

**NEWS**

**Software** ..... 6

**Business** ..... 9

**World** ..... 12

**Insecurity** ..... 14

**Kernel** ..... 16

**Letters** ..... 18

**COVER STORY**

**Data Protection Intro** ..... 19

**Operating System Hardening** ..... 20  
How to make your computer system safer beyond a firewall. We look at securing and limiting services to lock down any unwanted access.

**Spam Control** ..... 24

**Firewalls** ..... 28  
Connect your computer to the Internet safely with IPCop.

**Encrypted Filesystems** ..... 31  
Encrypted filesystems safeguard data even if stolen.

**Filesystems Repair** ..... 32  
Repairing Ext2/3 filesystems on the fly.

**Virtual Private Networks** ..... 34  
Create a private local network with minimal effort and at a reduced cost.

**REVIEWS**

**Book Reviews** ..... 38

**Umbrello** ..... 40  
Software modeling with UML and the KDE Umbrello tool.

**KNOW HOW**

**OCR** ..... 44

**surfraw** ..... 46  
Querying search engines from the command line.

**Perforce** ..... 48  
Professional version control with a rival to CVS.

**24 Spam Control**

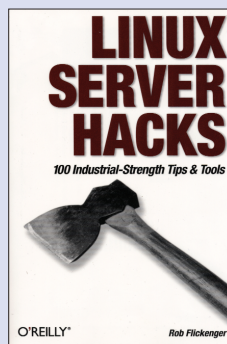
Unsolicited spam mail is a pain – no doubt about it. Something needs to be done to prevent spam from sealing the fate of our electronic messaging systems – and surprisingly enough there is a solution.

Spam filtering is a method of letting the computer do the work. Once set up this will save you valuable time and effort.



**38 Book Reviews**

This month we have a fantastic line-up of books to tempt you into reading. We cover the range from setting up and configuring an Internet server, with all its security implications, to a complete Unix reference library contained on a single CD.



If that is not enough, we also take a look at a collection of Linux server hacks. A valuable grouping of the most useful hints, tips and tools that you are likely to find that covers everything you need in day to day work with Linux.

**44 OCR**

Scanning letters onto a computer can reduce your mountain of paper. Using Optical Character Recognition will then dramatically reduce the data further and allow you to manage and search it better.

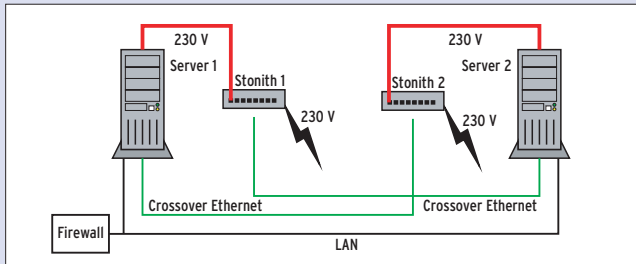


OCR is not limited to just scanned data, and will work on any image you choose.

We guide you through the options and packages available, both free and commercial that run under Linux.

### 53 HA Fileserver

Clusters or failover solutions are the typical answer to High Availability on Linux. By using Linux Heartbeat, we make light work of producing a High Availability Fileserver with just a redundant NFS server and a shared hard disk for the storage.



### 66 Creating a game with SDL

Steven Goodwin takes us on a journey of discovery with the Simple DirectMedia Layer programming library. He explains how each part works and much more importantly how to use this cross platform development tool to write a program.

As the program develops Steven will be explaining each technique and trick until finally we are left with a new game called Explorer Dug.



Using this guide you will then be able to produce your own range of programs including other games.

### 85 GU4DEC 2003

GU4DEC is the fourth annual GNOME User and Developer European Conference. This year it was held 16-18 June at Trinity College, Dublin, Ireland. The conference is aimed at



bringing the developers and deployers into discussing the future and setting an overall strategy for the forthcoming year.

We report directly from the conference.

#### SYSADMIN

Charly's column ..... 52

HA Fileserver ..... 53

Software RAID ..... 58  
Setup a Raid system the quick and simple way.

#### PROGRAMMING

Kylix Workshop ..... 62

Creating a game with SDL ..... 66

#### LINUX USER

DeskTOpia: 3d-desktop ..... 72  
Enter the 3D world of virtual desktops.

Dr. Linux: "Hidden" KDE features ..... 75

Out of the Box: ddclient ..... 78  
Put your computer on the Net without a static IP address.

Freeciv ..... 80  
Found a nation and rule the world.

ssh & scp ..... 82  
Secure connectivity made easy.

#### COMMUNITY

FLOSS and Developing Countries ..... 84

GU4DEC 2003 ..... 85

EnSEMBL ..... 86

Free software projects ..... 88

Brave GNU World ..... 91

The User Group Pages ..... 94

#### SERVICE

Events / Advertiser Index / Call for Papers ..... 96

Subscription CD ..... 97

Next Month / Contact Info ..... 98