

10-PAGE MAC BUYERS' GUIDE INSIDE

MORE NEWS, MORE REVIEWS

Macworld

From SE to iMac

10^{rollercoaster} years

2 CDs

Play the hottest
Mac games



NO CD?

PLEASE CONSULT
YOUR NEWSAGENT

IDG

MAY 1999 £4.99

From System 6 to Mac OS X
– Macworld UK was there
on the front line

Macworld

Ten Years of
EXCELLENCE

contents

May 1999

91



96



109



118



read me first



What were you up to ten years ago? Moaning about Thatcher? Waving Ronnie Reagan goodbye? Working on a Mac that ran faster than 16MHz? You should be so lucky, lucky, lucky... Yes, 1989. It might have been the end of the Eighties, but that was practically last

century... It's all millennium this and Y2K that, these days. Now we watch the Dome go up, then we watched the wall come down. When revolution was on the streets of Eastern Europe, we thought we witnessed the end of communism. Now we know how illusory that victory was, with state-run genocide in our faces night after night. A decade has passed but little has changed. We like to think the opposite of technology. What about the smart bombs and Stealth fighters? How about those video links, and 3D news graphics?

Isn't the digital world so much brighter than the old? Not really. It's much the same stuff – a bit, literally, closer and cleaner. Ditto, computing today and ten years ago. From System 6 to Mac OS 8.6, we've got the same old thing with new bells (MIDI files) and whistle (Appearance Themes). Our translucent blue-&-white Power Macs hum at 400MHz. Our 36GB hard drives hold hundreds of CDs-worth of MP3 audio files. And our in-trays are Outlook Express folders.

The fall of the Berlin Wall and Kylie Minogue seem like history lessons – re-runs on Broadcast.com. The 14lb Mac Portable that looks like a Psion made by Skoda – what a hoot! That Newton handwriting “translation” – give me a break! Word 6's menu mania – hold my sides, please!

But all these hindsight hilarities paint a picture worthy of LetraStudio 1.0. What is the iMac but a spray-painted Colour Classic with a funny, round mouse? USB for ADB. IDE for SCSI. CD for floppy. Big deal. £779? In 1989 a Mac Plus cost under a grand. It looked good, and you could do all kinds of consumer stuff on it. Cool Power Mac G3? The IIfx didn't look as dull as the competition either – and it was easier to take apart than the DOS boxes, too.

Mac OS X promises much, as do Windows 2000, Linux, and Java-based set-top boxes. But there are so many fundamentals that must make an irrevocable paradigm leap first. Here's my top ten for the next ten:

Simon Jary, editor-in-chief



1 Compression has come along way since DiskDoubler, but not far enough. With MBs expanding faster than bandwidth, we should reject the siren call of Jaz drives and DVD-ROM. A smaller storage medium would compel us to find new ways of working – I'm not demanding the bringing back of 800K floppies. No way. 1.4MB seems fairer to me.

2 For all colour's 24-bit beauty, we're still plagued by Web-safe palettes and arcane colour-management protocols. Black-&-white maybe problematic, but greyscale's rather graceful, don't you think?

3 The same goes with sound and vision. QuickTime is just so much song and dance. Let's hear it for silence, and jump up and down for stillness.

4 Let's lose the Wastebasket. It's a Trash can, a plastic rubbish bin, Top Cat's restaurant. Those kind of Yank-style wastebaskets cost a bloody fortune down at Habitat. In the face of cheapo Wintel PCs, there's an easy way to cut down costs on Macs. A small whicker bin for the Finder will do me just fine.

5 But is one Finder enough? What we need is a MultiFinder.

6 I've had it with John Sculley. Vote Steve Jobs back as permanent Apple boss.

7 Re-invent that sense of millennial optimism we had for multimedia. Remember when it appeared that MM was going to change all our lives? Even a Flash fest doesn't Shockwave us any more. Bring back the hope.

8 Is it a crime to want your Mac in any damn colour you fancy? No... so please tell me why the minimalists among us can't buy one in a nice neutral beige?

9 Two of the best-known crimes of computing are RSI and digital dreadlines. Started when word processors negated the need for real return keys, RSI and WYSIWYG have done only harm to our tendons and tensions. Why not slow down the work rate. A simple solution would be to return the Return. Slow down the links between outdated keyboards and outstanding output. Replace ultra-fast USB with dawdling ADB links, and we'll all feel a little better.

10 How about those Desktop Pictures? A witty way to say “This Mac's mine” or today's flying toasters? What did the Mac prove above all else? It's nicer to work with black text on a white screen than green commands on a dark one. So, go on, let's bring back System 6.

Back to the future. Plus ca change, plus these changes, please. MW

91



96



109



118



143 secrets



58 funnel web pro 3.0



116 competition



features



76

11 This month's cover CDs



■ we lead, others follow

- 49 first contact Power to the people
- 51 prochak Hacked off with Big Blue
- 53 desktop critic Conquer Mt Email
- 242 worlock It's not too late for 3D

opinions

76 Macworld's 10 years

The times – have they a'changed?

91 The DTP race is on

Get the low-down on Adobe's potential QuarkXPress killer – InDesign 1.0.

96 Perfect Mac

Choosing the best Mac solution for your particular needs.

109 A3 colour lasers

Macworld Test Centre goes colour crazy with the latest A3 colour lasers.

127 create web

Building sites Master Cascading Style Sheets.

133 create motion

Snazzy shows Add another dimension to your presentations with HTML.

137 create print

Boost productivity Essential Quark XTensions.

143 secrets

Weed out waste Keep URLs anarchy in check with the Mac OS's simple shortcuts.

145 q&a

Modem quality tips Plus other tricks and shortcuts.

regulars



124-125 Macworld subscriptions

Unbelievable value! Get a free copy of Art Dabbler or Soap when you subscribe!

8 How to contact Macworld

Who's who, and who's won what

116 Competition

10 years. 10 prizes to win.

187 Career Moves

Job vacancies. Get the right job here.

165 NEW! Buyers' Guide

Mac system advice; Vision thing; Macworld Reseller Guide; Star Ratings; plus a full year's index



189 Macworld Shopping

Consumer advice and mail-order ads



reviews

■ Macworld has it covered

54 ADOBE GOLIVE 4.0

55 Dark Vengeance

56 Fireworks 2

57 Headline Studio

58 Apple Studio Display

59 Funnel Web Pro 3.0

60 EditDV 1.5

61 iMac 266MHz

62 Klingon Honor Guard

63 DeltaGraph 4.5

64 VectorWorks

65 Surf Express Deluxe 1.5

66 WebDoubler 1.0

67 Wacom PL-400

68 Hard Disk ToolKit 3.0

69 Connectix Virtual

70 Game Station

71 Spring Cleaning 3.0.1

72 Shadow Filter 1.12

73 Three-D Luxe Filter 3.0

74 VariFocus Filter 1.1

75 PanoTouch 1.01

76 VR ObjectWorx 1.01

77 VR PanoWorx 1.01

78 VR SceneWorx 1.0

79 VideoShop 4.5

80 Amapi 3D 4.1

■ in-depth stories ■ incisiveness ■ exclusive tests

18-19 Mac OS 8.6 facts

20-21 Quark fights back

22-23 Mac splash at CeBit

24-25 More Mac games



Macworld

☒ On The ultimate reference guide and news source for the Macintosh market.
☐ Off

Subscribe



Active
Inactive

Find out how you can get either MetaCreations Art Dabbler or Soap **FREE** when you subscribe to Macworld – see pages 124-125.

?

Subscribe

Macworld (UK) is an independent journal not affiliated with Apple Computer Inc. Apple, the Apple logo, Mac, and Macintosh are registered trademarks, of Apple Computer Inc.

All contents © IDG 1999, except articles adapted from Macworld US, or from MacWEEK © Mac Publishing LLC.

Macworld is a publication of IDG Communications, 99 Gray's Inn Road, London WC1X 8UT. Telephone: (0171) 831 9252 Editorial fax: (0171) 405 5308 Sales fax: (0171) 405 0262 ISSN 0957-2341

Colour Origination: Red Creative, 0171 242 2330 Printed by BPC (Carlisle). Macworld is printed on paper produced in sustainable forests.

Macworld editorial domestic Internet access courtesy of those nice people at Direct Connection (0800 072 0000, www.dircon.net)

MACWORLD SUBSCRIPTIONS: 01858 435 304

A subscription to Macworld includes 12 issues, 12 CDs and a FREE copy of either Art Dabbler or Soap (see pages 124-125).

UK	Europe	ROW
£44.66	£88.97	£113.98

To subscribe, please use one of the following methods:

By post:

Macworld Subscriptions, FREEPOST (WC4336), Leicester, LE87 4DE.

By fax: 01858 434 958

By phone: 01858 435 304

By email: idg@subscription.co.uk

If you have a query about a current subscription please call 01858 435 303

Contacts

who...	@
Editor-in-Chief	Simon Jary editor@macworld.co.uk
Executive Editor/News	Michael Burns news@macworld.co.uk
Executive Editor/Features	David Fanning david_fanning@macworld.co.uk
Executive Editor/Reviews	Lynn Dartnell lynn_dartnell@macworld.co.uk
Production Editor	Sean Ashcroft sean_ashcroft@macworld.co.uk
Reporter	Louise Banbury louise_banbury@macworld.co.uk
Staff Writer	Andrew Hinkinson andyh@macworld.co.uk
Art Director	Mandie Johnson mandie_johnson@macworld.co.uk
Deputy Art Editor	James Walker james_walker@macworld.co.uk
Designer	David Grant david_grant@macworld.co.uk
Managing Editor/Online	Gillian Robertson gillian_robertson@macworld.co.uk
CD Editor	Vic Lennard
US Editor	Andrew Gore
Contributing editors	Peter Worlock, David Pogue, Deke McClelland, Lon Poole, Michael Prochak, Ian Winter, Simon Eccles, Joseph Schorr, Franklin Tessler, Bruce Fraser, Christopher Breen, David Biedny, Matthew Bath
Group Ad Manager	Anne Ridyard anne_ridyard@macworld.co.uk
Advertising Manager	Mustafa Mustafa mustafa@macworld.co.uk
Display Sales Executive	Dean Payn dean_payn@macworld.co.uk
Classified Sales Co-ordinator	Matthew Bennett matthew_bennett@macworld.co.uk
Classified Sales Executives	James Poulson, Sarah Maher
Production Manager	Sharon Bird sharonb@idglondon.co.uk
Deputy Production Manager	Richard Bailey richardb@idg.theplanet.co.uk
Marketing/Circulation M'ger	Sarah Bagnall sarah_bagnall@macworld.co.uk
Marketing Executive	Jo Brown jo_brown@macworld.co.uk
Publisher	Guy Eaton guy_eaton@macworld.co.uk



Are you a winner?



The winners of the two Mitsubishi 19-inch monitors were:

readers: **Gordon Low** of Angus, Scotland; and **Alan Johnson** of Fareham, Hants.

The world's first truly distortion-free, flat-faced desktop monitor, the 19-inch Diamond Pro 900 colour display offers a patented state-of-the-art 'naturally flat' cathode ray tube (CRT). The Diamond Pro 900U produces extraordinary picture sharpness and bright colours that allow users to take advantage of precise text and graphics applications including those in CAD/CAM and desktop publishing. Featuring an ultra-fine 0.25mm dot-pitch, this monitor displays a maximum resolution of 1,600-x-1,200 pixels at 75Hz plus a user-friendly on-screen display with more than 20 different settings. Congratulations!

NEXT MONTH Find out if you're the lucky winner of the PowerBook G3 Macworld Awards Readers' Choice competition.



World Leaders in IT Publishing

Macworld is a publication of International Data Group, the world's largest publisher of computer-related information, and the leading global provider of information services on information technology. International Data Group publishes over 275 computer publications in more than 75 countries. Ninety million people read one or more International Data Group publications each month. International Data Group's publications include: **Argentina's** Buyer's Guide, Computerworld, PC World; **Australia's** Computerworld, IT Casebook, Macworld, Network World, PC World, Publish, Reseller News, Webmaster; **Austria's** Computerwelt Österreich, Networks, PC Tip; **Bangladesh's** PC World; **Belarus's** PC World; **Belgium's** Data News; **Brazil's** Anuário de Informática, Computerworld, Connections, Macworld, PC Player, PC World, Publish, Reseller News, Supermagpower; **Bulgaria's** Computerworld, Network World, PC & Macworld; **Canada's** CIO, Client/Server World, Computerworld, InfoWorld, Network World, WebWorld; **Chile's** Computerworld, PC World; **Columbia's** Computerworld, PC World; **Costa Rica's** PC World; **Czech and Slovak Republic's** Computerworld, Macworld, PC World; **Denmark's** Communications World, Computerworld, Macworld, PC World, Techworld; **Dominican Republic's** PC World; **Ecuador's** PC World; **Egypt's** Computerworld, PC World; **El Salvador's** PC World; **Finland's** Mikro PC, Tietoverkko, Tietoviikko; **France's** Distributive, Hebdo, InfoPC, Le Monde Informatique, Macworld, Reseaux & Telecoms, WebMaster; **Germany's** Computer Partner, Computerwoche/ExtraFocus, Global Online, Macwelt, PC Welt; **Greece's** Amiga Computing, GamePro, Multimedia World; **Guatemala's** PC World; **Honduras's** PC World; **Hong Kong's** Computerworld, PC World, Publish; **Hungary's** ABCD CD-ROM, Computerworld SZT, Internetto Online, PC World, PC-X Magazin; **Iceland's** Tolvuhelmir PC World Island; **India's** Information Communications World, Computerworld, PC World, Publish; **Indonesia's** InfoKomputer PC World, Komputek Computerworld, Publish; **Ireland's** Computerscope, PC Live; **Israel's** Macworld, People & Computers/Computerworld; **Italy's** Computerworld, Macworld, Networking, PC World; **Japan's** DTP World, Macworld, Nikkei Personal Computing, OS/2 World, SunWorld, Windows NT World, Windows World; **Kenya's** PC World; **Korea's** Hi-Tech Information, Macworld, PC World; **Macedonia's** Computerworld, MTB, Networked World; **Malta's** PC World; **Mexico's** Computerworld, PC World; **Myanmar's** PC World; **The Netherlands'** Computer! Totaal, LAN Internetworking, LAN World Buyers Guide, Macworld; **New Zealand's** Absolute Beginners Guide and Plain & Simple Series, Computer Buyer, Computer Buyer Directory, Computerworld, MTB, Networked World, PC World; **Nicaragua's** PC World; **Norway's** Computerworld, CW Rapport, Datamagasin, Financial Rapport, Kursguide, Macworld, Multimedia World, PC World, PC World Ekspres; **PC World Network**; **Pakistan's** Computerworld, PC World; **Panama's** PC World; **People's Republic of China's** Computer Users, Computerworld, Computer and Communication, Electronic Design, Electronics Today/Weekly, Game Software, InfoWorld, PC World, Popular Computer Week, Software Weekly, Software World, Telecom World/Weekly; **Peru's** Computerworld, PC World Professional, PC World SoHo; **Philippines'** Click!, Computerworld, PC World, Publish; **Poland's** Computerworld/Special Report, Cyber, Macworld, Network World, PC World Komputer; **Portugal's** Cerebro/PC World, Computerworld/Correio Informatico, Dealer World, Mac/In/PC/In Portugal, Multimedia World; **Puerto Rico's** PC World; **Romania's** Computerworld, PC World, Telecom; **Russia's** Computerworld, Mir PK, Publish, Seti; **Singapore's** Computerworld, PC World, Publish; **Slovenia's** Monitor; **South Africa's** Computing, Network World, Software World; **Spain's** Communications World, Computerworld, Dealer World, Macworld, PC World; **Sweden's** CAP&Design, Computer, Corporate Computing, InternetWorld, it, branschen, Macworld, MaxiData, MikroDatarn, Netverk & Kommunikation, PC World, PCaktiv, Windows World; **Switzerland's** Computerworld, Macworld, PCtip; **Taiwan's** Computerworld, Macworld, NEW VISION/Publish, PC World, Windows World; **Thailand's** Publish, Thai Computerworld; **Turkey's** Computerworld, Macworld, Network World, PC World; **Ukraine's** Computerworld, Multimedia World, PC World; **United Kingdom's** Acorn User, Amiga Computing, Digit, Macworld, Parents & Computing, PC Advisor, PC Home, PowerPC Business, PSXPro, The Web; **United States'** Cable in the Classroom, CIO Magazine, Computerworld, DOS World, Federal Computer Week, GamePro, InfoWorld, I-Way, Macworld, Netscape World, Network World, PC Games, PC World, Publish, Video Event, WebMaster; **Uruguay's** InfoWorld; **Venezuela's** Computerworld, PC World; **Vietnam's** PC World.



Macworld

With more than 650MB of the best demos, shareware, utilities and updaters, our main CD for this month has something for everyone. Vic Lennard double-clicks on the folders...



MkLinux



MkLinux is a project to port Linux, a freely distributed Unix-like operating system, to a variety of Power Macintosh platforms.

As MKLinux is a whole operating system, this is not for the novice. There are numerous sources for support on the Internet, but remember that as freeware no official support is given by anybody. If you do install MKLinux, Macworld bears no responsibility for the results. Though in the current release (DR3) many causes of crashes have been eliminated.

The folder on our CD includes all necessary Mac files for installation plus a large number of applications and utilities. Make sure you read the instructions before you do anything.

Fireworks 2



Fireworks creates the smallest, highest-quality JPEG and GIF graphics in the fewest number of steps. It is a total solution for creating and producing Web graphics and simplifies and streamlines the process of making Web and screen graphics, while providing the ultimate in flexibility and editability.

Fireworks also makes it easy to minimize file size without sacrificing quality, resulting in faster Web sites. With Fireworks, a designer's creativity is no longer complicated by switching from tool to tool, and valuable time is saved by avoiding repetitive procedures. Fireworks is a single tool that handles all the necessary steps.

By creating editable paths with bitmap attributes, Fireworks ensures that your work is fully editable throughout every stage of the design process. Fireworks' powerful export preview capabilities integrated with colour palette and graphic formatting offer a designer control over exporting.

Both text and objects in a Fireworks graphic are fully editable at any time. This means that graphics can be easily modified without recreating them.

Try Fireworks 2 in its entirety for 30 days.

Demo & freeware XPress XTensions



David's Place XT

Six demo XTensions plus eleven fully featured ones including:

- **Badia Duplica XT (demo):** copy, paste and duplicate attributes and items in XPress 4.
- **Badia FullMeasure XT:** extends the Measurements palette to accommodate character and paragraph attributes in XPress 4. Badia FullMeasure XT 2.0 (demo) gives instant access to nearly 60 additional features.
- **David's Place XT:** place text and graphics on a page without first creating a text or picture box, a la PageMaker.
- **Default Tab:** adds an item to the Utilities menu that lets you set the size for the default tab setting in text boxes – no more "I need more than 20 tabs" problem.
- **FitImage XT:** instantly fit an image box to match the size of the contained image.
- **Quark HTML Text Export:** export a story or selected range of text as HTML formatted text in XPress 4.
- **PrecisionGuides XT:** place guidelines accurately through a simple double-click.
- **XPert Scale (demo):** quickly scale groups, lines, text and picture boxes, and their contents.



