

## news

### 8 MORE ONLINE

Highlights from our Linux Magazine and ADMIN Online websites.

### 9 NEWS

- AMD, OpenJDK, and Oracle to improve Java computing.
- Sandia project studies cyber disruptions to smartphones.

### 10 CEPH SUPPORT

- Slackware 14 released.
- New funds for Inktank/Ceph.
- Apache Airavata is new Top-Level Project.

### 11 CRYPTO CONTEST

- Zentyal 3.0 small business server released.
- Keccak wins SHA-3 cryptographic competition.

### 12 TECH TOOLS

## SERVICE

3 Comment

6 DVD

96 Featured Events

97 Call for Papers

98 Preview

Linux Magazine ISSN 1471-5678  
Linux Magazine is published monthly by Linux New Media Ltd, Manchester, England. Company registered in England.

# Build a Botnet

Building a botnet doesn't necessarily make you an outlaw; we show you how one programmer automated a time-sensitive business application with a botnet. Next, get ready to hit the ground running with HTML5, and secure your websites with sound PHP programming principles.

## 16 Developing Botnets

Botnets that do no harm.

## 22 HTML5 Offline

An offline cache can protect you from Internet outages.

## 30 HTML5 Tools

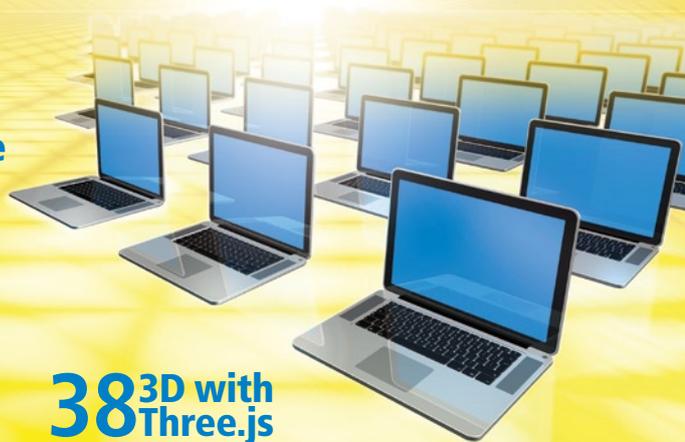
These resources get you started with HTML5.

## 34 PHP Security Principles

Sound principles for secure code.

## 38 3D with Three.js

The Three.js JavaScript library and the WebGL component of HTML5 make 3D in the browser easy.



## Community Notebook

### 90 Doghouse: Free Favela

Free Software project in Brazil empowers favela residents.

### 91 LinuxCon 2012

Security and the open cloud were featured at this year's LinuxCon in San Diego, CA.

### 92 Kernel News

PWM subsystem to main kernel tree; throwaway device IDs; Linux 3.2.y goes long-term stable.

### 94 Future Platforms

Web-based operating systems and the future of Linux.

## HIGHLIGHTS

### 22 HTML5 OFFLINE

Browser apps that work without Internet from an offline cache.

### 38 THREE.JS

HTML5, with WebGL, and this JavaScript library bring 3D to browsers.

### 48 HDPARM

Tune, report, measure, and modify hard disks and erase SSDs securely.

### 70 COLOR TEMPERATURE TOOLS

Make your monitor easy on your eyes.

# FEATURES

## 44 RPM Tools

Package management helpers rpmorphan and rpmrestore keep your system clean.



## 56 Kotlin

A work in progress, Kotlin borrows freely from Java, Scala, and Groovy and runs on the Java Virtual Machine.

### 48 hdparm

This tool tunes your drive and delivers drive statistics.

### 52 Charly: Swaks

Diagnose ailing mail servers.

### 54 Security Lessons: Web Frameworks

Plenty of tools exist for building web apps; don't roll your own unless you have to.

### 62 Perl: k-means Clusters

Identifying clusters is easy for us, but difficult for computers. Perl has a CPAN module for that.



### 66 Ask Klaus!

Klaus Knopper answers questions about swap, zRam, routers in bridge mode, and Linux on Macs.

## LINUXUSER

### 70 Color Temperature Tools

Changing monitor brightness through the day could help you sleep at night.

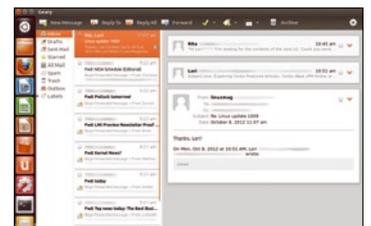


### 76 Workspace: Calibre Tips

Get more from the Calibre ebook manager.

### 82 Geary Email Client

We look at an early version of a new IMAP email client.



### 86 Command Line: Killing Processes

Learn how to shut down systems and processes.



# Knoppix 7.0.4

The world's greatest Live distro

Includes:

- GIMP 2.8
- Chrome 21
- VirtualBox 4.1
- Wine 1.5

SEE P6 FOR DETAILS