe Systems Incorporated.

The KuneriLite toolkit essentially extends Flash Lite on devices based on S60 3rd Edition and S60 3rd Edition, Feature Pack 1. KuneriLite includes a plug-in architecture, and it can be used in combination with any of the plug-ins, resulting in a flexible and lightweight system.

In addition, KuneriLite includes a wizard that developers can use for creating .SIS (Symbian Installation System) files. "To prepare any PC for S60 .SIS packages, a person not experienced with Symbian OS or C++ can install the KuneriLite Wizard, and it will guide them through setting up the SDK," Kaner explains. "Then it is possible to create KuneriLite projects with just a couple of clicks and without much technical knowledge." Like the noncommercial version of KuneriLite, the Wizard is a free download from the Kuneri Web site.



Kuneri Ltd.  
Oulu, Finland  
www.kuneri.net



"We are aiming to make a difference to the mobile development community. With KuneriLite, everyone can create great-looking applications for S60 devices, and this is possible without huge budgets or technical knowledge," says Ugur Kaner, CEO and co-founder of Kuneri Ltd.

## Looking ahead:

Kaner and his team are working to bring KuneriLite in sync with two new platforms, S60 3rd Edition, Service Pack 2, and the most recent release of Flash Lite, version 3, which includes support for Flash Lite video (FLV). The Kuneri team is working with Forum Nokia on the effort, and already, KuneriLite can support selected S60 3rd Edition, Feature Pack 1 devices — including the Nokia N95 8GB multimedia device — that can run Flash Lite 3 in non-native mode. Still to be overcome, Kaner says, are issues with some of Flash Lite 3's security sandbox features. The Kuneri team also hopes to expand its international reach. The company is scouting locations in Turkey for a new office there. Kaner and his colleagues also hope to attract Chinese developers by the recent addition of a Chinese-language discussion forum and blog to the company's online community site.

## Forum Nokia Success Story

Continue

### KunerLite 1.0 coming in second half of 2008

KunerLite, version 0.9.5, released in February 2008, adds several features, the most important of which is an emulator that lets developers test their applications on a PC, rather than on actual devices. Technically, KunerLite is still in beta-testing mode, as evidenced by its pre-1.0 version number. "We are still figuring out what developers' real needs are," Kaner says. "Once we can call [KunerLite] stable, then we will take it out of beta." Kaner expects to release version 1.0 sometime in the second half of 2008.

For individuals, KunerLite is a free download from the Kuneri Web site. However, developers must pay a small licensing fee before they can commercially distribute KunerLite applications. Enterprises also need to obtain a license that gives them full control over the KunerLite system and the ability to create customized solutions.

### Kuneri's rapid growth

Kaner, with a background in Flash development and S60 software design, conceived the idea for KunerLite in 2006, while working on Flash Lite projects for other clients. He and several colleagues founded Kuneri Ltd. in November of that year, then worked for another year to bring the initial release public. "We realized it was much simpler to develop mobile applications with Flash than with Symbian C++," he says. "We got very excited when we realized that cool applications could be created in Flash without much time or technical competence."

Though Kuneri Ltd. is still a small startup, it already employs an international team. A core group of five people work from the company's headquarters in Finland, several contract programmers work in Turkey and Russia, and a marketing team is being assembled in the Middle East. Because KunerLite and its Wizard are essentially free products, the company is earning revenue by providing related services — including mobile software design and development, UI design, and consulting — to operators, OEMs, and other large corporations.

*"We got very excited when we realized that cool applications could be created in Flash without much time or technical competence."--- Ugur Kaner*

### Technical challenges ahead

Kaner and his team also stay in close touch with their community of developers, of which there are currently about 150 worldwide. To do so, the company hosts a discussion forum for developers, as well as a wiki, blog, and news feed. "This way, we get the developers' ideas, see their problems, and learn about issues that need fixing," Kaner says.

Another technical challenge for the future is cross-platform compatibility. Kaner and his colleagues would like KunerLite to be useful not only for S60 applications, but also for the Series 40 and UIQ platforms. "Our long-term aim is to create a global layer, or platform, that will let people create one application, then use it on multiple platforms," Kaner says. "However, this will require a lot of study, plus a lot of cooperation from the device companies, OEMs, operators, and others. Assuming we can overcome the technical issues, it is not impossible to create this global environment."

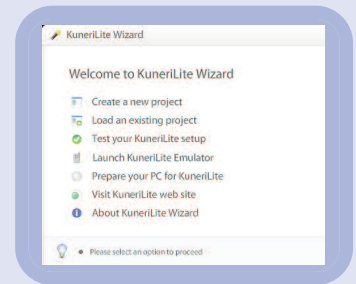
Increasingly, that community is not just developers, but also designers and anyone else who wants to create S60 applications. That's one major benefit of the toolkit's simplicity. "You don't need to be a developer at all," Kaner says. "Flash designers and other people with great ideas but not much technical knowledge can now create really impressive applications."

### How Forum Nokia helps Kuneri

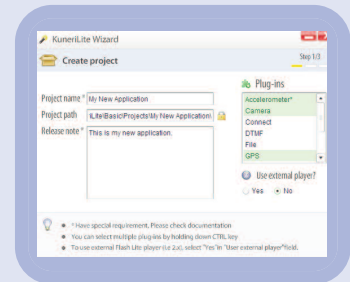
Along the way, the Kuneri Ltd. team has worked closely with Forum Nokia. Kaner met representatives from Forum Nokia on a Flash mailing list and began corresponding with them. A series of meetings followed, and today the two companies are working together closely. Nokia has provided test devices, technical advice, and marketing opportunities. And Kuneri has been helping to introduce mobile developers to Flash Lite. Most recently, Kaner has been selected as a Forum Nokia Champion, a recognition and reward program for top mobile developers worldwide.

For more information, go to:

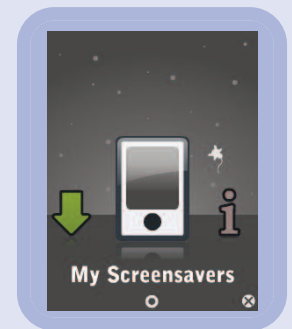
[www.nokia.com/developer](http://www.nokia.com/developer)



The KunerLite Wizard helps developers create Flash Lite SIS files. From here, users can set up a development environment, test their PC system, load existing projects, and create new projects.



On the Create project screen of the KunerLite Wizard, users can set the project's name, add release notes, select plug-ins, and choose other options.



Kuneri Interactive Screen Savers for S60 (KISS60), the first publicly released application built with KunerLite, offers a new and simple S60 user interface for users who wish to use, manage, and enjoy Flash Lite screen savers.



**NOKIA**