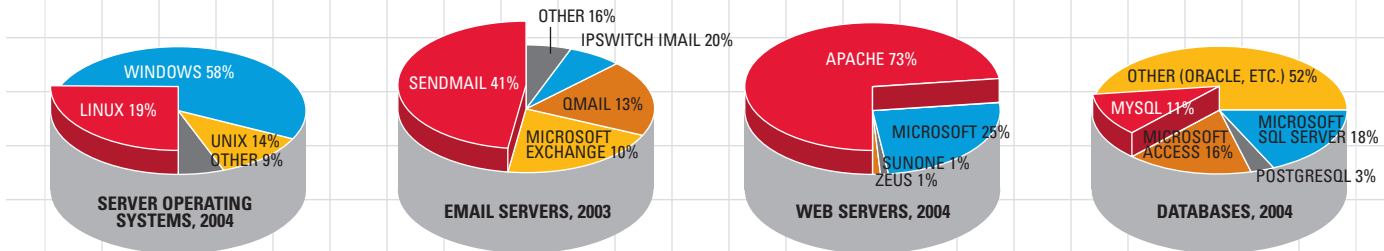


OPEN SOURCE EVERYWARE

Since free-software pioneer Richard Stallman started building the GNU operating system in the early 1980s, openness has thrived in software more than in any other industry. Today there are open source operating systems for Web servers, email, and cell phones. This success has provoked a reaction in the proprietary world, from Microsoft charging different prices in different countries to SCO asserting retroactive copyright over Linux's open code. These moves may be bona fide threats to openness or simply the throes of an industry undergoing commoditization. In some ways, though, the point has already been made: Openness in the software industry is inspiring worlds far beyond computers. Software was just the beginning. — Patrick Di Justo and Jesse Freund

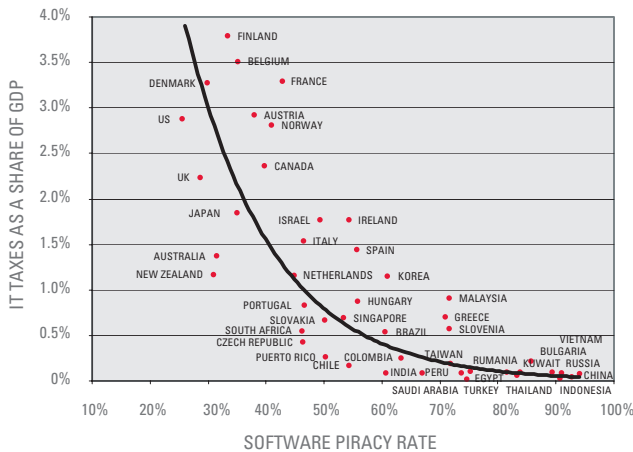
THE PROOF IS IN THE MARKET SHARE

Linux may be the poster child, but lots of open source projects are thriving in the marketplace. Across the tech industry, open source apps are gaining on proprietary competition.



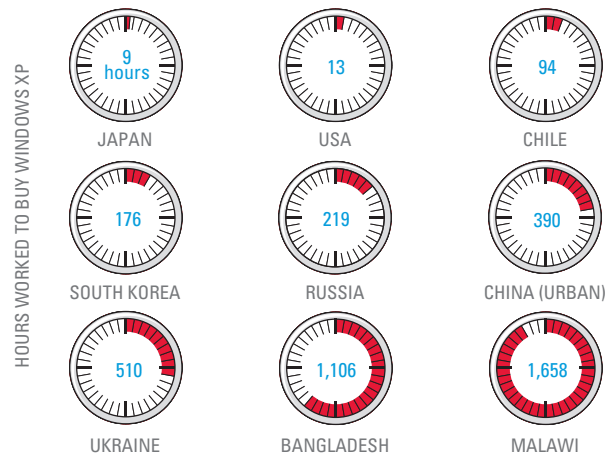
THE COST OF SOFTWARE PIRACY

To crack down on piracy, corporations need help from law enforcement. What's in it for the governments? A few extra bucks. Countries with low rates of piracy get more IT tax revenue.



THE PRICE OF WINDOWS IN THE WORLD

It takes an average Chinese worker more than two months to earn the purchase price of a legal copy of Windows XP. No wonder both piracy and Linux have such appeal in the developing world.



HOW A GLOBAL CODING COALITION BUILT AN OPEN SOURCE SUPERSERVER

Open source coding is a collaboration. Here's how one global band of brothers, led by a lead developer in China, formed to create features for the Linux Virtual Server (LVS), a program that yokes multiple servers into one superserver.

FEBRUARY 2000
Fort Lauderdale, Florida

Programmer Simon Horman proposes modifying LVS to improve scalability for large-scale applications.

MARCH 2000
Sydney, Australia

While visiting his hometown, Horman begins writing the proposed code.

MARCH 20, 2000
Changsha, China

Horman sends his code to LVS lead developer Wensong Zhang. Zhang notices inefficiencies that drag on performance and tweaks the code.

MARCH 30, 2000
Varna, Bulgaria

Zhang sends the revised code to Julian Anastasov in Bulgaria. He helps Zhang address performance problems, and the proposed change is shipped back to Horman.

THE FINAL FRONTIER: THE OPEN OFFICE

The desktop is where the movement finally meets the consumer. Increasingly, it's possible to replace the programs on your computer with free, high-quality, open source apps that allow you to be productive without increasing the bottom line of some software company.