NETSCAPE

Netscape Communicator 4.51

If you are a Communicator user, do not forget to update your software to version 4.5.1 on our CD.

Cool Specials

Check out Hannah Gal's portfolio of digital images – a good example of Extensis Software's Portfolio in use.



Serious Demos

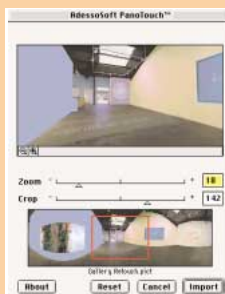
ACTION Files 1.2 & GoMac 2.0

ACTION GoMac is the premier task bar and start menu for the Mac OS. It is a fast, easy way to launch or switch applications or use control strip modules. ACTION GoMac offers a more elegant keyboard program switcher than OS 8.5.

ACTION Files is a very convenient way to manage files, adding menus of commands at the top of every Open and Save window. Each program is fully functional for 30 days.

PanoTouch

PanoTouch is for enhancing and editing your stitched, cylindrically warped panoramic PICT images in Photoshop before converting them to QuickTime VR movie files. You can select an area of the panoramic image for editing and then import that area into Photoshop. The demo has all the functionality of PanoTouch except that it places a notice across each image you import.



CineMac 1.5

CineMac for Director is a software toolkit that enables you to create screensavers from Macromedia Director Projectors.

New to version 1.5: support for Director 7, including slim projectors and Internet updating; variable length of time-expiring screensavers (for creating demo screensavers); optional mute button; new control panel user interface; live updating windows. The demo creates screensavers that time-out after one week.

Other Demos



iCab Preview 1.25



Book'em! 3.1

ApplicationSentry 1.0
BeyondPress 4.0.1
Book'em! 3.1
EditDV Unplugged 1.1.3
FlightCheck
FlightCheck Collect 3.52
FotoPage 1.1

Funnel Web Pro 3.0
iCab Preview 1.25
Portfolio 4.0.2IE
RTU 3D Type Effects
Three-D Luxe
VR Toolbox 1.0.1

APPLE (in the System Utilities folder)

- ASIP Web+File 6.1.1
- ColorSync 2.6
- MRJ 2.1

NETWORK

- Assimilator 2.0.2

NEWTON

- Dash Board 1.5

COMMS & INTERNET
29 applications including:

- CommuniGate File 1.4/IMAP 1.3
- Emailer to Eudora 1.1
- Internet Launcher 1.1.3
- PPP op 2.0.4 PPC
- VSE HTML Turbo

SOUND & MUSIC
Seven applications including:

- MacAMP Lite
- StripAmp 1.0
- TitleTrack 2.0

ANTI-VIRUS
Four items for your data's continuing protection.

EDUCATION

- Math Dittos 2

FONTS

- FastFontMenu 2.0.1
- Fonts Manager 3.9.2

GRAPHICS
14 items including:

- DropImage 1.4
- GraphicConverter 3.6
- Kaleidoscope 2.1.2
- Painting 1.6.1



- PhotoGIF 3.0.2
- Tracer 2.4.1



- VideoScope 1.0.4



UPDATERS
This month's dedicated updaters folder includes over 115MB of patches to bring many popular applications bang

up-to-date, including:

- Cinema 4D Go 5.19
- Combined Updater for Office 98
- Corel Graphics 8.0.2
- IomegaWare 1.1.3
- MarkzTools III v7.5
- Norton AntiVirus (March 1999)
- SAM (March 1999)
- SCSIProbe 5.1.1
- VR OW/PW 1.0.1

INFO
6 items including

- 1984 OLM Issue 11
- Apple Wizards - March 1999
- About this Particular Mac 5.03
- My Magazine #46/47 plus items for developers

MATH & SCIENCE

- Periodic Table



- The Atomic Mac Demo

Shareware

Many programs on this CD are shareware, which means that if you keep them and use them for more than the allowed time (usually up to 30 days) then you must pay for them. Treat shareware as budget-priced commercial programs – support shareware authors so that they continue to provide high-quality programs for the Mac.

Install Me Before you start working your way through the software on our CD, go to the System Utilities folder and make sure you install the following:

■ British Mac OS 8.1 updater

If you have recently purchased a Mac system with Mac OS 8.0 then use these to upgrade to later versions.

■ Acrobat Reader 3.01

Install this version to be able to read many of the on-screen manuals. This also installs Adobe Type Manager 4.0.2.



■ QuickTime 3.0.2

Many of the demos need this installed. It gives you new versions of QuickTime and the MPEG, VR, Musical Instruments and PowerPlug add-ons.



Macworld's first dedicated demo and shareware games CD for ages! Boasting 15 major demos, 50 shareware games and more than 150 levels for commercial games, GamesWorld will keep you glued to your Mac for many a long night! Vic Lennard grabs for his joystick and dives for cover...

HERETIC



Based on the DOOM engine, and now converted for the Mac thanks to Brad Oliver, Heretic is set in a grim fantasy world of dark creatures and evil magic. You play the last of a magical elven race decimated by satanic forces and your quest is to avenge the fallen by seeking out the evil monsters and killing them. Like DOOM, the game is played from a first-person, 3-D perspective.

The shareware version here is actually the first of the three episodes included in the full PC edition – that's nine levels of immersive combat action. With a variety of new weapons (such as Staff, Gauntlets, Elvenwand, Crossbow and Dragon's Claw), a host of evil enemies and a great new set of shooting sounds and monster grunts, you're guaranteed one *hell* of a time...

STARCRAFT

In the distant future, a small group of human exiles have been doomed to fight for survival on the edge of the galaxy. Through military strength, espionage and deceit, a unified Terran government has maintained an uneasy peace. But as resources and fuel run short, the Confederate nations find themselves looking towards the rich worlds of their alien neighbours, the enigmatic Protoss. To further complicate matters, it seems that a previously unknown species has entered Protoss space and is destroying everything in its path. The time for war has come. Try the demo campaign and then head on up to Battle.net and try your hand at some Terran vs. Terran multiplayer games with the included demo map.



QUEST FOR GLORY V



You are standing on the deserted shore. The night stars twinkle above you. Suddenly, a sailor appears, rowing furiously toward you, arrows peppering his small boat. This demo contains two rooms from the full game. You are on the island of Sifnos and have to beat the hostile guards, the centaur wizard and the general. You can choose to be a fighter or a wizard. You cannot save, restore, or import from a previous Quest for Glory game. Once you are on the island, press the ESC key for the game's control menu, click the Manual button and start reading.

NIGHTFALL



On the verge of a great discovery, you have been barred from the Egyptian tomb you were exploring. While entering for one last time, you have been trapped by a massive

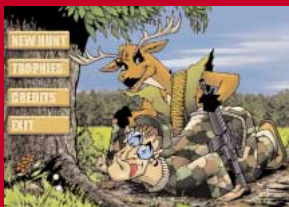
earthquake. With no hope of rescue, you must venture where few have been before. Nightfall is a real-time 3D game – you go where you want to. Puzzles take place in a real-time environment and things can happen with you, and to you, while you are doing something else. Play the shortened version of the first,

APARTMENT HUNTER



Welcome to Manhattan where you and your newly betrothed are going to start your life together. First, you have to search for an apartment – from cozy to creepy and everything in between. Each apartment has a story to tell and truth to reveal. The further you venture into the city the more twisted your journey becomes. In the end you have to save the entire city from the biggest disaster it's ever faced!

Taken as a complete mini-adventure, The Demo is but a few paragraphs of a much grander novel. If you can solve the mysteries within this one small journey you are on your way to uncovering the most heinous crime that has ever been planned against humanity.



DEER AVENGER

Welcome to Deer Avenger, the premier deer revenge parody. Deer Avenger is designed to provide the most humorous hunter-hunting experience possible on a computer system. In this game, you play Bambo – the deer avenger! Shoot the hunters and show 'em off in your Trophy Room. So, go out there and get you some hunters!

BIG RACE USA

Get ready for the ride of your life with Pro Pinball: Big Race USA, the most nail-biting, adrenaline pumping pinball experience you'll ever encounter.

With incredible physics models for balls and flippers, dot-matrix display, balls that really slide and spin and four flippers, this is as good as it gets.

Big Race USA takes a real pinball table and adds an extra dimension with TEN balls in play simultaneously and high-speed motion blur. Boasting massive play areas, a unique head-to-head mode, amazingly detailed high-res graphics and Dolby surround sound, this is the most accurate pinball sim yet.



Other demos

Nine excellent previews including:

- Killing Time 1.02: pirates, ghosts and more.
- Kuba: the classic push-to-play game.
- Nethergate: Roman Empire role-playing game.



• Slithereens: snakes and mazes from Ambrosia Software.

plus...

- Adventure Creator 2.3
- Empire Master 3.0
- Morpheus 1.0.1



• Safecracker; The Castle

Shareware Central

50 new shareware games, divided up into seven, easy-to-digest chunks

ARCADE

Blobs 2.2.0; Boom 1.1.4; Dirt Bike 3D 1.5; MacPipes 2.2.7; PPCGallery; Sentinels of Ceth 1.6; Snave! 1.0.5 and Star Fighters 1.6.



BOARD



Including: David's BackGammon 2.7.6 and MacChess 5.0.1.

PUZZLE/STRATEGY

Hexaplex v1.0 and Sokoban 2.4.2.

ADVENTURE

Adventure Island and Sim Cinema Deluxe 2.5.

FOR KIDS

Hang2000 v1.3 and KKGames 1.06.

CARDS

PokerOne; Solitaire Till Dawn 3.4 and Ultimate Blackjack 2.1.



DIFFERENT



A-OK! The Wings of Mercury

Levels galore

Here you'll find more than 150 levels for popular commercial games such as Duke Nukem, Myth II, Quake, Shadow Warrior and Wolfenstein. Additionally, there's a total Batman conversion for Doom II, plus the EVIL and Tempus Irae 2 conversions for Marathon.

...and finally

Enjoy reading a recent issue of *Inside Mac Games*, the specialist Mac gaming CD-ROM from the USA.



FAULTY COVER CD-ROM?

If your cover CD doesn't seem to work as it should please check you have read all the instructions on the cover disc pages carefully first. If it still doesn't work then please email Gillian Robertson at gillian_robertson@macworld.co.uk

If your cover disc is broken and you want a replacement CD, please call Emileigh Borrett on 0171 831 9252 or send an email to: emileigh_borrett@macworld.co.uk

Macworld CD catalogue

Courtesy of Mark Pirri's superb DiskTracker program, Macworld brings you a searchable catalogue of all our CDs from 1997 and '99 – almost 110,000 files! This will grow month by month to allow you to find any file you want, without wearing out your CD-ROM drive. The latest version of DiskTracker (1.1.4) is also included – don't forget to register if you find our library useful.



OS 8.6 release-date looms

Excitement is mounting in Apple camp over major releases

Apple is set to release the next incarnation of its operating system, Mac OS 8.6. At time of writing the slated due-date is the end of April for the US and around 30-45 days after that for an international release. The upgrade is likely to be in the form of a free download.

The new release will feature much improved multitasking and multi-processor support, improved Java support (see box, bottom), updated Themes and Open Transport and enhanced hardware support for current and forthcoming Mac and PowerBook models.

The main feature in this interim release is the nanokernel: a software component that handles task execution. This provides asynchronous operation: the ability to process tasks while others are being carried out almost simultaneously. Mac OS 8.6 will still not offer full pre-emptive multitasking, however.

According to sources Mac OS 8.6, code-named Veronica, will go some way to providing compatibility with the Blue Box, an essential step

in the Mac OS timeline leading up to the forthcoming Mac OS X. There has also been talk of QuickTime 4.0 finally making an appearance as part of the new update. This is due to industry speculation that that Mac OS X will rely on the multimedia technology to drive streaming media over the Internet from its Server component. Apple refused to comment on the unreleased products.

Portable players

On the hardware front Apple is eyeing three markets for portable computers. Steve Jobs let slip some strategy details to shareholders gathered for their annual meeting in Cupertino in March. Jobs stated that "there may be three markets for portables" diverging from Apple's earlier strategy of focusing on laptops for business and consumer users.

Jobs said the company's immediate plans are aimed at what he called "digital road warriors" – corporate users unwilling to give up CD-ROM, DVD and 14-inch screens just because they're out

of the office. He also said Apple plans a lower-cost, consumer-oriented version of such portables. He did not give any details on the products.

In addition, he said there may be a need for a third type of machine, geared at busy executives who just want to check email when they're travelling.

When asked whether the company had any plans for a Newton-like device, Jobs said no.

"It's not that big, relative to our existing business," Jobs said. "We've elected, for now, not to get into that business."

Instead, he said, Apple is working closely with 3Com on its Palm handhelds and licensing some technology to it. He added that one of his first moves 18 months ago when he resumed the helm at Apple was to call 3Com and offer to buy its handheld business. He was rebuffed.

Previous shareholder meetings have been quite rancorous, as stockholders demanded explanations for the company's declining fortunes. This time, pleased at Apple's renewed vigour, the audience was more upbeat, quick to hiss any mention of Microsoft and prodded Jobs to take the title of permanent CEO.

At one point, a shareholder stood up and asked, "What would it take for you to assume your position on a permanent basis?"

Jobs evaded the question, saying "I don't think about it that much."

"Isn't it about time you did?" the shareholder pressed. To which Jobs said, "If you'd like me to do something else, just tell me."

That caused a horrified audience to shout "No, no, no!" When asked about Apple's prospects in the business market, Jobs said the company would focus on small businesses in education, design and publishing, for now.

He added that trying to unseat Microsoft's dominance in the business market "would be a tremendous drain of energy, without a high probability of short-term success."

In other news from the meeting, Apple shareholders re-elected three members of the company's board of directors and agreed to elect all board members annually from now on.

Re-elected to Apple's board were members William Campbell, president and CEO of Intuit; Gareth Chang, corporate senior vice president of marketing at Hughes Electronics; and Jerome York, former chief financial officer at IBM and Chrysler and vice chairman of Tracinda.

Shareholders also voted to conduct annual elections for all six board seats. A similar motion was defeated last year.

Jobs used the meeting to tout Apple's new Mac OS X Server and its multi-colour iMacs. Jobs said the public's response to the Server has been "overwhelming". More than 16,000 developers have already registered with Apple for access to



Jobs springs source-code surprise

Apple interim CEO Steve Jobs, springing yet another surprise on the computer industry, has announced that the company will give away the source code to key parts of its new Mac OS X Server software, which is now shipping. Apple thus becomes the first major operating system developer to adopt an Open Source strategy, a growing computer industry movement in which programmers are free to add their own innovations to someone else's software, as long as they make those changes available to other developers. Mac OS X Server – or more precisely, a subset of the software known as

Darwin – thus joins such well-known Open Source technologies as the Linux operating system and Apache Web server.

Jobs made the announcement on March 16 during a press briefing at Apple's Cupertino headquarters. He also revealed that Apple would drop the price of Mac OS X Server from \$999 to \$499. In addition, the company offers the software in a \$4,999 bundle with a Power Mac G3. But it was the Open Source announcement that raised eyebrows. Darwin incorporates the underlying components of Mac OS X Server – the Mach 2.5 microkernel, the BSD 4.4 version of Unix, and the Apache

Web server – as well as key Apple technologies, such as AppleTalk and the HFS+ file system. It will not include Mac OS X Server's graphical user interface – developers will have to create their own windowing environments – but Jobs characterized Darwin as a fully functional modern operating system.

Any developer who agrees to Apple's Open Source licensing agreement can download the software and use it as the basis for new products. Apple devised the

agreement with assistance from the Open Source Initiative, a non-profit industry group promoting Open Source software. Open Source Initiative president Eric Raymond, who appeared on stage with Jobs, said the licence agreement fully conforms to accepted Open Source standards. "Apple really gets it," he said. "I hope it develops into a pattern for other computer makers."

Gavin Eadie, director of the Strategic Technology Group at the University of Michigan, said the Open Source move will give computer students a chance to see the underpinnings of a modern OS.

During a question-and-answer session following the briefing, Apple software chief Avie Tevanian acknowledged that major portions of Darwin, including BSD 4.4 and Apache, are already available as Open Source. However, he said that Apple has made its own modifications to these components and would like to see its versions in the hands of Open Source developers.

Jobs also presided over a demonstration of Mac OS X Server, which the company is targeting largely at schools and small businesses. He noted that Mac OS X Server running on a 400MHz Power Mac G3 outperformed comparably configured Linux, Solaris, and Windows NT Web servers in WebBench benchmark testing. MW



Third-party time
Third-party vendors, like Stone Design, have embraced the Mac OS X Server.

its open-source components, he said, and Internet downloads of the newly available software have topped 100,000.

On the subject of iMacs, Jobs said "colour preference is less of an issue than we thought it would be".

Looking ahead, the iCEO said that Apple sees "a real opportunity in the small-business market. In the enterprise market it doesn't make much sense to do a frontal assault against entrenched Windows systems without a high probability of success".

In answer to a shareholder's question, Jobs acknowledged that Apple deserves a poor grade for hardware and software support, and he said members of the company's executive team "are aware of the problem and are working on it."

On the eve of the meeting board member Larry Ellison (CEO of Oracle) said Apple is poised to become "the great provider of digital appliances." Ellison told reporters: "I've seen some of the new products coming downstream and you want them like a teenage boy wants a cool-looking fast car." (See page 22).

Continuing the good news, PC Data, a US market analysis firm, has revealed that Apple leapfrogged IBM as the number-three computer retailer, behind Compaq and Hewlett-Packard. Apple took 12.5 per cent of the retail market, compared with 31.3 per cent for Compaq, 24.3 per cent for HP and 9.5 per cent for Big Blue. MW
– Michael Burns and Lisa Bowman

Pace stepped up on QuickTime

QuickTime for Java is now available on Apple's Web site, allowing developers to create Java software that takes advantage of QuickTime's multimedia capabilities on both Mac OS and Windows machines. Meanwhile Apple has updated Mac OS Runtime for Java (MRJ) to version 2.1.1, available via free download from www.apple.com/java.

Version 2.1.1 offers full compatibility with version 1.1.7 of the Java development Kit (JDK) from Sun Microsystems, as well as offering a five-fold speed boost, according to Apple.

In addition, MRJ 2.1.1 allows Macintosh developers to extend the capabilities of Java applications by coupling them to core Apple technologies, including QuickTime and AppleScript. MW

Apple, 0870 600 6010

XPress route to

Quark answers Adobe InDesign challenge with raft of new products.

During a packed keynote at Seybold Boston, Quark founder Tim Gill offered his company's response to Adobe Systems' next-generation DTP InDesign announcement by previewing several forthcoming products, including an upgrade to QuarkXPress. Gill said that Quark hopes to release XPress 5.0 by the end of the year – a far cry from the four years that elapsed between versions 3.0 and 4.0.

Four for Five

Although he did not demonstrate any of the new XPress features, Gill discussed four broad functions that are expected in the upgrade: a built-in table editor, document layers, HTML and PDF import/export.

XPress 5.0 will offer table-generation features similar to those in Microsoft Word, "but hopefully with a lot more elegance", said Gill. Quark representatives told *Macworld* that the table editor can import graphics into cells as well as text, and blends can be applied to the table background.

Using the layers function, text and graphic elements can be placed on separate layers that

can be hidden, merged, and modified in other ways. For example, users could specify how different layers interact with each other when wrapping text. If text is on one layer, a circular graphic on a second layer, and a rectangular image on the third, users will be able to preview how the text will look when wrapped around either graphic.

The HTML export function will use a new Articles palette that identifies elements within a document that should be included in a Web page. Elements can be exported in HTML format, with the option of using Cascading Style Sheets, or mapping the document's style sheet to specific HTML tags. With the PDF import option users can drag-&-drop PDF files into QuarkXPress, where they will appear as graphic objects. PDF files can also be exported, either directly or through Adobe's Acrobat Distiller software.

Asset management

Gill also demoed the Quark Digital Media System; a digital-asset management system scheduled to ship in the next three or four months. The client-server system, based on an Oracle database, is aimed at companies that need to manage large

future

volumes of text, graphics, and other design elements for deployment in print or online.

Gill noted that poorly conceived digital-asset management schemes are adding to the cost of building and maintaining Web sites. "Your assets are like money," he said. With many production systems in use today, "it's almost like taking your assets and putting them under the mattress."

Demonstrating QuarkDMS, a company representative brought up an image in Adobe Photoshop then used a plug-in to enter keywords and other information about the image. Switching to XPress, he performed a search that brought up all images that included "texture" as a keyword. He also showed how a salesperson on the road could use a Web browser to locate and download an image for use in a PowerPoint presentation.

Vertical markets

Gill said that one of Quark's goals is to develop software for specialized segments of the publishing business, such as book publishing, package design, and direct marketing.

For package designers, Quark is developing a program – code-named Wrapture – which combines page-layout and 3D prototyping functions. Demonstrating the software, a Quark representative opened an EPS file–created in a CAD program for packaging – that showed the folds and die cuts for a six-pack carrier. She then imported a series of panels, which were automatically mapped to the appropriate sides of the carrier. Finally, the software displayed a 3D-simulation that showed how the package would look in its final form. The simulation, which allows the designer to view the package from any side or rotate it in real time, can be exported as a QuickTime VR movie. Gill said that the program would even allow you to simulate cellophane windows. He noted that packaging is a \$100 billion business in the US alone.

For direct marketers, Quark plans to release a database-publishing program – code-named Cypress – which can import data from multiple sources and place it in catalogue layouts. Product information in the catalogue will be linked back to the database, permitting instant updates of prices and descriptions. Once a catalogue template has been set up, pages can be built simply by dragging items from a product list. Future versions of the software will include features for building catalogues on Web sites.

Along with Cypress, Quark plans to offer a Windows-only financial-analysis program – code-named Mirim – for direct marketers.

Another forthcoming program – code-named Troika – is targeted at publishers who want to deploy print documents on the Web – see right. The first release of the software will let you export images in Macromedia Flash format; a future version will also support the proposed Scalable Vector Format, a forthcoming Web

standard endorsed by Quark and Adobe.

While making it clear that Quark is taking Adobe's challenge seriously, Gill also pointed out that InDesign is still an unreleased product. Playing on Adobe's new marketing campaign, he noted that InDesign is "in beta."

– **Stephen Beale**

Triffic Troika

XPress to Web via XML

Quark couldn't supply us with any Mac shots of its Troika Web publisher. So apologies for the Windows screenshots! (Top) An XTension in QuarkXPress extracts the contents of the page automatically as XML. (Centre) A Web template designed in Troika holds the content from the database on the Web. Note the text on a path that says 'headline'. This is one of the clever bits where the text from the database is taken and manipulated as specified in the template to produce a customized graphic on the fly. (Bottom) Here is the page generated dynamically by Troika in a standard Web browser. Notice how it has not just inserted a stock graphic from the database. It has created a graphic 'When the Bough Breaks' on a path, as in XPress, sat on top of another graphic. If the text content is changed in the database, and the page refreshed, a new custom graphic is created.

AOL aboard the Netcenter

AOL is set to release version 4.0 of its Mac Internet software after inking a deal to acquire Netscape Communications. The \$4.2 billion merger, first mooted in November, sees AOL reorganizing into four product groups including one devoted to Netscape operations, and laying off between 700 and 1,000 workers from AOL and Netscape combined.

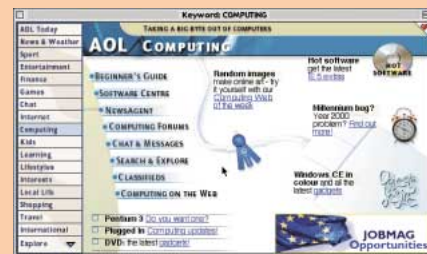
AOL plans to expand the reach of the Netcenter Web portal, which it said would enable AOL to increase its daytime traffic and capture audiences by broadening its reach worldwide. In addition, AOL will release the 5.0 versions of Navigator and Communicator later this year and will continue Netscape's policy of supporting open development and open source through the work of mozilla.org, the organization that manages Netscape's open source initiative for developers.

"We will continue to build Netscape's successful businesses, including expanding the audience for the popular Netscape Netcenter and extending both the Navigator and Communicator browsers to the emerging market of next-generation

Internet devices," said Steve Case, AOL chairman and chief executive officer. "This acquisition will greatly accelerate our business momentum by advancing our multiple-brand, multiple-product strategy and helping us take e-commerce to a new level."

As part of its own strategy AOL is about to roll out version 4.0 of its AOL software. Though it claims a host of enhancements, the software still comes a year behind its Windows counterpart. Features include streaming multimedia content (in a 'slideshow' format) and new email and chat options including a download sentry to catch email viruses, the ability to attach multiple files and embedded images in mail. Software installation and operation has been streamlined, with new one step upgrades, automatic modem selection and 'live' on-line switching of user screen-names without disconnecting from AOL. The software, which is available free from AOL, also benefits from a redesigned interface, new Channels and enhanced Web connections.

On the back of the release AOL Europe has been laying out its strategy to reach 10



million European households in 2002. At the CeBIT show in Hannover, CEO Andreas Schmidt said that as part of the strategy, there will be an initiative to connect all of Europe's MPs to the company's Internet services. He also said that AOL was planning a new portal strategy to boost advertising and e-commerce revenue. **MW**
AOL, www.aol.co.uk

PowerPC allies' diverging paths

Onus on Apple to bring chip firms closer together

The introduction of Mac OS X Server brings powerful new capabilities to the PowerPC microprocessor and offers a foretaste of some of the modern OS capabilities owners of desktop Power Macs can look forward to when the client version of Mac OS X ships later this year.

Despite these glad tidings on the OS front, some forward-looking observers have discerned a serious stumbling block in the Mac road map: the lack of a coherent CPU strategy from Apple's PowerPC partners, Motorola and IBM.

Judging from their recent moves, both companies are striking off in their own PowerPC directions, neither of which has much to do with desktop systems based on the RISC technology.

According to sources, IBM is focusing most of its attention (and its high-speed processor technologies) on 64-bit PowerPC silicon for its AS/400 servers and leaving further development of 32-bit models suitable for future Mac systems – including the long-awaited PowerPC G4 chip-in the hands of Motorola.

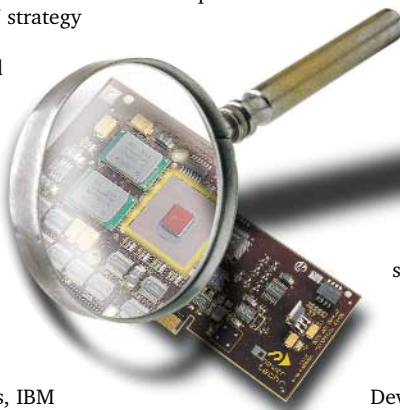
Motorola's own PowerPC agenda, meanwhile, is increasingly shaped by the allure of embedded

processors for communications and other systems. While Motorola's interest in capturing this lucrative market bodes well for the survival of PowerPC technology in some form, car dashboards and other "smart" appliances do not a desktop platform make.

At least some of the blame for this troubling turn of events can be laid squarely on Apple's doorstep. The company's decision to pull the plug on its hardware licensees, while salutary – and arguably vital – to Apple's hardware business in the short run, reduced the number of PC manufacturers its processor partners could supply to one: Apple itself.

And until now Apple has not been forthcoming about how its OS offerings will leverage such PowerPC innovations as AltiVec, the multimedia technology Motorola plans for its G4 generation of processors.

However, May's Worldwide Developers Conference in San José, California, will see Apple offer a trio of sessions covering AltiVec's "parallel and vector capabilities" and explaining how to write and review AltiVec code for Mac OS applications. If the PowerPC is to remain a Mac selling point, Apple needs to further demonstrate its own commitment while stirring up sufficient public interest to sway the companies who can make or break future development efforts. **MW**



FirePower blazes a storage trail

The first external hard drives designed for the blue & white Apple Power Mac G3 have just been launched by FirePower.

Billed as the world's fastest desktop FireWire external hard-drive solution, the FireDrive HDD series delivers full FireWire hot swappable functionality.

The 8.4GB FireDrive is priced at £329, a 1.01GB drive is £459 and the 14.4GB FireDrive costs £599.

All drives feature a 512K cache and an average seek time of 9.5 milliseconds (ms).

FirePower intends to expand its range to include a CD-R drive, Hubs, FireWire cables and PCI-to-FireWire interface cards.

**Channel Dynamics,
0870 607 0540**



Ellison runs for office '99

He's at it again. Larger-than-life Larry Ellison, CEO of Oracle, has admitted at a University appearance that he has contemplated running for governor of California.

Ellison said: "I feel passionate about the crisis in education in the United States and feel working in state government would be the best way to improve education standards."

A relaxed Ellison – appearing at the University of California at Berkeley – was at his most outspoken, though, when discussing Microsoft's ongoing antitrust trial. An ardent Microsoft critic, he said: "What's breathtaking is that they knew they were breaking the law," he said.

Ellison accused Microsoft of using its monopoly



of the PC operating system market to "control" competitors, "destroy" innovation and run Netscape – "one of the most innovative companies in Silicon Valley" – out of business.

Ellison dismissed Microsoft's pleas to be left alone to innovate better software products as "an astonishing lie." Microsoft is trying to destroy innovation. It's in their interest to destroy innovation," he said.

"Innovation is taking us away from the personal computer. ... It's in Microsoft's interests to slow the innovation for as long as possible."

Another speaker asked Ellison whether Microsoft "really is a surrogate 'evil empire' then?"

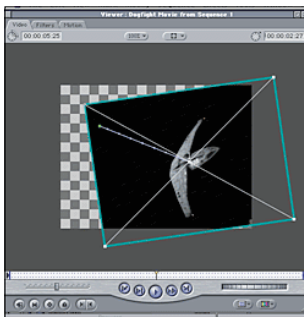
"Yeah," Ellison replied.

– Joel Deane

MW

Wait nearly over for Final Cut Pro

'Premiere killer' now in the can



Mover and shaker

Clips can have effects or geometrics animated through a simple interface.

Every movie director longs to get "final cut" on their film, and for several years now Mac-based video users have been eager to get Final Cut Pro software for their Macs.

The long-awaited video-editing system, originally developed by Macromedia and now owned by Apple, is currently in beta testing; at the time of writing, sources said Apple planned to unveil the package at the National Association of Broadcasters show, which opened on April 17 in Las Vegas. Adding weight to this, Apple has officially announced a spring delivery date for Final Cut Pro in the US.

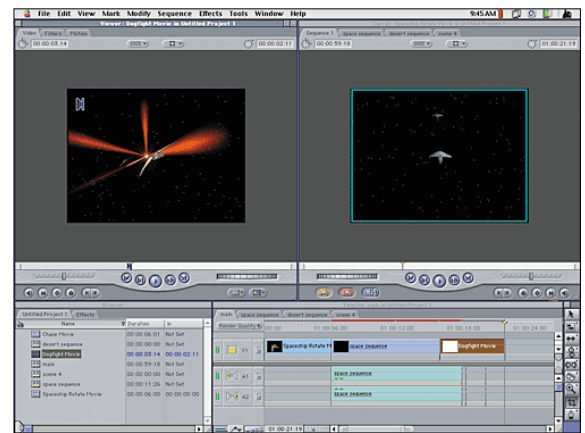
With a feature-set that sources said competes head-on with Adobe Premiere, Final Cut Pro also folds in a number of compositing and special-effects features that might make die-hard Adobe After Effects users take a second look at the new product.

According to sources, Final Cut Pro sports an interface that pulls elements from popular desktop-editing and compositing programs, ranging from Premiere to Avid MediaComposer. The program packs a full suite of editing features, including three-point editing with insert, overwrite and replace modes, as well as a match-frame facility, rolling edits and ripple delete.

Although its basic editing functions are similar to other non-linear editing systems, Final Cut Pro reportedly lets users divide their projects into sequences that can be nested inside each other, à la compositions in Adobe After Effects.

As well as easing organization, sources said this feature simplifies the program's interface and use of screen real estate. Other interface niceties cited were the lack of a separate transitions track (transitions are applied directly to a clip), such as those used in Premiere and Media 100.

Final Cut Pro takes advantage of a number of new Apple technologies, including forthcoming



Furthered nest

To simplify editing tasks, a movie can be edited in sequences that can then be nested inside other sequences.

QuickTime 4.0 streaming capabilities, full support for QuickTime effects and the ability to output a digital video stream directly to a FireWire port. The new package will also include comprehensive device-control, batch capture and logging features.

Sources say Final Cut Pro will provide a number of compositing and motion-control facilities. A given clip's geometrics and opacity can be animated through a simple keyframing interface, although the program lacks velocity control for easing effects in and out. Compositing is achieved by laying video tracks on top of each other in the time line, and the program includes a full selection of keying effects and transfer modes.

Apple declined to comment on Final Cut Pro, but an international version is not likely to ship before June.

– Ben Long

Distributor in software bonus

Computers Unlimited is offering FileMaker Pro 4.1 with Macromedia Dreamweaver 2.0, and a free copy of Adobe GoLive PE with selected Sagem Planet ISDN products.

The Dreamweaver/FileMaker bundle costs £399. The bundle also includes a CD containing the new FileMaker ODBC driver and documentation on how to use the two products together to produce database-driven Web sites. The free copy of Adobe GoLive PE (Personal Edition) is available with the Planet PCI-3 and PCI-4 ISDN cards (£599), the Planet GeoPort adaptor (£349), and the Planet USB adaptor (£199).

Computers Unlimited,
0171 358 5857

New ATM hits the font

More than two years since its last major upgrade to Adobe Type Manager, Adobe Systems is on track to deliver a new version of its venerable font-management and rasterizing application.

ATM 4.5, now in beta testing, sports a cleaner interface and adds support for double-byte fonts.

The upgrade will allow users to activate, preview and print double-byte fonts (such as the kanji alphabet), sources said. In addition, Adobe has simplified the utility's menu system, relocating most functions within a single Tools menu.

New font-management features include the ability to copy fonts and manage duplicates via

a pair of menu commands. The current version of ATM does not let users copy fonts while they are in use. New activation options will let users control whether a font will be reactivated after the next restart, deactivated or deleted, sources said.

Fonts can be activated automatically when they are added to an ATM set, preventing the common time-waster of adding a font to a set, forgetting to activate it and then being forced to return to ATM.

ATM 4.5 will require 16 MB of RAM, 73 MB of free disk space (for a complete installation), Mac OS 7.5 or later and a PowerPC Mac.

– Ben Long

Emailer's Dead. Long live Emailer

Apple to reprieve popular Claris email program

Rumours of Claris Emailer's death are greatly exaggerated. Sources report that the email program will live on – albeit as an integrated part of AppleWorks 6, the next version of the Apple productivity package formerly known as ClarisWorks.

Sources were unable to provide a shipping date for AppleWorks 6, and Apple was unavailable for comment.

Apple took back both ClarisWorks and Emailer when it restructured its Claris software subsidiary in January 1998 and reconstituted FileMaker as an independent database operation.

The lack of new Emailer releases has sparked speculation that the product is dead, even though Apple declined to comment on its email plans.

The move raises a number of questions: Why would Apple choose to integrate Emailer into AppleWorks? Why doesn't it simply continue to develop it as a stand-alone application?

AppleWorks is aimed primarily at the small-office, home-office market. In many ways, it's probably better-suited to that market than

Microsoft Office 98. Office 98 has more features than anybody is likely to ever use, but it still lacks AppleWorks' database and illustration capabilities.

To many users, however, email has become an absolute necessity, and if Apple's vision of the future is anything to go by, that group will grow. Including email in AppleWorks – an

application that already satisfies 90 per cent of users' needs – is the next logical step.

Right or wrong, Apple has decided it can't make enough money developing Emailer as a stand-alone application. But if it's part of another application, the picture changes. Integrated into AppleWorks, Emailer wouldn't have to carry the burden of marketing, distribution and support.

At the same time, Emailer enjoys a large and loyal user base. If Emailer is integrated into AppleWorks and if it's possible to use it more or less independently, it might be worth buying AppleWorks for Emailer alone.

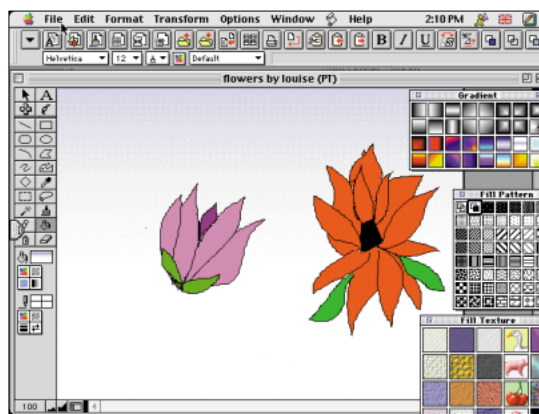
By integrating Emailer into AppleWorks, Apple can satisfy this loyal user base and offer a more complete AppleWorks at the same time. If the company can make money in the process, that's not a bad idea.

■ Apple has released version 5.0 of AppleWorks, priced at £69, which offers various new enhancements, including a revamped interface, and the ability to add graphics, movies and frames to databases. The suite of programs

in AppleWorks 5 includes programs for word processing, drawing, painting and creating spreadsheets, databases and charts.

New Internet features mean spreadsheets and word-processing documents can contain Web links, and Web pages can be created by saving a text document as an HTML file. **MW**

– Nils Holmlöv



Big draw

AppleWorks 5.0 includes enhanced drawing and graphics features.

Live Picture axes its image editor

After an exclusive report on Macworld Daily News (www.macworld.co.uk), Live Picture has confirmed that its eponymous, innovative, image-editor has been discontinued. But a top official denied that the company's PhotoVista panorama creator had also been shelved.

Tony Bove, corporate communications manager at Live Picture, told *Macworld*: "Future development of Live Picture 2.6 and Reality Studio (Windows-only) has been discontinued, but we continue to support the present versions of these products on our Developer site (developer.livepicture.com)."

"PhotoVista is also supported on the Developer site and has not been discontinued," he added.

Live Picture will now focus on its Internet-based products, specifically the free-to-download ZoomIt! JPEG Web detailer. (www.livepicture.com) – **Simon Jary**

Netscape fires engine

Netscape is working on a fast new layout and rendering engine that will keep the next version of its Web browser "ahead of the game".