■ PROPRIETARY

■ OPEN SOURCE



DESKTOP OS

Microsoft Windows
Linspire Lindows
GNOME
BeOS Max

INSTANT MESSAGING

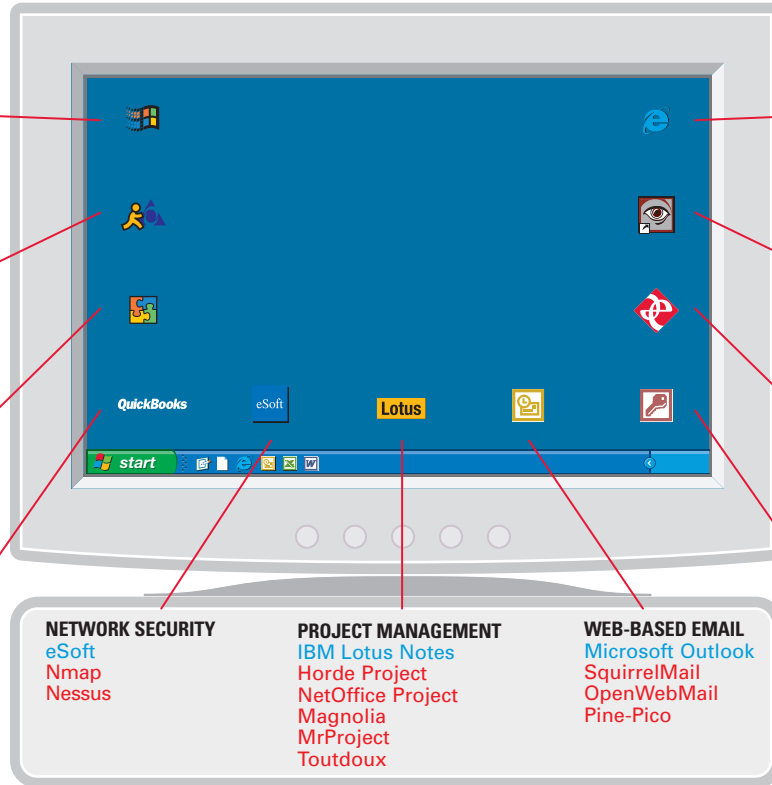
AOL AIM
Jabber

BASIC OFFICE PROGRAMS

Microsoft Office
OpenOffice.org
GNOME Office

ACCOUNTING MANAGEMENT

Intuit QuickBooks
Compiere



WEB BROWSER

Microsoft Internet Explorer
Mozilla
Mozilla Firefox
Lynx

IMAGE EDITING

Adobe Photoshop
GIMP
ArahPaint

FAX MANAGEMENT

Esker VSI-FAX
HylaFAX
Mgetty + Sendfax
Gfax

DATABASE

Microsoft Access
TWiki
Druid
GNOME-DB

NETWORK SECURITY

eSoft
Nmap
Nessus

PROJECT MANAGEMENT

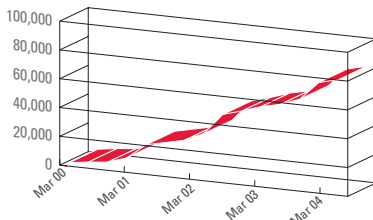
IBM Lotus Notes
Horde Project
NetOffice Project
Magnolia
MrProject
Toutdoux

WEB-BASED EMAIL

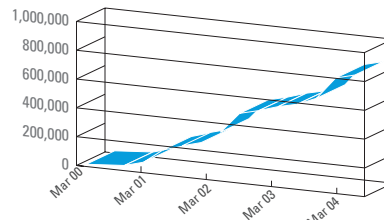
Microsoft Outlook
SquirrelMail
OpenWebMail
Pine-Pico

THE MAKING OF A MOVEMENT

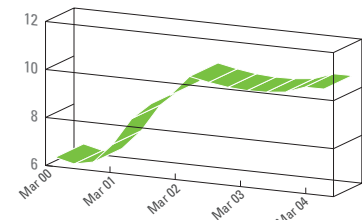
In the past few years, open source software has gone from being a fringe movement that relied on a small clique of programmers to a global phenomenon. Sourceforge.net, the main clearinghouse for open source development, tracks more than 80,000 projects and 800,000 collaborators.



■ HOSTED PROJECTS



■ PARTICIPANTS



■ PARTICIPANTS PER PROJECT

APRIL 6, 2000

Silicon Valley, Calif.

Horman, back to work at VA Linux Systems, modifies the code using the Zhang/Anastasov solution and sends a finished product back to Zhang.

APRIL 7, 2000

Changsha, China

After a few more tweaks, Zhang releases the code to the several-thousand-strong LVS community as Firewall Mark Virtual Services (fwmark).

MAY 2000

Zurich, Switzerland

Roberto Nibali suggests a better way for LVS to handle persistent connections – when one server supplies all data over a single connection.

JULY 2000

Columbus, Ohio

Ted Pavlic realizes that fwmark can be configured to address Nibali's concern. The group makes changes to the LVS code accordingly.

TODAY

Durham, North Carolina

fwmark remains a vital component of LVS, and its documentation is maintained by Joseph Mack in Durham.