The layout engine, named Gecko, is at the core of Navigator 5.0, and Netscape director of engineering Rick Gessner said it will be the fastest, smallest and most standards-compliant layout engine available – features that Netscape hopes will help it win its bloody browser war with rival Microsoft

Currently at Version 4.5.1, Netscape said Navigator 5 is scheduled for a beta release by July and a commercial version by year-end.

Gessner said: "We are way ahead of the game with CSS (cascading style sheets). We have a great CSS1, a great XML story, and soon, a great CSS2 story. We've learned Web standards are the most important thing we do in Netscape." **MW**

– Wendy Mattson

Macs make splash

Small presence but huge impact for Apple stand at German show

A record-breaking number of exhibitors and visitors braved the north German weather for this year's CeBIT – the world's largest computer trade fair – which ran from March 18 to 24 in Hannover. Although Apple and its vendors accounted for only a small fraction of the exhibitors, the company's stand – named the PowerPark – was the largest exhibit at CeBIT's hardware hall. This was where Apple put its new Mac OS X Server to the acid test, only two days after its US launch.

Networked systems throughout Apple's booth (including the iMacs at the information counters) were booted from and administered by a Power Mac G3 running Mac OS X Server.

Beside Mac OS X Server, Apple's CeBIT booth and public presentations featured its entire hardware and software product portfolio, including the latest G3 systems, the Apple Studio Display line, Mac OS 8.5, Appleshare IP 6.1, WebObjects 4.0, Quicktime 3 and AppleWorks 5. In addition, Apple Germany demonstrated its support for the countrywide "Schulen ans Netz" [Schools on the Net] campaign, which the Mac-maker is

co-sponsoring with Deutsche Telekom.

The company offered hourly presentations covering four topics: "Introduction to iMac," "G3 Performance," "Digital Media" and "Publishing," the latter featuring a demonstration of the Mac version of Adobe Systems' forthcoming InDesign package. Also at the PowerPark, Apple hosted a variety of third-party developers

demonstrating their Mac-based products and solutions. The demonstrations put more than 80 Power Mac G3 systems to work on tasks such as print and Web publishing, colour management, and digital-media creation. The booth also included an exhibit aimed at the consumer market. Major vendors participating in the Mac

exhibits included Adobe, Microsoft, Iomega, Sonnet, OCE, Macromedia, Quark, Pantone, Hewlett-Packard, Agfa, QMS, Viking, LaCie, Helios, 3Com, GCC, Connectix and Keyspan.

Apple also made waves away from the show floor by winning two prestigious design awards. The awards were presented by the German industry forum, Design Hannover. The iMac



'Mice here to stay' – Logitech boss

The mouse is here to stay, but it still doesn't hurt to expand into other markets, the head of the world's largest mouse manufacturer said at CeBIT.

Guerrino De Luca, Logitech International's president and chief executive officer, dismissed the idea in vogue at this year's CeBIT that the widespread interest in voice-

recognition technologies will soon make mice and the keyboard obsolete. In contrast he said, the company is expanding into new peripheral

markets. "Mice are essential for computing and are here to stay, although more sophisticated models for specialist applications are being developed," said De Luca. "People still use telephones, but they're a lot different than they were 50 years ago."

De Luca joined Logitech in February 1998 from Apple, where he was executive vice president of worldwide marketing. The company celebrated the production of its 200 millionth mouse last year, and has announced a May 1999 launch date for its three-button WingMan Gaming Mouse for the Mac, but De Luca isn't planning on stopping there.

"March of last year, we released our first keyboard. In doing so, we went from zero per cent to 25 per cent of the US market share," De Luca said, adding that Logitech, after the purchase of the QuickCam range from Connectix, also has 40 per cent of the desktop video camera market. "We have gone from being the mouse company to being the

desktop company," he said.

Logitech last year won an important agreement with Apple to make the mice for the iMac, and also ships its newest peripherals with the USB (universal serial bus) interface.

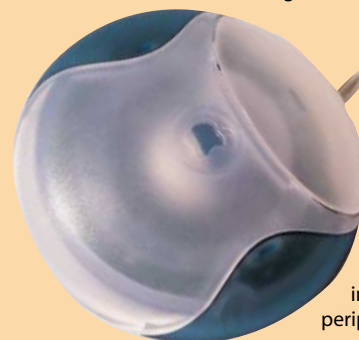
"We have a lot in common with Apple," said Fred Swan, director of marketing for Logitech's WingMan entertainment products. "One of the most important things we share is a strong commitment to offer an outstanding user experience by means of an interface that makes computing more natural and enjoyable. Apple's new iMac and G3 computers exemplify this commitment, and we're looking forward to supporting these systems with a variety of our products."

The WingMan Gaming Mouse is priced at £29.99 and will ship with a full version of Monolith's Shogo: Mobile Armoured Division game.

Logitech, 01306 734 300

– Douglas Gray

MW



at CeBIT

landed the top prize in the Office category, while the Apple Studio Display won the Product Design Award.

They are among the most coveted design awards in Germany and cover a wide range of products and fields. Other winners included the Volkswagen Beetle and the Porsche 911.

Other Mac vendors were showing a wave of new products at CeBIT 99.

Maxon Computer (HiSoft, 01525 718 181) offered a first look at 3D Painter, a forthcoming application for creating 3D textures and surfaces.

The software, which will be available this autumn, will let users apply a standard assortment of graphics to the surfaces of 3D objects. All brush marks are displayed on the fly.

Three-dimensional qualities such as transparency, surface relief (bump map) or glow effects can be "painted" directly onto an object with brush or pencil tools and users will be able to undo each step in a project.

3D Painter will let users employ as many image layers as they desire and link each level with multiple masks (see main picture, left).

Like most 3D applications, it requires a hefty amount of RAM – Maxon said 3D Painter takes 40 to 60MB.

Maxon also showed off the forthcoming version 6.0 of its high-end Cinema 4D XL, featuring additional modelling tools, a new timeline editor and a revamped lighting system and Cinema 4D Net, a new version of its flagship 3D technology that renders across local networks or the Internet. UK pricing is not yet available.

Minolta (01908 200 400) displayed its entire range of monochrome and colour printers, as well as its new copier-printer system, the CF910 (see facing page).

The high-end model copies at 400 dpi, prints at 6ppm (pages per minute) and also functions as a full-colour scanner. An intuitive touch-panel display is used to change and manipulate colours, images and image sizes, and add or delete text and figures. It is available with an embedded Fiery controller for £19,500, or without for £14,295.

Metrowerks (Full Moon Software, 01628 660 242) introduced CodeWarrior Professional 5. With the new version of the development environment for C/C++ and Java, Metrowerks has added support for Linux in addition to the Mac OS and Windows. No UK pricing had been confirmed at the time of going to press.

Lindy (01642 754000) showed a range of new products including a USB mouse specially designed for the Mac. The mouse is a single-button model with a 400dpi resolution, costing £16.50 and sporting a translucent case and ergonomic design.

Kodak (0800 281 487) rolled out three new digital cameras. The £300 entry-level DC200 Plus



Sea change

Maxon 3D Painter is a new application for creating 3D textures and surfaces

is an improved version of the DC200, featuring several enhancements such as longer battery life, border templates, TV/video output capability, and a 4MB CompactFlash card. The DC240 costs £500 and boasts a 1.3 megapixel sensor, a USB interface, automatic focus in single and multi spot mode, and image conversion to black-&-white or sepia. The USB-compatible DC265, is the successor to the DC260, and is priced at £750.

It features a "super" compression option, a 16MB CompactFlash card as standard, and uses the Digital Print Order Format (DPOF) – a proposed industry standard that simplifies printing and ordering prints from photo-finishers.

Active Concepts (Quaymedia, 01452 700 150) announced a new international version of Funnel Web, a tool for monitoring and analysing Web-site activity. Version 3.1 supports localizations for French, German, Italian and Japanese. Two versions are available – Funnel Web Pro costs £299, and the standard version costs £159.

The organizers of the show, Deutsche Messe, said that of the 7,341 exhibitors, most expressed "full satisfaction" with their participation.

However, not all vendors were happy. One company, Macally, which specializes in peripherals for the Mac, was one of several peripherals companies that received notices asking them to remove certain products, such as joysticks, from their stands.

"I was told that I'm not allowed to display joysticks and that they are not among the list of approved products here," said Joe Duffer, managing director at Macally Teklink Europe.

"My guess is that they are trying to limit the gaming crowd here and instead drive traffic to the CeBIT home show", he added, referring to the biannual CeBIT Home exhibition that is directed at consumers.

MW



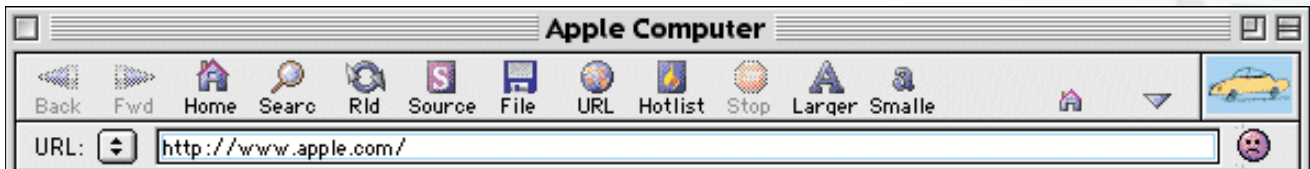
Colour master

Kodak's new 1.3 megapixel DC240 sports a USB interface and converts colour pictures to black-&-white or sepia.



Valued input

Kodak's entry-level DC200 Plus has TV and video output and longer battery life.



iCab cutting up the Net

Macworld investigates the success of the iCab compact Mac Web-browser

The Internet browser market has a new player, in the shape of German company, iCab. Its eponymous Web browser is issuing a challenge to giants Microsoft and Netscape by being smaller, leaner and also independent. *Macworld* got the lowdown on this new kid in town in an exclusive interview with iCab founder, Oliver Joppich.

Macworld: Your new Web browser looks like it will shake up some major competitors. Why did you decide to take on giants like AOL/Netscape and Microsoft in the browser market?

Joppich: If you look under the hood, these competitors aren't really free: Microsoft distributes Internet Explorer free of charge because the company wanted to break Netscape's dominance of the market, but Bill Gates will recoup high development costs through the content of Web sites.

And Netscape is now AOL, which has a vested interest in pushing its own content. Also, Communicator and Internet Explorer are based on older programming concepts and are very bulky. Internet Explorer for the Mac is quite attractive but it still seems excessive.

We wanted a slim browser that would give users a smooth ride on the Internet. And many users seem equally interested: We had more than 50,000 downloads from our page in the first three weeks. That was markedly higher than even we had expected, and naturally it inspires us for the future.

Macworld: While the competition offers their browsers free of charge, iCab will ultimately cost about £25. Do you think the market is inclined to pay for a commercial product at all?

Joppich: For now, the preview versions of iCab are free, and our goal is to continue to offer a free limited version. As for the complete version, we'll still ask only a very fair price that we'd like to put almost completely into advancing iCab.

Macworld: iCab's option for switching off ad banners will surely prove attractive for some users. However, the Web survives in part on advertisements. Isn't this a contradiction?

Joppich: If someone is offering an interesting Web page free of charge, he also has the right to



Web walker

iCab's slim new browser is making sure that Microsoft and Netscape are feeling its force.

put ads on it. We just think the current trend toward bulky advertising images isn't very smart; advertisers are going to have to think up better concepts. iCab provides the capability to switch off images; it just does it more intelligently than Internet Explorer or Communicator (where you must switch off all images).

We didn't invent it: Mac programs such as WebFree already do much the same thing.

Macworld: What are your XML plans for the iCab Browser? When will JavaScript support arrive? GIFs and JPEGs can contain embedded ICC colour profiles. Can the browser analyze these?

Joppich: We want to add JavaScript support sometime this year. We'll evaluate graphics support to determine where the real need is.

Macworld: How hard will it be to port iCab to the Carbon APIs? Do you plan a Yellow Box version for Mac OS X Server?

Joppich: Since iCab is a very modern concept, porting shouldn't be too much work. We'll start to do so when the client version of Mac OS X takes shape. A special Mac OS X Server solution doesn't make any sense to us. **MW**

— Martin Stein

■ The new compact Mac Web browser from iCab requires only 4MB of RAM and occupies less than 2MB of disk space. The English-language version 1.25 of iCab is featured on this month's cover-mounted *Macworld* CD.



Apple helps give schools Net gain

**Macintosh:
machines of
choice for Tesco
'Net centres**

Apple equipment is playing a major part in the world's biggest schools Internet project SchoolNet 2000, which will be the centrepiece of the Learn Zone in the Millennium Dome.

As part of the Tesco-sponsored project, each of the supermarket's 340 stores is being equipped with an Apple Internet Centre, which can be used for free by those schools waiting for funding for computer equipment under the government's National Grid for Learning scheme.

Schools using the Tesco centres will have free Internet access and use of Power Mac G3s, eMates, scanners, printers and digital cameras, as well as Internet routers and hubs.

The equipment is provided by Xemplar, which supplies Apple kit to primary and secondary schools. Xemplar was jointly owned by Apple and Acorn until Apple bought out Acorn's share in February of this year (see News, February *Macworld*).

SchoolNet 2000, the first project of its kind in Europe, supports the National Grid for Learning and the National Curriculum. Since its launch in September 1998, pupils have been taking part in a range of curriculum-based investigations, researching their communities and environment, and authoring work which is then posted on the SchoolNet Web site.

Net resource

The plan is for the Web site to be a resource chronicling life in the UK at the end of the 20th century – as seen through the eyes of schoolchildren.

The 13,000 schools registered have generated 15,000 Web pages, with 33,000 school-age children contributing under the guidance of 14,000 teachers.

Professor Stephen Heppell of Ultralab, based at Anglia Polytechnic University, is consultant to the project. He is an Apple Master, and a world expert on technology in education.

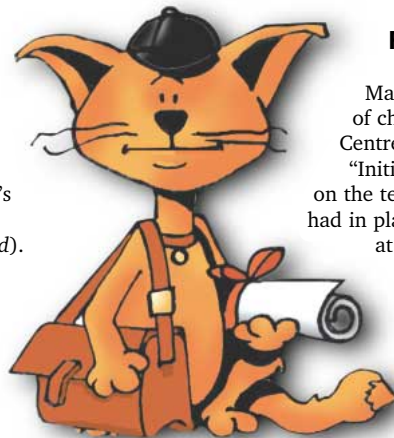
He said: "None of us on the team had any idea of how huge it would turn out to be."

Web-site simplicity

The Web site was designed and is managed by Intuitive Media, which produced the cat logo (above) that appears on the site. Simplicity was the key when setting up the site: it is plug-in

independent and uses no Java.

Templates have also been created for the children to lay out their work – and extensive steps have been taken to ensure that the children's identity is protected. Forty advisory teachers were seconded from their teaching jobs to provide support for other teachers at the registered schools. Theresa Salvey of Xemplar, which is giving technical support to the teachers, said: "The advisory teachers are not technical experts, although they do have a certain level of competence in IT. At first, the teachers were given eMates to take out the road when visiting schools, but it wasn't long before they were asking for PowerBooks."



First choice

According to Salvey, the Mac platform was the system of choice for the Tesco Internet Centres because it is easy to set up.

"Initially it was going to be based on the technology that schools already had in place, but then we decided to look at a platform which lent itself well to this project."

"We needed systems with low maintenance and training costs and which were simple to support."

SchoolNet 2000 is set to run until the end of the millennium – but the project could be extended; with Apple

Internet Centres up and running the general public may also benefit from their use. Tesco PR manager, Tony O'Reilly, said: "We are looking into making the Apple labs a broader community resource."

■ Tesco is just one of the new "free" ISPs (Internet service providers) avidly following the battle between the telecom watchdog, Oftel, and BT. Oftel has drafted a proposal designed to end the dispute over revenue-sharing in free Internet access schemes, saying that BT and other local loop providers are getting a fair share of the revenues from local calls being made to free ISPs. Interconnect rates should stay the same until at least August 2002, said an Oftel spokesman.

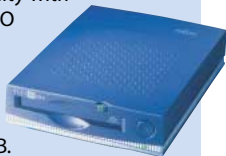
Since calls originate on BT's local loop – but then are passed onto the network of a competitive carrier working with the ISP – BT must pass on 70 per cent of the cost of the local call, that ranges from 1-4 pence per minute. BT has complained that it makes less profit on this type of call than on other services.

SchoolNet 2000,
www.tesco.schoolnet2000.com
Oftel, 0171 634 8750

Fujitsu first with 1.3GB MO drive

Fujitsu has launched the first 1.3GB 3.5-inch magneto-optical (MO) external disk drive, the DynaMO 1300SD.

As well as 1.3GB media, the £350 drive has read/write compatibility with 2.5-inch MO media at 640MB, 540MB, 230MB and 128MB.



With a 2MB buffer, the drive offers data transfer rates up to 5.9MBps using 1.3GB media, and 4.9MBps with conventional 640/540MB media. **MW**
Fujitsu, 0181 573 4444

Apple sets out stall on games

Developers bash confirms Jobs' consumers aim

Apple turned out in force at the Game Developers Conference in San Jose, California, with a large booth showing off iMacs and the company's powerful G3 machines. More important, the display demonstrated popular games – including Myth 2 and Quake 2 running on both platforms – and Apple gave away development tools needed to create games to every show attendee.

That's good news for the revived computer maker. Even interim CEO Steve Jobs has said that creating more games for the iMac is key to luring customers back.

"Apple lost its focus on the consumer market for a long time," admitted Peter Tamte, senior director with Apple's consumer marketing group. "And if we weren't focusing on the consumer market we weren't focusing on games."

Games like Klingon Honor Guard (see Reviews, page 60) and LA Police Squad were shown running on Macs in Apple's booth. And the company announced that it would bundle the popular Tomb Raider game with Mac OS 8.5 (see Product News, page 39). Reports from the show floor also let slip that LucasArts is planning to release a new StarWars game: Episode 1 Racer (www.lucasarts.com).

Such games depend on a few technologies underneath the technicolour skin of the iMac. The computers include a top-of-the-line graphics accelerator, and Jobs' insistence on supporting the universal serial port for input is counted as a blessing among many developers.

"It's simple," said Matthew Manuel, senior programmer at Disney Interactive. "The iMacs are sort of like game consoles. They're much easier to optimize games for."

With only one type of iMac out in the market – all using the same Rage Pro graphics accelerator from ATI – developers can tune games to perform better with less work, instead of aiming their products at a low-end "baseline" system, as is often done with games for the PC market.

Tamte remained tight-lipped on new games that will be available soon and would not speculate on whether iMac graphics will get a boost with an even better chip. But he said Apple would do "what is necessary" to stay ahead. "When Apple started to get in



Speed king

The Star Wars: Episode 1 Racer game from LucasArts will coincide with the soon-to-be released movie.

trouble was when people started looking at the Macs as second class," Tamte said. "We now see it as important to always be a leader."

Adding weight to the Mac bid, Blizzard has released Starcraft, a multiplayer Net-capable battle game, based on the Warcraft engine.

A huge hit on the PC, Starcraft features scenarios built around three intergalactic races, Terrans, Protoss or Zerg, each battling for galactic domination. The £34 game comprises of 30 missions, which take place in space, on planets and within installations. The underlying story is revealed with each successful mission.

Players can play over Blizzard's Battle.net, a cross-platform online gaming arena, or over networks, where up to eight players can take part. Battle.net is free to access and participate in, but obviously Internet access is required.

Starcraft includes a campaign editor, for players to create their own scenarios and maps. The game requires at least 16MB of RAM and a hefty 90MB of disk space, but features real-time light sourcing and visual and tactical realism.

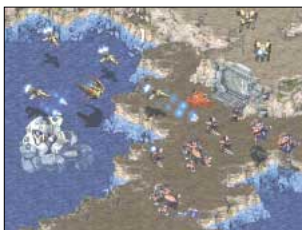
Blizzard is also to release an expansion set for the game, StarCraft: Brood War. An exclusive demo of the game is on this month's Macworld cover CD.

Softline, 01372 726 333

**– Robert Lemos
and Michael
Burns**



MW



Total carnage

Blizzard's galactic empire-building game StarCraft (above and below) leads the way in the resurgence of Mac gaming.



High street blitz

AppleCentres set to place Macs in consumer heartlands

The first AppleCentre to be launched in the UK for two years was officially opened on March 23. The Square AppleCentre, owned by the Square Group, is the first of many "new-look" AppleCentres due to be opened throughout the UK this year. The AppleCentre blitz is part of Apple's drive to move the sales focus away from mail order and into face-to-face selling after the company announced a shake-up in the channel in February (see Macworld News, March 1999). Apple resellers were asked to re-apply for authorization, following a number of strict criteria, and the fruits of the shakeup will be seen over the next few months.

The new AppleCentre, situated in New Oxford Street, London, is designed to fit Apple's strict specifications regarding safety, staff training and look and feel. The centre integrates the Apple sales environment into a graphics studio and reprographics business. Customers can test Apple products and see Macs being used in a digital workflow. The new premises were opened by Apple UK's managing director, Jon Molyneux. He said: "The opening of this new AppleCentre is a milestone for Apple UK. This is the first of many updates to our AppleCentre channel which will improve the surroundings and facilities available to our customers."

Demo suites are available to customers on an appointment-only basis – security is high on the proprietors' minds after an incident soon after the



Facelift
The flagship New Oxford Street AppleCentre marks the launch of the company's drive to raise its consumer profile.



centre's opening, in which a man was seen to make off with a PowerBook under his arm and AppleCentre staff in hot pursuit.

The revamping will continue through the year. Other centres to receive a facelift are existing outlets in Warrington, Bedford and Bristol, with the refurbishment scheduled to take place during this coming quarter (April-June 1999).

Apple, 0870 600 6010

Check out Macworld's all-new Dealer Guide, from page 171.

Eire rival turns up for Apple Store

Ireland's biggest Mac dealer has gone online, with the promise of next-day global delivery of Macintosh systems ordered from its Web site.

The SuperStore Compu b online service offers current Apple products as well as third-party peripherals.

Compu b said the site offers more bespoke options than the Apple Store self-assembly option and is the first such service to be offered to Irish customers.

Denis O'Connell, managing director of Compu b said: "The ability to specify a particular G3 system online will save hours of trawling through the retail outlets and trade ads for the right

model." He continued: "Obviously a service such as this will rely heavily on technical ability and the delivery guarantee."

"An assembly area and experienced assembly staff have been taken on at Compu b's Limerick headquarters to meet expected demand. Its proximity to Apple's manufacturing plant in Cork will also help the supply of parts."

Compu b, www.compub.com

Store wars

The home page of Compu b's new "bespoke" Mac ecommerce site, launched on March 28.



FireWire faces Intel USB threat

Intel is working on USB 2.0, the next-generation connectivity system, which some industry experts say could dampen enthusiasm for Apple's FireWire (IEEE 1394) technology. At Intel's Developer Forum in February, Pat Gelsinger, general manager of the company's desktop division, announced that USB 2.0 bandwidth will be 10 to 20 times higher than the current version, USB 1.1 – which Apple, among others, subscribes to. Compaq, Hewlett-Packard, Lucent, Microsoft, NEC and Philips have joined Intel in the USB 2.0 initiative.

If realized, the move may also spell a shake-up for the flourishing Mac USB device market (such as the hub from Entrega, pictured here).

USB 1.1's data rate is 12Mbps – USB 2.0 is expected to have a transfer rate of 120-240Mbps and to be backwards-compatible with USB 1.1. FireWire still holds poll-position, however, with a maximum data-transfer rate of 400 Mbps. Apple's new PowerMac G3 desktop range ships with on-board FireWire and a host of third-party manufacturers are gearing up to support the high-speed bus.

In his keynote speech, Gelsinger admitted that FireWire does have a role to play as the digital

Apple anxious as processor giant works on USB 2.0

convergence pipe to connect the desktop computer to the consumer electronics world in the area of audio or visual high performance devices. He described the role as "important, but very focused".

Gelsinger hinted at the recent licensing issues surrounding FireWire (see Macworld news, April 1999) as holding back the acceptance of FireWire. Apple and five other leading consumer computer and electronics companies announced in March that they were devising a joint licensing programme after reports surfaced that Apple was to charge steep licensing fees.

Gelsinger said: "Broad deployment requires reasonable licensing terms around this technology for it to be accepted and deployed by the industry. In that sense we're very happy with the progress that's been recently announced." **Apple, 0870 600 6010**



QT pulls 3D title's strings

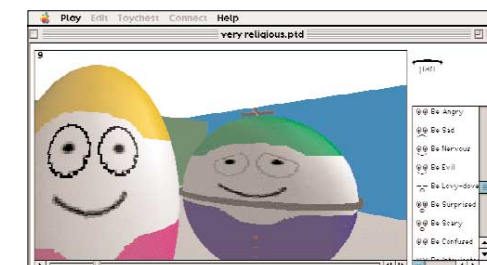
PuppetTime has released a free preview version of its 3D-storytelling application, PuppetTime Director, on its Web site (www.puppettime.com). A QuickTime-based application, PuppetTime uses 3D puppets, which are scripted and manipulated by the user, to create and view 3D movies.

"The core philosophy at PuppetTime is to bring the power of storytelling to the rest of us," Deeje Cooley, PuppetTime's founder and chief technology officer said. Children are natural storytellers, and executives and professionals incorporate storytelling into their daily business practices. PuppetTime will make 3D animation accessible to all."

Each puppet is a self-contained plug-in, with interactive controls, that "knows" how to render and animate itself in 3D. Users can create a 3D movie by entering dialogue, selecting predefined actions, and moving puppets around a stage. The movies only store commands and metadata, making them small and easy to stream over a Web connection.

Additional plug-ins for new characters, stages, costumes, and props will be available on the company's Web site.

PuppetTime said that, in time, the Web site



Strung along

The icons on the right define the puppets' expressions and movements.

will also host live productions of original works by users. The company has also called for requests from users for new features in future versions of the product.

PuppetTime's chief operations officer, Tal Fried, said: "This technology is needed because the biggest barrier to consumer 3D animation is the steep learning curve. Nobody wants to spend hours learning a how to create 3D characters and then learn how to animate those characters to tell a story."

PuppetTime, www.puppettime.com.

Macs can add to Melissa mayhem

Macintosh users could unknowingly transmit a virus that is sweeping the Windows world. Melissa, a Word Macro virus, affects Microsoft Word 97, Microsoft Word 2000 and Microsoft Outlook and is passed on by email.

Once downloaded, the Melissa virus disables document security, creates infectious email messages and mails itself to the first 50 addresses listed in a user's personal address book, with the heading "Important Message from (name)". The virus can infect locally-stored Word documents and disseminate confidential information to other users.

Macintosh users with the virus dormant on their systems can inadvertently infect Windows users via Word documents on floppy disk or other removable media. Macs running Windows emulation software may also be at risk.

Apple offers deal on Power Book G3

Apple has dropped the price of the PowerBook G3 and is offering customers a free Connectix Virtual PC or an extra 64MB of memory with every purchase.

Prices for the PowerBook G3 now start at £1,299, a reduction of £650. All 14.1-inch PowerBooks have built-in 56K modems, ATI Rage LT Pro graphics, built-in S-video output and hot-swappable expansion bays with dual-battery capability.

The Connectix Virtual PC 2.1 software emulates Windows 98 and runs Windows applications on the Mac.

The free software or free memory offer is open to customers who purchase a PowerBook from an Apple Authorized Reseller or online through the Apple Store before April 30. Redemption coupons with promotion details are available from Apple's Web site or from resellers and retail outlets.

Apple is giving away a free copy of Tomb Raider II or Tomb Raider Gold with every copy of Mac OS 8.5 bought before

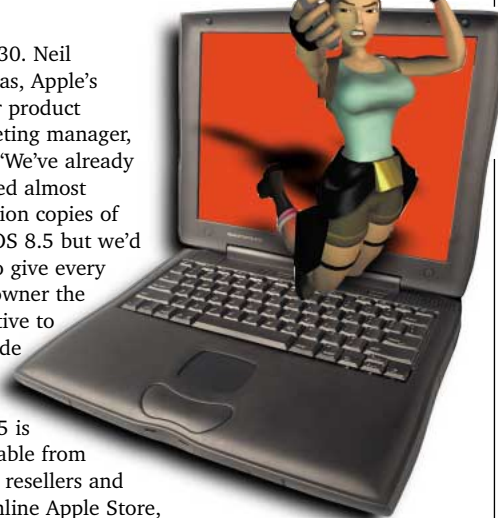
April 30. Neil Thomas, Apple's senior product marketing manager, said: "We've already shipped almost 3 million copies of Mac OS 8.5 but we'd like to give every Mac owner the incentive to upgrade to it."

Mac OS 8.5 is available from Apple resellers and the online Apple Store, priced at £60.

A coupon offering customers the free copy of Tomb Raider II or Tomb Raider Gold is available at point of purchase, or Oas a PDF from Apple's Web site

www.apple.com/uk

Apple, 0870 600 6010

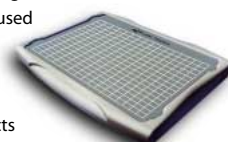


Flexi Touch a key move

Tagsearch has unveiled the Flexi Touch programmable overlay keyboard, designed to simplify data entry into a USB-equipped Mac. Available in both A3 and A4 sizes, the ergonomically-designed keyboard can be used alongside

– or instead of – traditional keyboards and acts like a graphical user-interface. It comprises 256 programmable keys underneath a wipe-clean membrane. The Flexi Touch ships with Mac Intercept software for £151, or on its own for £135.

Tagsearch, 01703 455004



Pioneer's DVD move

Pioneer has added to its DVD range. The DVD-A03/U03 is a 6x DVD ROM drive and 32x CD ROM drive capable of DVD data-transfer at 8.1MB per second (MBps), or CD transfer at 4.8MBps. The slot-in mechanism prevents disc damage and allows the drive to be mounted vertically as well as horizontally. The average access time for DVDs is 110ms, and 80ms for CDs, and the DVD data buffer is 512KB.

Pioneer, 01753 789 789

JVC printer announced

A multimedia printer costing £450 – the GV-DT3 – has been launched by JVC. It offers a variety of interfaces, including FireWire (IEEE 1394) for connecting to compatible digital video cameras and S-Video/Video input. The Picture Memory Function stores up to eight images and the printer's picture-processing functions includes Auto Adjust.

JVC, 0181 450 3282

Network transfer boost

Farallon has announced optimized drivers for its 10/100 fast ethernet cards. The new version 2.0 drivers can improve performance by up to 35 per cent, claims the company.

The high-performance drivers are available for Farallon's Fast EtherTX-10/100 PCI and Comm Slot II cards: both are optimized for Mac OS 8.5, but also support Mac system OS 7.5.3 or higher.

Principal, 01756 704000



Kaidan gets panoramic

Kaidan has announced the KiWi 900 panoramic tripod head – designed for the Nikon Coolpix 900/900S digital camera – to create professional VR panoramas. The KiWi 900 (below, left), costing £125, is aimed at photographers, multimedia developers and Web-page designers.

The tripod head comes with a twin-axis bubble level, a camera slider/positioner, a captive camera attachment knob and two detent discs, which are used for proper angular indexing.

As well as shipping as a separate product, a choice of various software bundles are available with the KiWi 900, including Apple QuickTime VR Authoring Studio, Live Picture PhotoVista, or AdessoSoft Panotouch.

Full Moon Digital, 01628 660242



Scan scan
The IS01 scans
24 pages per
minute at
200 dpi.



Ricoh's scan trio

Ricoh has launched three new scanners – the IS01, the IS4120 and the IS430. The IS01 is a flatbed scanner that scans 24 pages per minute (ppm) at 200dpi, or 12 ppm at 400dpi. Priced at £2,420, the 8-bit greyscale A3 model checks vertical and horizontal dimensions of the original image.

The IS420 is aimed at CAD/CAM and animation applications, and is priced at £3,500. It scans at 36ppm at 200dpi and 23ppm at 400dpi. The 100-sheet ADF features easy frontal loading.

The £4,160 IS430 is a 400dpi, 8-bit greyscale scanner with a speed of 50ppm at 200dpi and 43ppm at 400 dpi.

Ricoh, 0181 261 4000

CDs and books

Clip-art explosion

Nova's Art Explosion 525,000 is a collection of royalty-free clip-art. As well as 525,000 images, the CD contains a 1,500 printed-image index, and 32-bit image browser software for fast access. The graphics include vector and raster images, fine art, backgrounds, fonts, Web graphics and animations. Also included on the £115 CD is AlienSkin

Eye Candy 3.0 and GoLive CyberStudio PE.

Nova, 01752 202 507

Surfing made simple

Internet Searching for Dummies, a new title from IDG Books, contains hundreds of tips to help find your way around the 'Net and track down even the most arcane information on the Internet. Priced at £24, the book comes with a CD of shareware and freeware.

Transworld Publishers, 0181 579 2652

'Common images' CDs

PhotoDisc has launched a CD series called Designer Tools. Each disc contains 100 images based on common themes, such as clocks, currency and maps. The CDs cost £199 each and feature images sizes of 600K, 10MB and 28MB.

Photodisc 0345 302 1212

iMac Dummies guide

In *iMacs for Dummies*, published by IDG Books, author David Pogue describes how to make the most of the iMac's built-in software, such as PageMill, and Kai's Photo Soap. Priced at £19, the book teaches word-processing, printing and file saving, and has sections on USB, troubleshooting, and how to back-up files without a floppy-disk drive.

Transworld Publishers, 0181 579 2652

Flags flagged-up

Stockhaus has released Flag Folio Professional, an £89 CD of more than 230 national, 16 state and seven

international flags of the world.

Cadmium Systems, 0800 436 867



Newer homes in on USB

Newer Technology has added to its Mac options with a new USB video product and a range of upgrade cards.

The uTV is a USB peripheral that adds video and audio in and-out, and a TV tuner facility to any USB-friendly Mac.

Equipped with S-Video and composite video inputs, the £99 uTV has the same styling as Newer's uDrive USB floppy and the uHub seven-port powered USB hub products, and can be stacked together. It also features a TV connection for the tuner, as well as audio and video in and out.

The TV tuner can place a resizeable window on the Mac screen, and accept TV and video input while working in other applications. When the window stretches to full-screen mode, the factory ATI video chipset kicks in and video integrity is maintained at this higher resolution. The uTV uses an MPEG codec that allows for video data-stream compression. Both PAL and



See blue

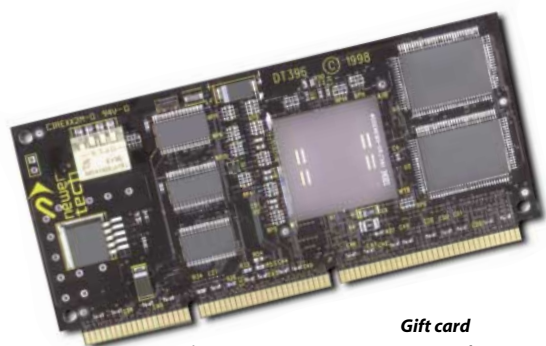
The 1212u is Agfa's first translucent USB flatbed scanner.

Agfa's USB debut

Agfa has unveiled the 1212u, a USB SnapScan scanner, which is available in translucent blue or green, priced at £129.

The 1212u is the sister model of the recently introduced SnapScan 1212U, Agfa's first USB flatbed scanner for the home and small office. With a maximum scanning area of 216-x-297mm. The 1212u features a true optical resolution of 600-x-1,200 pixels per inch (ppi).

The scanner ships with entry-level FotoSnap software that reads the image on preview and automatically selects the best setting for the final scan. Other bundled software includes Caere's OmniPage LE, Visioneer PaperPort and Color-It!. **Agfa, 0181 231 4200**



Gift card

The MAXpowr G3-L2B is a new series of Power Mac processor upgrades.

NTSC video formats are supported.

Newer has also announced the MAXpowr G3-L2B series of G3 processor upgrades for a variety of Power Mac systems. MAXpowr G3-L2B is offered as two 300MHz models and a 400MHz version and installs into the Level 2 cache memory slot on the motherboard.

The MAXpowr G3-L2B range is compatible with the Power Mac 5400, 5500, 6400, 6500, Twentieth Anniversary Mac, Performa 5400, 6400, Apus and Power Computing PowerBase systems.

The range comprises: a 300MHz G3 with 512K of backside cache running on a 150MHz cache bus costing £305; a 300MHz G3 with 1MB of backside cache running on a 200MHz cache bus priced at £439; and a 400MHz G3 with 1MB of backside cache running on a 200MHz cache bus for £809.

IMC, 01344 871 329

AM Micro, 01392 426 473

Banners are real breeze

MetaCreations recently announced **Headline Studio 1.0, a new tool for creating Internet banner ads using animated GIFs.**

Priced at £179, Headline Studio cuts the time it takes to create a banner ad from hours to minutes. The software creates video effects such as walk-ins, dissolves and fades for images and text.

The package includes customizable, Web-safe colour palettes, unlimited undo, and the ability to determine GIF animation size and frame-rate after the animation has been designed.

With Headline Studio, animated GIFs can be created in three steps. Step one is to create (and import) the image, shape and text to animate, step two involves defining the motion and actions for each element, which is done using editable keyframes. This is then exported as a GIF animation.

Computers Unlimited, 0181 358 5857

3Com's Palm airs new handhelds

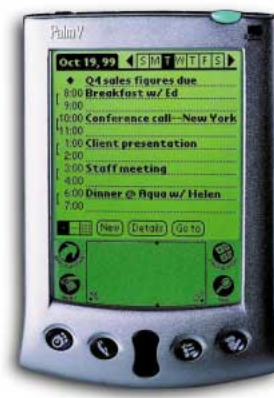
The long-awaited range of 3Com's Mac-compatible Palm handheld computers – the Palm V and the Palm IIIx – has arrived. The £350 Palm V (right and below) with its ultra-slim design, is half the thickness of the Palm III. It has a removable leather cover and a new screen with improved contrast and clarity. It now runs on batteries that are automatically recharged via the HotSync cradle and screen contrast is adjusted with a built-in software control instead of a hardware dial. A £130 snap-on modem is also available for the Palm.

The Palm IIIx, at £280, has an expanded memory of 4MB, and an internal expansion slot.

Both models run on version 3.1 of the

Palm OS software, and both have email compatibility with Microsoft Outlook Express and Qualcomm's Eudora Pro.

To coincide with the release of the new organizers, 3Com is shipping Mac Pac 2, an updated version



of the software for synch-ronizing the Palm and PalmPilot series with the Mac.

The new version supports the latest range of Palm devices. MacPac 2 includes the Palm Desktop software version 2.1, which is based on Claris Organizer. This lets users create new appointments, view address listings, and print mailing labels.

The new Instant Palm Desktop extension means Palm owners can access information without launching the Palm Desktop application, and a new HotSync Manager configures and manages third-party conduits for the Mac. The update also has a drag-&-drop Install feature.

The new version is priced at £17. Owners of previous versions of MacPac can download a free upgrade from (www.palmpilot.com).

3Com, 0118 927 8200

Upgraded Bryce is right

MetaCreations has announced Bryce 4, a £179 upgrade to its terrain-generation and animation software, offering more compatibility with other software and enhanced Web-output.

Bryce can now export textured terrains to most 3D modelling and animation applications and it features import and export formats for all Bryce-generated objects, textures, models and scenes.

A new feature is the Sky Lab, which controls all aspects of sky generation. Sky Lab features include spherical clouds and sun-cloud shading effects, that can be previewed and animated with the integrated-preview render and animation controls.

With the enhanced Web features, designers can create HTML image maps from scenes, and RealMovie output lets animations stream on the Web.

Navigable scenes can be posted on the Internet with QuickTime VR and the MetaStream output options (coming soon for the Mac) allows terrain



Unreal reality

Bryce 4 can generate stunningly realistic landscapes.

export for streaming 3D objects to the Web. New import options in Bryce 4 include LightWave, TrueSpace, VideoScape, VRML1, Heightfield, Portable Grayscale Map, USGS DEM and USGS SDTS.

Computers Unlimited, 0181 358 5857

pricing update

lomega SCSI, USB Zips

lomega has announced price reductions on its SCSI and USB 100MB Zip drives. The SCSI drive is now £89, reduced from £99, and the USB drive is £99, reduced from £119. The drives offer removable storage for the Mac, with an average seek time of 29 milliseconds, a sustained transfer rate of 1.40MB/sec and a 32K buffer.

lomega, 0800 973 194

Mac ISDN hardware

ISDN hardware for the Mac from Hermstedt is now up to 40 per cent cheaper. The two-channel Leonardo SL ISDN card, which includes a data/fax modem, now costs £749, down from £1,145. The Marco PC-Card for PowerBooks is £350, reduced from £595. The WebShuttle, which provides Web-only access for USB-equipped Macs, has been reduced to £159 from £199.

Hermstedt, 0171 242 4060

Encad Croma24 printer

The Encad Croma24 large-format printer is now 25 per cent cheaper, at £1,295. Previously priced at £1,699,



the printer produces colour images up to 24-inches wide and 15 feet

long. It has refillable snap-in cartridges, built-in roll-media feed and an automatic cutter.

TDS Cad-Graphics, 01344 489 191

Eizo monitor range

Eizo has announced reductions across its range of monitors. Its L66 18.1-inch flat panel display, for example, is now £2,299, a reduction of £250, while its T575 19-inch flat-screen CRT monitor has been cut by £100 to £479.

PDS, 01483 719 500

Maxdata 17" monitors

The Maxdata Belinea 10 70 15 and the Belinea 10 70 60 have been reduced from £248 to £199. Both are 17-inch models. The Belinea 10 70 15 features a dot-pitch of 0.27 and a maximum resolution of 1,280-x-1,024 pixels. The Belinea 10 70 60 includes built-in Nakamichi speakers.

Maxdata, 0118 936 2900

product news

700MB CD-Rs released

Memorex has boosted the capacity of its CD-Rs to 700MB, or 80 minutes of recording time. Costing £1.59, the CD-R 700MB is scratch-resistant and compatible with all Memorex and other

high-end CD writers, CD-ROM and audio devices.

Memtek, 0181 990 6600

Mask FX reveals all

Auto FX has announced Mask FX, a £149 masking tool that ships as a stand-alone application or a plug-in for image editors that support the Adobe Photoshop 3.0 plug-in standard. Mask FX tools include Auto Brush and Fine Details Brush. Special effects – such as shadow, glow, blurs and grain – can also be applied to a masked image or background.

Cadmium, 0800 436 867

Hitachi offers 19-inch

Hitachi's latest offering is a 19-inch monitor, the CM753ET, which aims to take on the low-end 21-inch monitor market in price and performance. Priced at £499, the CM753ET delivers a resolution of 1,600-x-1,200 pixels at 85Hz and a video-clock frequency of 230MHz.

Hitachi, 0181 849 2000

VSE turns on the Turbo

VSE has announced VSE HTML Turbo, the latest version of its shareware HTML optimizer. The software optimizes HTML documents so they load more quickly into Web browsers. The new version fixes several bugs, uses Navigation Services if installed, recognises PNG images and offers several small improvements. A demo of the £30 shareware is available on the cover CD **VSE, vse-online.com/turbo.html**

CDs speak volumes

Russian, Dutch, Turkish and American English are the latest languages available in the World Talk series of CDs from EuroTalk. The £30 titles include games designed to help students reach intermediate level in their chosen language.

EuroTalk, 0171 371 7711

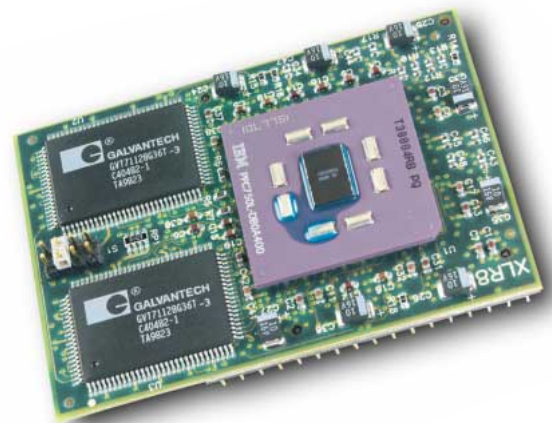
Interex's Seybold bonanza

Interex has announced a bundle of new products at Seybold that includes a 466MHz MACH Speed G3 ZIF upgrade card, a dual-port USB card and control software for the XLR8 range of upgrade cards and a new video-capture and editing solution called InterView.

InterView is a £99 compact device that connects quickly via USB to the Mac and any standard video source. It enables real-time viewing of satellite, VCR and Home DVD, interactive video capture and editing and production with the bundled Adobe VideoShop software. VideoShop lets users cut, change, and add special effects and transitions to their videos. They can then save videos as QuickTime for cross-platform distribution.

The 466MHz MACH Speed G3Z upgrade for Power Mac G3 owners costs £1,079. As with all XLR8 MACH Speed G3 cards, the ZIF socket 466MHz upgrade incorporates MVP (multiple variable processing). MVP allows users to adjust the speed and interaction of their CPU, RAM and cache-access speeds to optimize systems for maximum performance.

The card also ships with the new MACH Speed G3 Control v1.3.1 software, which utilizes the Virtual FirmWare on the card to execute performance and compatibility routines before hardware or software is initialized. It can also select the fastest compatible speed on start-up.



Upgrade value

Interex has reduced the price of its XLR8 333MHz ZIF G3 upgrade card (above) by £90 and launched InterView, a video-capture and editing solution (below)

The new MACH Speed G3 Control v1.3.1 software has enhanced testing features and can warn users when localized cache is running too fast. Further modifications of the software will offer online help from Interex.

The Dual Port USB is a £42 PCI card, which offers USB connectivity for Power Macs. It is the first third-party device to ship with the authorized Apple USB support-extensions (version 1.1).

XLRB price cut

Interex has also cut prices in its XLR8 card range. The 333MHz ZIF G3 upgrade card is £579, down from £669; the 366MHz card costs £679, down from £849; and the 400MHz version is now £779, reduced from £1,049. All cards feature 1MB of backside cache.

In the PCI range, pricing starts at £339 for the 266MHz card with a 133MHz-cache speed, reduced from £399. The top-of-the-range G3 400MHz card, with a cache speed of 200MHz, is now £799, down from £1,099.

MACH Speed G3 Control v1.3.1 software can be downloaded free from **www.xlr8.com**
ProMedia/Interex UK, 01923 266 400



Sony powers-up entry-level flat-panel

Sony's new Multiscan L133 13.3-inch TFT LCD flat-panel display is now on the shelves, priced at £799.

The entry-level display has a single-button automatic set-up system, while for fine tuning there's a host of on-screen user controls.

These include back-light control,

colour-temperature control and pitch and phase adjustment.

The display's resolution is 1,024-x-768 pixels at 85Hz, contrast ratio is 200:1 and its dot-pitch is 0.264mm.

The footprint is 6.5 inches, and the LCD panel can be detached from the base and mounted on the wall.

Sony, 0990 424 424



Memory on the cards

Techworks has released four memory upgrade cards for the Power Mac G3 range. The company is offering a choice of 32MB, 64MB, 128MB and 256MB SDRAM DIMM modules in its PowerRAM range, which is optimized for the 100MHz bus of the new G3. The 3.3-volt, 168-pin devices are compatible with the four DIMM slots of the G3, allowing for 1GB of DRAM to be installed.

Techworks, 01753 898500

USB mice join Mac family

ASC has added to the choice of USB mice available for the Mac with the Intra-Travel mouse and, for children of primary school age, the Kiddy Mouse. The Bondi blue and white Intra-Travel



mouse costs £20 and offers a choice of one or two buttons. The Kiddy Mouse has three buttons, and is designed to fit and support small hands. Prices

start at £15 and the mice come in a variety of designs, including Dalmatian spots.

ASC, 0181 640 4040

QuarkImmedia update

Quark has released an upgrade to QuarkImmedia, its interactive multimedia design tool. Version 1.5 continues the tradition of a QuarkXPress-style interface, but adds new functionality and features. These include True Colour and Expressions, which can be combined with scripts and conditionals, making projects more interactive. The new version also adds object opacity, drop-shadow functions and QuickTime 3.0 compatibility. QuarkImmedia costs £395. The upgrade is £129 to registered users.

Quark, 01483 445 566

iTray the latest accessory

The iTray from Contour Designs is the latest of a raft of accessories for the new iMac range.



The iTray is an alternative to the traditional mouse mat. The surface allows the mouse to glide, and the tray has

a soft gel palm pad for extra comfort and support. The iTray can be used with Contour's UniMouse. The iTray will be available in the UK, but pricing has not yet been set.

Contour Design, 0181 997 7002

Fujifilm, Nikon's digital camera trio

Nikon and Fujifilm have upped the ante on digital photography, following the launch of FujiFilm's MX-2700 and Nikon's Coolpix 950 and 700.

The latest addition to the FujiFilm stable is a 2.3 million-pixel pocket-sized camera, with an image resolution of 1,800-x-1,200 pixels. The aspect ratio is 3:2, and a new RGB filter gives improved skin tones and improved blues and greens.

The £650 MX-2700 (pictured right) is equipped with two DRAM processors, and a high-resolution Fujinon lens with a powered lens barrier to protect it from dust and scratches. It also features a 2.5x digital zoom, five-mode auto white balance and PAL video out and macro.

The two new Nikon offerings, the CoolPix 950 and 700, are megapixel cameras



costing £799 and £499 respectively. Both benefit from Nikon's Best Shot Selector, which instantly shoots five frames, selects the best one and discards the others, neutralizing camera movement that can blur a picture.

The Coolpix 950 (pictured left) offers a choice of three resolutions, 16-x-1,200, 1,024-x-768 and 640-x-480 pixels. The high-speed autofocus has 4,746 steps, and the built-in Speedlight offers Auto Flash, Flash Cancel, Anytime flash, Slow Sync and Red-Eye Reduction.

The CoolPix 700 is fully automatic and simpler to use than the 950, with fewer photographic features. The camera has a choice of two resolution settings (1,600-x-1,200 and 640-x-480 pixels), and a five-step digital zoom-lens.

Nikon, 0181 541 440

Fujifilm, 0171 586 5900



PitStop support for Acrobat 4.0

Enfocus has announced PitStop 4.0, a Portable Document Format (PDF) production tool that supports Adobe's new Acrobat 4.0 application.

It combines preflight, interactive and native PDF-editing at any production stage, and automated correction for PDF documents. Features include graphic search and replace and reusable action lists, through which frequent changes and corrections can be made into automated macros.

PDF editing includes improved text editing and font management, as well as editing of more high-end attributes such as spot colour and overprint.

Based on the latest Adobe technology and Enfocus technologies, the PitStop 4.0 interface is integrated into the Adobe Acrobat 4.0 window.

PitStop 4.0 is priced at £199 for a single seat. Existing PitStop and CheckUp users can upgrade for £69.

Alta Technology, 0171 622 6606



Light source
The AP1500SX has a palette of 16.7 million colours and weighs 13.3kg.

Projector for Mac

Toshiba has rolled out a new Mac-friendly LCD projector – the AP1500SX – for use in CAD/CAM studios and conference rooms.

It has full SXGA resolution (1,280-x-1,024 pixels), 1,500 ANSI lumens, a reflective LCD optical system and built-in 1W stereo speakers.

The projector has a palette of 16.7 million colours. It weighs 13.3kg and the remote control operates of key functions, such as zoom, brightness, volume and menu.

The AP1500SX also boasts video compatibility with PAL NTSC, and SECAM.

0171 242 7295

product news

ASUSCom's Net gain

ASUSCom Network has released the INET-810 to offer a connection between a LAN (local area network) and the Internet. The unit comprises a four-port hub, an ISDN terminal adaptor and a network router.

Software within the device enables multiple users on the network to share one Internet account. The £199

INET-810 can also be used with a modem, either to replace an ISDN facility or to boost throughput.

Solwise, 01482 621 888

Spring Cleaning polished

Aladdin has released a new version of Spring Cleaning, its hard-drive cleanup software. The £30 software cleans hard drives by searching for and removing unused and unnecessary files, folders, applications and fonts. Version 3.0 is faster, has a better interface and restores mistakenly removed items. The new version also includes Aladdin Desktop Magician, which creates personalized desktops for easier organization.

Softline, 01372 726 333

EditDV for Power Mac G3

EditDV 1.5, Digital Origin's DV (digital video) editor, is now available in a software-only version for the new Power Mac G3. The £599 version uses the standard FireWire (IEEE 1394) interface included in the G3, for the transfer of video to and from DV devices. Users of EditDV 1.5 upgrading to the new G3 range can download a software-driver update (www.digitalorigin.com). EditDV 1.5 includes MotoDV for full-motion video-capture and Terran Interactive's Media Cleaner EZ.

Computers Unlimited, 0181 358 5857

Vbase releases Fotopage

Vbase has released Fotopage, a plug-in that brings the ability to view multiple previews to versions 3.0-4.0.1



of Adobe Photoshop – enhancing productivity for anyone using large numbers of stock images. The £15 plug-in also brings a speed increase of up to 20 times that of the built-in contact-sheet function of Photoshop 5.0. A demo of Vbase is on this month's Macworld cover CD
SDC, 01248 671621

Extensis reverts to type on Suitcase 8

Extensis is to give an April launch to Suitcase 8 – the update of the font-management software it bought from Symantec earlier this year.

Suitcase 8 is Mac OS 8.5-compatible, and has extra features, such as XT – a QuarkXTension that opens fonts on the fly, eliminating missing font dialogues and saving time on creating and outputting QuarkXPress files.

The MenuFonts tool organizes and displays fonts in their own type-style and groups them by families in menus. The new FontAgent tool identifies duplicate and corrupt fonts and avoids TrueType/PostScript collisions.

Mark Niemann-Ross, senior product marketing manager at Extensis, said: "Fonts are like children. They're messy, they leave stuff laying around everywhere, but they give colour to your life. Suitcase lets Macintosh users focus on creativity and the job at hand while cleaning up the mess."

Suitcase 8 is the first in the company's planned line-up of font-management products. Suitcase Font Management Server, slated for release in late 1999, will offer scalable system wide font management to networks and groups, said Extensis

Suitcase 8 is priced at £59.95. Users can upgrade from previous versions for £29.95.

Computers Unlimited, 0181 358 5857



BMG and Abbey Road Interactive have come to the rescue of inept heavy rock behemoths *Spinal Tap*, by relaunching the cult film in DVD-Video format. There is the added bonus of interactive animated menus, on-screen lyrics and in-depth biographies. It costs £15.99 and is available from high street retailers. Crank it up to volume 11.



Long drive
The 36GB drive from LaCie has a data-transfer rate of up to 19.7 MB/sec.

LaCie's colossus

A new hard drive from LaCie offers 36GB of storage for £1,195 – and includes a choice of interfaces and a five-year warranty.

The drive has an average seek time of 7.5ms, a maximum sustained data transfer rate of up to 19.7 MB/sec, and a rotational speed of 7200 RPM that together provide rapid data transfer.

Hardware automation further reduces SCSI command overhead and cache accessing time. The choice of interfaces available includes Ultra2 SCSI, Serial Storage Architecture (SSA), and Fibre Channel-Arbitrated Loop (FCAL)
LaCie, 0171 872 8000

Speedy scanner

Polaroid has introduced the SprintScan 400, a film scanner that scans 35mm slides, filmstrips and Advanced Photo System (APS) film formats.

The £1,499 scanner produces images with a true optical resolution of 4,000 dpi and an optical density of 3.4 in under one minute.

The SprintScan 4000 manages multiple images, with a six-image position filmstrip or a four-image position mounted slide holder.

An optional APS roll-film handler provides APS and unattended batch scanning of up to 40 images.

The bundled software, Polacolor Insight Pro, removes surface flaws such as dust, scratches and fingerprints and provides enhancement controls and image adjustment tools.

Polaroid, 01756 702 888





Che Fanning

If Che Guevara was alive he'd use a Mac
– the only revolutionary-friendly platform

Mac's secret service

Ever since the birth of the Macintosh, people have been talking in terms of revolution. Now the plethora of privacy issues plaguing the “other guys” means that Macintosh is the only safe platform for revolutionaries. The villain this time is Intel, which, in its infinite wisdom, decided to embed a serial number in its new Pentium III processor. To paraphrase American Express, it's the processor that says more about you than cash ever can – but mostly to hackers, creeps, despots and money-grabbing corporations.

Right-thinking people everywhere railed against this – as doubtless did software pirates the world over – and Intel decided to ship the processors without this feature enabled. However, if you prefer, you can enable it – and sit back as your intimate personal documents, Web activities and software collection becomes public knowledge. It is the Internet equivalent of electronic tagging – a practice normally reserved for crooks.

In this country, data protection is well regulated and unscrupulous marketing activities are given short shrift. In the wild-west world of the Internet however, bad business practices are easy to get away with. It's quite possible for a piece of shareware to turn the identity feature on surreptitiously and begin to broadcast the contents of your hard drive. If you happen to use your credit card for Internet transactions, it can also broadcast that information. It's a simple matter of correlating pertinent information – using tried and tested methods. Literally anybody can compile a dossier on you and your habits that would do the keenest KGB officer proud.

Because ethics have never played a large part in the life of the average hacker, this is extremely worrying.

When you add this to the constant stream of security problems Microsoft has experienced, the problem deepens. There is evidence that Microsoft Office includes information such as your name, address and even the Web sites you have recently visited, in Word and Excel documents. Also, with the PC version of Office 97, serial numbers and other personal details may be sent to Microsoft, even if you clicked the button saying that you don't want to send that information. Microsoft has apologised for this, claiming this was an “accident”. Hmm... Bill Gates must be the unluckiest guy in the world.

If you want to see what strange things are going on in your Word documents try opening one in a text editor. You may be surprised – and a little scared – by what you find, especially if the document has been modified a few times.

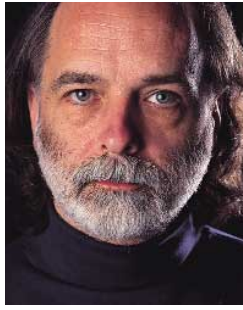
Whether this is enough to make the average citizen swap platforms is doubtful – but there are people to whom privacy is all. Apart from the paranoid conspiracy theorists, there are very real reasons for people to access the Internet in safety. Countries with questionable human-rights records often pump huge resources into keeping track of dissidents. Internet revolutionaries are not safe from those dark forces that seek to deny basic human rights and freedoms.

Take East Timor, in which the Indonesian government has been responsible for more than 200,000 deaths since its 1975 invasion. An Internet service provider in Ireland began hosting the East Timor top-level domain .tp. It also hosted Web sites demanding freedom for East Timor. Somebody – most likely the Indonesian government – began a systematic attack on the Web server's defences. After nine months of trying, a co-ordinated attack from 18 different countries smashed the defences of the server and attempted to bring down the system completely. This is the first instance of online warfare, but I doubt if it will be the last.

So what do you do if you want to avoid prying eyes peeking at your private activities? Well, even on a Macintosh it isn't totally straightforward. First of all, it seems clear that Microsoft products – whether through ineptitude or malice – are not trustworthy or secure. So, use a different text editor for your freedom manifesto. AppleWorks (ex-ClarisWorks) is a reasonable choice – although the severely paranoid might prefer one of the lesser known shareware text editors. It is unlikely that shareware developers have any reason to track your documents. When browsing the Web you should use Navigator and turn cookies off. For maximum security, you could try the German iCab browser. Lastly, avoid operating systems that include any of the Windows varieties. This, of course, isn't an issue for Mac people.

If you were an East Timor dissident, would you buy a Pentium III running Microsoft Office? When choosing a platform for your revolution, be sure to choose the platform that revolutionized the personal computer industry in the first place. Power Mac to the people.

MIW



Michael Prochak

IBM's latest anti-hacker TV ad bristles with
hypocrisy of a very dangerous kind.

Hacked off

Let's face it. The suits are nervous. And like any thundering herd of wild pigs, their lives are full of shadows. Unfortunately, most of those shadows look a lot like you and me. Out there at the crossroads, an ugly collection of secret weirdies who instinctively think the free flow of information is dangerous are recruiting data enforcers. And if the swine have it their way, the "golden age" of public access to information will be over before it had a chance to begin.

Although Apple and IBM are still business partners, I've always hoped that Apple would retain its original anarchic edge and indeed, follow its own advice about thinking "different". Superficially, IBM has worked hard in recent years to ameliorate its own harsh image of oppressive regimented suits and I think a lot of the recent IBM TV adverts have been extremely clever and entertaining.

They've evolved a style of their own and often, like the one about the Web designer who could do flaming logos or spinning logos, but couldn't actually build a "useful business" site, the messages tend to be familiar, psychologically reassuring and of course, commercially astute. However, with their latest advert, something ugly and ethically unsound has crept into the equation that is sadly reminiscent of their former Orwellian incarnation.

A trendy but scruffy couple huddled on a bed with their computers – a laptop, which could be a PowerBook for her and an anonymous Wintel desktop system for him – busily tapping away, eyes transfixed in the ambient light of their screens. Suddenly, the male, exclaims "I'm in." (Because that's what males do). No, there's no sexual innuendo...he's simply hacked into his company's central personnel file. The woman leans over and browses the list and discovers that one accounts director is being paid a lot more than another accounts director, both apparently doing the same job. Upset by this unfair inconsistency, she wonders aloud what they'd think if they knew about this. Her male partner replies that they'll find out because he's just emailed the whole file to everyone in the company.

Cut away to message suggesting that IBM has a solution to prevent this sort of nasty hacking happening within "your" company and that CEOs should change their brown trousers and contact them to do something about this sinister profit-wrecking problem before some clever hack exposes all their ugly sharp practice.

In his book *Hackers*, Steven Levy writes that true hackers believe that essential lessons can be learned about systems and the world by taking things apart, seeing how they work and using that knowledge to create new and even more interesting things. They resent any person, physical barrier or law that tries to keep them from doing this, especially when they want to fix something that is "broken".

The so-called 'hackers ethic' suggests:

- Access to computers and anything which might teach you something about the way the world works, should be unlimited and total;
- All information should be free;
- Mistrust authority – promote decentralisation; and
- Computers can change your life for the better.

The question that needs asking about the IBM advert is, why isn't information free and who is using computers to change life for the better – the corporate suits with draconian security systems, or the portrayed hacker, who is using information, ostensibly to promote honesty, justice and fairness? Paranoia and conspiracy mongering?

Perhaps. But at this very moment, there are proposals suggesting laws should be changed to allow police and security services to hack into nominated computer systems to secure access to private information. There are further suggestions to exploit computer audio systems so that target computers may be converted to listening devices. And a 1996 report reviewing policies relating to encryption technologies was suppressed, with only a censored version belatedly released.

Defining a hacker's motivation depends on your point of view. Maybe you do think police hacking into your system is OK, but individuals doing it isn't. I think in this case, IBM may have commercially shot itself in the proverbial foot. Like it or not, the perhaps unintentional sub-text of this advert is that companies can lie to and cheat their employees and that's effectively OK as long as nobody finds out about it. The hypocrisy is dangerous. The issue here is what we think about double standards and truth and the hypocritical posturing designed to hide the fact that double standards exists – and what we're prepared to do about it. As Thoreau said in his essay, *On the Duty of Civil Disobedience*: "A corporation has no conscience." Unlike IBM, he also reminds us that it is not desirable to cultivate a respect for the law, so much as a respect for the right. **MW**

In the battle of man versus
the in-box, software wins

Desktop critic

DAVID POGUE is the author of *iMac for Dummies* (IDG Books Worldwide, 1998) and *The Great Macintosh Easter Egg Hunt* (Berkely Books 1998). He also wrote *Macs for Dummies*, fifth edition, newly updated for Mac OS 8, *The Weird Wide Web* (IDG Books Worldwide, 1997) and *The Microcloth Joke Book* (Berkeley, 1997).

Attack of living email

How could anyone not love email? It's cheap; it fosters literacy; it provides a written record of what's been said. Best of all, it's delivered almost instantaneously, like a phone call – but you answer it at your leisure, like the postal service. Nobody ever had to get up from dinner to answer an email. (Nobody with a life, anyway.)

Unfortunately, email can get out of hand. Take my bloated, overtaxed Claris EMailer box: spam, mailing lists, and tech-support pleas from readers were drowning me, even as my book deadlines were crashing down in flames. One frightening morning I awoke to find that I was exactly 1,749 messages behind.

I did some research: How did other high-email-traffic individuals handle the deluge? Andy Gore, editor-in-chief of *Macworld* in the US, reads all messages, forwards lots to appropriate parties, but responds only to the ones he's best qualified to answer.

Harry Connick Jr. lets his office handle requests (autographs, tour dates, photos); he answers the others according to "the lottery system." Rush Limbaugh claims to get 12,000 messages a day, which he promptly deletes. (In that case, why publish your email address at all?)

As best as I could tell, those strategies rely primarily on deleting huge swaths of messages. Yet much of my material comes from the suggestions, corrections, and ideas in those emails. Furthermore, my hardwired Midwestern sense of duty compels me to answer reader messages as part of the unwritten book buyer-author contract. How could I keep both my email address and my sanity? I decided to apply technology to the problem.

Email sanity strategy

Phase 1: delete spam Too many of my incoming emails run along the lines of "MAKE MONEY SALTING CRACKERS AT HOME!" or "SEXXXXY TRUCK DRIVERS ARE WAITING FOR YOUR CALL!" If I'd started my Internet life ten years ago by keeping one address just for email, I wouldn't be in this mess. My mistake was posting messages on bulletin boards, where software-savvy spam robots pick up addresses.

Still, I found a way out in, of all places, *Macworld*. A sidebar in 'Stamp out email junk' (June 1998) leaked

the trick to having your email program route spam automatically to the Wastebasket. Bingo!

Phase 2: autofile I subscribe to a bunch of Internet mailing lists, such as the EvangeList and a PalmPilot discussion group. Using the same filtering trick described in that *Macworld* article, I taught my email program to autofile mailing-list messages into folders of their own. Only actual personal messages remained in my in-box.

Phase 3: FAQs To siphon the frequently-asked questions out of my email, I created a FAQs page at my Web site. No longer did I have to type out answers to "How do I do a clean install?" and "What's a Type 3 error?"; instead, I could refer the authors of such questions to www.davidpogue.com.

Phase 4: TypeIt4Me This brilliant shareware control panel (available at www.macdownload.com) lets you set up auto-expanding abbreviations that work in any program. I type ty and get "thank you." I type csi and get "A clean system-folder install will solve your problem." I type gbye and get "In this age of impersonal, faceless communication, isn't it wonderful that we can take a quiet moment to exchange personal messages?"

Phase 5: denial of service Most of my tech-support messages come from readers of my books; in this world of £25 calls to Apple, I can understand their plight. Where's a person supposed to turn for help these days?

Unfortunately, more and more of these messages begin: "I heard in a chat room that you give free tech support. So here's the problem with my ImageWriter..."

After much soul-searching, I decided to play hardball. I created a macro that offers ten free sources of help, such as Apple's Tech Info Library and NoWonder.com. This macro explains that I just can't answer personal questions from everyone on the planet – and still have time to write stuff that could help larger groups of people.

Après le déluge

My assault on Mount EMail, I'm happy to say, has cut the tidal wave down to a mere waterfall. Nowadays, my software tricks let me spend only two hours a day answering mail.

Meanwhile, I'm still on the quest for shortcuts. If you've got any great ideas, my email address is david@ – actually, never mind.



Macworld

reviews

MACWORLD RATING	★★★★/9.0-10.0 = EXCELLENT	★★★/7.0-8.9 = VERY GOOD	★★/5.0-6.9 = GOOD
	★★/3.0-4.9 = AVERAGE	★/0-2.9 = POOR	
MACWORLD POLICY	At Macworld, we don't think our readers should have to worry about whether ratings are based on a real product or a prototype. Therefore, we simply don't rate products unless they are real, shipping versions – the products we rate and review are the same products you end up buying.		

Macworld

Excellent new features keep it a leader



Adobe GoLive 4.0

Publisher: Adobe (0181 606 4001)

www.adobe.co.uk

Pros: Brilliant site-management features; unsurpassed table-editing; handling of QuickTime movies.

Cons: HTML preview could be more precise.

Price: Adobe has an introductory price for 90 days of £119; upgrade £59. Thereafter, price will be £179; upgrades range from £59-£119. All prices are ex VAT.

Star Rating: ★★★★★/9.4

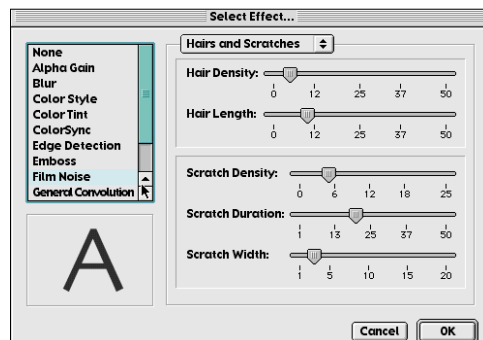
GoLive CyberStudio has won many awards since it first started shipping in early 1997, all of which were thoroughly deserved. Adobe's recent acquisition of the product may have worried many aficionados, who feared that Adobe's plans to take CyberStudio cross-platform was a sign that it was time for the Mac version to rest on its laurels.

The frequency and speed with which GoLive churned out upgrades in the last two years has led users to expect a high standard of additional features and improvements in any upgrade announced. Thankfully, Adobe hasn't let us down. Released several months before its first scheduled appearance on Windows, GoLive 4.0 for the Mac is even more solid and reliable a WYSIWYG edition, and it's still edging ahead of its nearest competitor, Macromedia Dreamweaver. With GoLive, Adobe can now boast a full range of tools specifically designed for Web-site creation and management.

New features

GoLive 4.0's new features include improved site management, a QuickTime Movie Editor, fuller XML support, ASP support, PDF integration and lots more CyberObjects. Enhancements have also been made to the already easy-to-learn interface and workflow. Extra attention has been paid to table-editing and to extending CSS/DHTML support.

The new QuickTime Movie Editor lets you edit your movies while still in GoLive, which dispenses with the need to purchase separate video software, and saves you time. You can now work with your movies directly in layout mode using the Inspector.



Above: QuickTime Movie Editor
QuickTime elements can be selected and drag-&-dropped onto the QuickTime Timeline Editor.

Left: Effects palette
You can add effects, blends, filters, and various different tracks to your QuickTime movies using the built-in effects palette.

A movie Timeline is available in which to place, organize, layer and add your sprites, sound files and apply effects. You can add effects, blends, filters, and many different tracks to your QuickTime movies. QuickTime elements can be selected and drag-&-dropped onto the QuickTime Timeline Editor. A preview can be viewed of the movie while still in the layout mode of GoLive.

You can also preview a selection of the available effects; colour tint and style, ColorSync, blur, film noise, emboss, sharpen, as well as change the RGB or HSL balance.

New with GoLive 4.0 is Actions Plus 1.0 – built-in JavaScript actions that were requested by users. These include slide shows, redirects, forced frames and remote window targeting. Furthermore, version 4.0 now lets you save a site's JavaScript actions to an external library file. When the page

loads, the browser caches the entire JavaScript library file. Being able to create and then hoard bits of HTML is a great way to produce new pages and targeted sections quickly with the minimum of fuss.

Just as Macromedia has now embraced the importance of site management in Dreamweaver 2.0, Adobe has managed to improve GoLive's already excellent site-management tools. They now help you reduce the time spent fixing links and help avoid you getting bogged down in the nitty gritty of HTML-bug fixing. Being able to view your site as a whole structure rather than as list of folders, and view links referencing each other across as well as linearly, are vital for good site navigation and reliability.

These additional tools can help you increase your productivity and keep overall control of your site. You can now preserve

the absolute URLs to your page in fact GoLive appears to handle (and keep) links much more reliably than before. Files that you move, rename, or delete in the site window are automatically updated in the other referenced pages by simply clicking the new Update tab. GoLive quickly rescans and updates any changes made, as well as alerting you to broken links and out of sync pages. Adobe PDF format is supported too. You can update and check links in PDF and PGML files from the site window. The built-in FTP client lets you make site downloads and uploads with drag-&-drop simplicity.

Dynamic Components let you store regularly repeated elements from your site, ready to be dropped onto a new page. Templates can now be set and used again and again to create large, sophisticated sites, without the risk of upsetting delicate layout design. Applying Style Sheets to one or

more pages can help keep a consistent look and feel to a site. Defining the attributes of your chosen style – paragraph, characters and sections – in the GoLive Inspector is straightforward. You can now import existing style sheets, classes and IDs as well as create Style Sheets that work with CSS-enabled browsers

Turning tables

Most Web pages are to some degree constructed using tables, so flexibility and precision when creating them is essential. CyberStudio was the first Web-layout editor to really make a dent in the complexity of table construction. Getting the placement of your individual elements perfect, without using layers, is much less of a headache. Sorting and organizing the content of your tables is also easier now. You can select multiple cells by shift-clicking in them and change the font, colour and text style in

one go. You can also check where your invisible elements are placed in a table using the Inspector's Hidden table view tab.

Although in this release GoLive's precision in HTML has been improved, the page Preview is still not exact. Don't rely on it. Make sure you check your pages in both Navigator and Explorer before committing them to a live server.

Macworld's buying advice

The sheer number of new and enhanced features in Adobe GoLive 4.0 explains the wait we've had for this release. (Although most of this time has also been spent in producing the first Windows version). All of the enhancements make the Web designer's workload easier and you can't afford not to have this package. Take full advantage of the special 90-day upgrade offer. GoLive 4.0 has been worth the wait.

Gillian Robertson

Hack and slasher hits and misses



Dark Vengeance

Publisher: MacSoft

www.wizardworks.com/macsoft

Distributor: Softline (01372 726 333)

Pros: Beautiful game under hardware acceleration; inventive characters and weapons.

Cons: Control problems; weak plot and dialogue.

Price: £34 ex VAT.

Star Rating: ★★★/6.9

One of the year's most eagerly anticipated games – Reality Bytes' Dark Vengeance (published by MacSoft) – has finally hit the shelves. Was it worth the wait? Yes and no. Kissing cousin to the Tomb Raider series, this third-person hack-&-slash game offers a more richly realized and expansive world than Lara Croft's, but brings a measure of frustration as well.

As with the Tomb Raider games, you spend most of your time looking at your protagonist's backside while propelling him or her through a labyrinth of levels, gathering goodies, and slaying the spiritually corrupt. The three heroes include Nanoc the Gladiator, a muscle-bound galoot whose



Room with a view

Just one of Dark Vengeance's richly appointed rooms.

strength allows him to wield large, cumbersome weapons; Kite the Trickster, a more agile character who dashes her enemies with lethal powders and other short-range weapons; and Jetrel the Warlock, a bandage-swathed gentleman who prefers long-range weapons.

Your heroes can deliver blows in three ways: a quick lateral chop, a slower over-hand hack, and a deadlier, backhanded slash. You can block your enemies' attack – unusual for such games. A sweeping graphic arc marks each thrust and parry – green if you or your enemy misses and a satisfying red when blood is drawn. The weapons are not the usual fare; Dark Vengeance's armoury is packed with exotic weapons such as Living Flame – a Molotov cocktail you sprinkle on the baddies – and the Vampire Staff, which unleashes a pair of

flesh-eating bats. Also unique is Reality Bytes' decision to include cheat codes as a menu item.

The world of Dark Vengeance under 3D-acceleration hardware – ATT's Rage Pro or a 3Dfx Voodoo card – is beautiful, with its sumptuously coloured walls and vast chambers. The software-rendered graphics aren't nearly as impressive as those in MacSoft's Unreal, however. The movement of the characters can be ungainly, and heroes tend to get snagged on jutting corners, barrels, and decorative statuary. And although no one expects such a game's story line to rise to the level of literature, not only is Dark Vengeance's plot convoluted, but the poorly written and occasionally mumbled dialogue makes it even more confusing. Finally, I prefer the bodies of the vanquished to remain visible rather than disappearing after a few seconds. Because the game lacks a mapping element, having familiar bodies scattered throughout the many corridors and halls would make it easier to retrace steps.

Macworld's buying advice

Dark Vengeance is a beautiful and entertaining diversion that, due to some control problems and an unconvincing plot, doesn't quite live up to its potential. If Dark Vengeance II cleans up these problems, it will be a must-have game.

Christopher Breen

Reviews continues page 56

17-inch monitor mimics new G3 design



Apple Studio Display

Manufacturer: Apple Computer (0800 783 4846)

www.apple.com/uk

Pros: Great display quality for the price.

Cons: A bit pricey; certified only for Power Mac G3.

Price: £319 ex VAT

Star Rating: ★★★★★7.5

The first thing you notice about Apple's latest 17-inch monitor is the look: it sports the same curvy, translucent industrial design seen in the new G3 Power Macs. But don't let the pretty facade fool you. The monitor offers top-notch display quality at a decent, though not rock-bottom, price.

The 17-inch Apple Studio Display is based on Mitsubishi's Diamondtron aperture-grille CRT, which features a 0.25mm dot pitch. Aperture-grille tubes typically offer sharper image quality than shadow-mask CRTs, and this model is no exception.

Screen quality is excellent, with crisp text and great colour rendition.

With a 16-inch viewable area, the monitor supports resolutions of up to 1,600-x-1,200



pixels (although it's best suited for 1,024-x-768-pixel display). It offers a relatively modest 60Hz refresh rate at the maximum resolution, but you can boost this to 85Hz at the default resolution to avoid flicker. Push-button controls let you set brightness and contrast; they also allow you to access the on-screen menu system to set colour temperature, horizontal and vertical positioning, and other options.

The monitor – which at first glance resembles a blueberry iMac – is clearly designed as a companion to the new G3 systems. In addition to sharing their colour scheme, it features a broad, three-legged tilt-and-swivel stand that can't sit comfortably on Apple's older desktop Macs.

Apple says that it has certified the

monitor to work only with its Power Mac G3 systems, both the original models and the new white-&-blue designs. However, because the 17-inch Studio Display is a multisynchronous monitor with a VGA connection, you should be able to use it with any Power Mac model as long as you have a Mac-to-VGA adaptor. For example, Macworld Lab was able to use the monitor with a Power Mac 9500 equipped with iXMicro's Ultimate Rez graphics card.

This 17-inch CRT is one of three new monitors Apple is selling under the Apple Studio Display brand, the others being a 15-inch LCD and a 21-inch CRT. The 15-inch Apple Studio Display features a white-&-blue colour scheme and a £699 price tag, but is otherwise identical to the £899 LCD monitor Apple introduced last year (★★★★9.2; 'See Flat', October 1998). *Macworld* covered the 21-inch CRT, which sports a similar industrial design, in the March 1999 issue. (It was rated ★★★★★9.0)

Macworld's buying advice

This Apple Studio Display is certainly not the cheapest 17-inch monitor you can buy, but it offers crisp text and images, excellent colour rendition, and easy-to-use hardware controls without breaking the bank. Owners of older Mac systems may run into technical support problems because of Apple's official specs, but if you use a Power Mac G3, give it a good look. **Stephen Beale**

Essential Web-site log analysis tool



Funnel Web Pro 3.0

Publisher: Active Concepts

www.activeconcepts.com

Distributor: Computers Unlimited (0181 358 5857)

Pros: Remote administration; email notification; very easy-to-use and fast; wide choice of graphical reports.

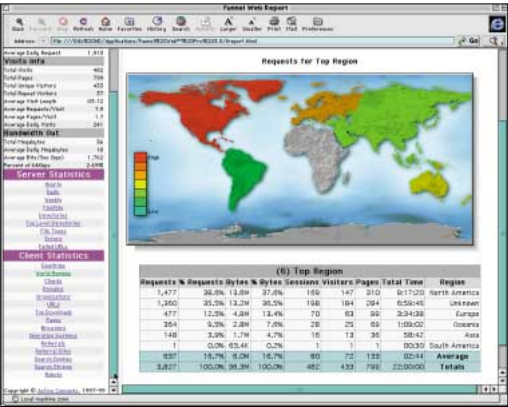
Cons: Multiple-site analysis reports lack clarity.

Price: £299 ex VAT; Funnel Web Standard £159.

Star Rating: ★★★★★8.8

The act of in-depth Web-site traffic analysis can evoke images of Cold War espionage. Picture the scene... a sinister-looking, solitary figure tracks your every movements through a Web site, clocking which pages you looked at, how long you stayed, where you came from, and where you went when you left.

In reality, spies like us are just trying to improve our Web sites by making them more user-friendly as well increase our Internet business strategies. To do this it's important to keep a close watch on your Web-site log files. These files hold a wealth of information. You can, with the help of a decent analysis software, deduce when the busy times occur on your site, how effective



Any way you want it

With version 3.0 of Funnel Web you can show the results of your analysis in a variety of ways including a pie chart, a 3D graph and a map of the world (left), which shows the number of visitors from each country.

Check out the demo of version 3.0 on this month's cover disc.



different areas of the site are and assess the level of reaction to new free download offers and latest news updates. Such analysis software is sparse on the Mac, in fact Funnel Web seems to be the only choice for a professional Web-site administrator.

Stream away

Funnel Web is a perfect name for this product, now upgraded to version 3.0. The sheer amount of data that can be captured about your visitors and threaded together from the server log file is incredible. Funnel Web translates it all quickly into good-looking, easy-to-understand reports. Active Concepts has enhanced version 3.0's already wide range of features by adding more versatility with Streaming Analysis. This technology allows Funnel Web to process

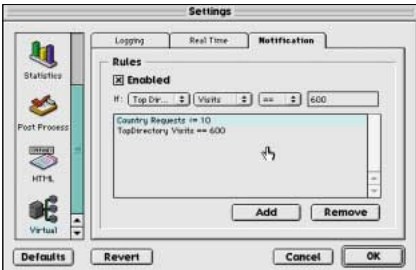
large log files using a small amount of RAM. The Streaming Analysis feature can also be used for real-time traffic reporting, giving you up-to-the-minute results. If you use this in conjunction with the new remote administration feature you'll be able to access your latest site statistics on an out-of-house server. The Professional version 3.0 can now analyse your hits in real-time using a lot less RAM – this was one of the main drawbacks of the earlier versions and its nice to see it addressed and solved. This means you'll be free from the additional task of regularly downloading log files and post-processing them on a separate Mac for extra power. Having Funnel Web constantly chugging away, logging and reporting activity on your site is a better overall solution.

New to version 3.0 is the site-use

notification features. Say for example, you need to be informed when the first 15 visitors to your site have entered a prize draw for a company T-shirt. Rather than having to keep a close eye on the number of entries deposited in your inbox, Funnel Web can be programmed to send you a message informing you – and as many other people as you want – of this event.

Considering that your Web site is open to whole world 24-hours a day, being able to keep track of some elements such as the use of your bandwidth and checking for server or database crashes can be vital for the success of your site. The remote-administration option in the Professional version lets you check these as well as unlimited proxy and virtual domains on your network.

Funnel Web 3.0 can now not only tell you when, where and how often, it can tell you what your visitors get up to, let you know when to manage them and how worthwhile your enticements are. All this background activity is essential in recognizing what needs improving on your site in



Automatic notification

Funnel Web can send you an email when certain pre-specified events occur such as processed orders.

order to offer the best user experience; the content, navigation stream and an idea of whether you're attracting the kind of customer you need or enough of them to the right places. The Pro version of Funnel Web can give you a 'Clickstream' report showing the routes of individual users though your site. You can also generate a report for a mean path; the most frequently followed route by users.

Anyone can use Funnel Web to produce

Amazing but challenging digital-video editor



EditDV 1.5

Publisher: Digital Origin

www.digitalorigin.com

Distributor: Computers Unlimited (0181 358 5857)

Pros: Brilliant integration of digital video and FireWire; some functions superbly designed.

Cons: Excruciatingly difficult to learn; no online help; can't drag to edit clips or transitions.

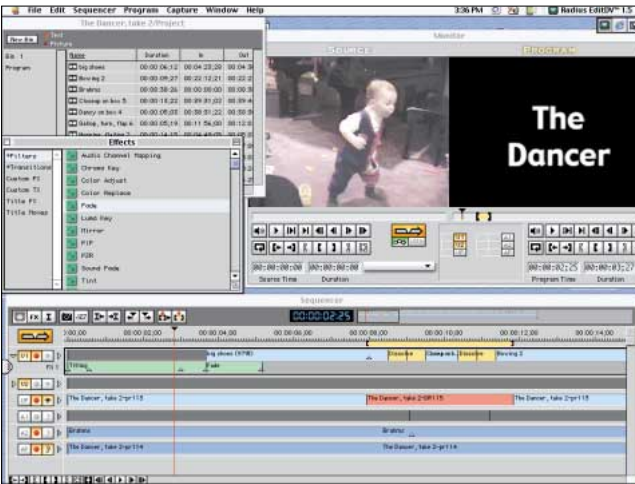
Price: £699 ex VAT including FireWire card,

Star Rating: ★★6.8

Digital Origin, formerly Radius, was among the first companies to capitalize on the thrilling possibilities of digital video (DV). Equipped with the company's MotoDV FireWire card and a digital camcorder, your Macintosh can duplicate the functions of a video-editing workstation that would have cost £12,500 in 1995. Digital Origin's newly updated EditDV is an Adobe Premiere-like program for assembling DV clips into a finished movie. Like any newborn, this baby has plenty of messy moments, but you can easily see how attractive it might be when it grows up.

Although they're digital, DV camcorders still record onto tapes. But as the data flows into your Mac (and out again after editing), there's no loss of quality, no matter how many times you shuttle footage back and forth. The finished movies look stunning, always full-screen and 30 frames per second, with none of the shrunken, washed-out look of analogue-captured QuickTime movies.

The beauty of EditDV 1.5 is that it puts the capturing and editing functions in a



Abandon hope, Premiere users

EditDV 1.5 bears little resemblance to Premiere's drag-friendly interface.

A demo of EditDV 1.5 is available on this month's cover disc.



single program, but reaching video nirvana is still a mammoth project. You need a huge, fast hard drive (3.6MB per each second of video), 80MB of RAM, a TV, and the Digital Origin FireWire card that comes alongside (oddly enough, EditDV doesn't yet work with the blue G3s' built-in FireWire).

Once everything is connected, you can control your camcorder (play, rewind, and so on) from your Mac's keyboard. You flag certain taped scenes as component clips for your movie; unattended, EditDV then turns all such segments into DV clips on your hard drive.

Now you're ready to make your movie. You can apply EditDV's astounding power – filters, transitions, chroma-key effects, and so on – with impressive precision. The text animator runs rings around Premiere's, and you can easily change filter, title, and effects settings over time using keyframes.

Unfortunately, you reach all these features via an interface that's modelled after Avid's professional editing systems; if you're accustomed to Premiere, EditDV will turn

fast and detailed reports on their Web-site traffic. It's very intuitive. You simply select and process your log file hour by hour, week by week, or month by month. The flexibility of output format and level of customization available for your reports is remarkable. It can provide an instant picture of what's happening throughout your site. You can show this information in different ways, for example as a pie chart, a 3D graph of depth and duration, by the number of visitors from certain countries of the world or how many still haven't upgraded their browsers.

Macworld's buying advice

Funnel Web has no real competitor in the Macintosh market. The shareware tools that are available lack its speed, ease and finesse. In version 3.0, Active Concepts has made the analysis of Web traffic more visible and comprehensive. If you want to make the most of your online business opportunities, this is a definite must buy for Macintosh Webmasters. **Gillian Robertson**

Apple enhances consumer machine



iMac 266MHz

Manufacturer: Apple Computer (0800 783 4846)

www.apple.com/uk

Pros: Great value; groundbreaking design; solid performance.

Cons: Few expansion options; hard-to-handle mouse.

Price: £779 ex VAT.

Star Rating: ★★★★★/8.4

Don't let the fruity flavours fool you: Apple's latest iMacs offer more than just a new colour scheme. Sure, the hot-selling consumer Macs are now available in strawberry, blueberry, grape, lime, and tangerine. But they also sport a faster processor, a larger hard drive, and a smaller price tag than the original iMac. There are no breakthrough technologies here, and the iMac still suffers from limited expandability and an unergonomic mouse. Nevertheless, Apple has taken the most popular computer of 1998 and made it even more attractive.

The original, Bondi blue iMacs sold for £999 including VAT with a 233MHz G3 processor and a 4GB hard drive. The new,



£779 iMacs feature a 266MHz G3 and a 6GB drive. Apple has also eliminated the iMac's IrDA port and the undocumented mezzanine port, but otherwise the new model is nearly identical to the old ones. It comes with a built-in 15-inch, 1,024-x-768-pixel display; 32MB of RAM; a 24x CD-ROM drive; 10/100BaseT Ethernet; a 56Kbps modem; an ATI Rage Pro graphics accelerator (with 6MB of SGRAM); and two USB ports. (The latest 233MHz iMac included a Rage Pro; the original 233MHz iMac used the slower Rage II.)

Macworld Lab testing found that the new iMac delivered predictable performance: a little faster across the board than the original iMac, but not as speedy as our 300MHz reference system (see the benchmark in the feature 'Your perfect Mac,' elsewhere in this issue).

Aside from the extra speed, the new iMac has the same strengths and weaknesses as the old one. On the plus side it's easy to use, features a striking industrial design, and offers lots of computing power for the money. The new iMac also benefits from the wider availability of USB peripherals, which were somewhat scarce when the original model debuted.

But most of the commonly heard complaints about the original iMac also apply. The new iMac features the same hard-to-handle mouse, and there's no built-in removable storage; no PCI slots; and no serial, SCSI, or FireWire connections. The new iMac is even less expandable than the original, which included the undocumented mezzanine port on the flip side of the motherboard. Apple made it clear to developers that this port was off-limits – you can void the iMac warranty by using it – but at least two companies, Formac and Micro Conversions, have announced boards that plug into the slot. Still, you can't blame Apple for dropping a port that it never intended for third-party use.

Macworld's buying advice

The new iMac builds on the success of the old one with faster performance, a lower price tag, and, yes, a choice of five colours. It's an affordable entry into the next generation of Mac computing. **Stephen Beale**

Star Trek: The Next Generation game



Klingon Honor Guard

Publisher: MacSoft

www.wizardworks.com/macsoft

Distributor: Softline (01372 726 333)

Pros: Sumptuous 3D graphics; great TNG atmosphere; quality sound effects.

Cons: Aimed at high-spec Macs; network play is a little choppy.

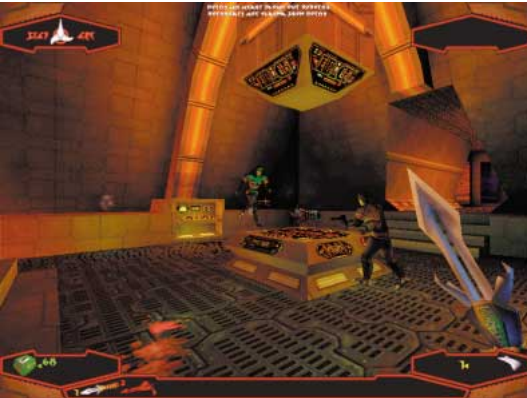
Price: £34 ex VAT.

Star Rating: ★★★★★/8.7

For many years, developers used Bungie Software's Marathon engine to create new action games; witness Prime Target and Damage Incorporated. After Westlake Interactive unleashed Unreal last year, it was clear that some tasty 3D games would follow based on this engine – and here's one: Klingon Honor Guard.

Based loosely on the hit TV series *Star Trek: The Next Generation*, KHG has you as an elite member of the Guard with the sole duty of defending the empire and its leader, Gowron, against whom a death plot has been hatched. Fail and he dies – you even get to watch the assassination courtesy of one of the many QuickTime cutscenes.

Graphically breath-taking, KHG boasts



Prepare to die

Botmatch mode pits you against numerous Klingons – and a D'k Tahg cuts little ice against a disruptor rifle or grenade launcher...

more than 20 levels with locations as diverse as alien planets, with vast, colourful scenery, to a Klingon bird of prey with its tight corridors and dark nooks and crannies. As with all good shoot-'em-ups, weapons of increasing power can be collected the further you get into the game with ten on offer, from the traditional *D'k Tahg* blade and standard issue disruptor up to the truly devastating particle dispersal cannon. Suffice to say a good warrior leaves a hefty trail of pink blood in his wake.

Enemies are as varied as the weapons, from four varieties of Klingon through to hard-as-nails attack droids, scorpion-like Tar Chops and the RoPed, which makes a yeti appear friendly!

KHG supports deathmatch and co-operative network play with support for modem-to-modem, local area network and Internet connections. A further offshoot from this is the botmatch mode: select a level, a number of Klingons and kill, kill, kill. Combat is generally short and *tout de suite*, but a flick of the spacebar leads to a miraculous reincarnation and the splattering of more pink puddles on the floor.

Macworld's buying advice

KHG is as atmospheric as a game gets – even some of the voices are provided courtesy of

the original TV actors (including Robert O'Reilly as Gowron and Tony Todd as Captain Kurn). Highly immersive... and totally draining!

However, there is a price to pay. For best results, your Mac will need a spare 270MB of hard disk, an ATI Rage Pro/128 graphics chipset plus a whopping great 105MB of RAM. Admittedly you can reduce the resolution, texture detail and sound quality, and turn on virtual memory, but the result is not nearly as impressive. Ultimately, the game falls down without a high-performance system. G3 and iMac owners should consider this worthy of close attention; other Mac owners may be a little disappointed.

Vic Lennard

Removable-media drive



Iomega Zip 250

Manufacturer: Iomega (0800 973 194)

www.iomega.com

Pros: Higher-capacity media; backward compatible with 100MB media.

Cons: Cryptic software interface; limited SCSI ID choices.

Price: £169 inc VAT; 250MB cartridge approximately £15 inc VAT.

Star Rating: ★★★★★/7.9

With higher-capacity media, more polished software, and an improved enclosure, the new 250MB Zip drive is a good product made even better. The £169 unit reads and writes to Iomega's new £15 250MB cartridges, but also supports 100MB Zip media. While it has a few annoyances, the Zip 250 is a good buy.

The drive is housed in a familiar purple enclosure, but with a few improvements. The unwieldy power brick in the original Zip drive has shrunk to the point where the word brick seems a misnomer. The drive now also features a power switch in front.

Picture your numbers



DeltaGraph 4.5

Publisher: SPSS (01483 719 201)

www.spss.com

Pros: Great variety of charts; nice scripts for automating report production.

Cons: Some defaults need fine-tuning.

Price: £195 ex VAT; upgrade £95 ex VAT.

Star Rating: ★★★★★/8.9

A few years ago, DeltaGraph 4.0 received one of *Macworld's* highest ratings (see Reviews, October 1996). Since then, statistics giant SPSS has acquired DeltaGraph and updated it to accommodate the Web and other changes in Mac computing, but it's still the best Mac program in its field.

DeltaGraph's objective is simple: it reads Microsoft Excel files (and most other common data formats) and turns them into better-looking charts than Excel can produce, with a richer selection of business presentation styles and scientific chart types. The program also handles large data sets more gracefully than does Excel (the included compact version of Design Science's Equation Editor enhances scientific display), and its business presentation charts are

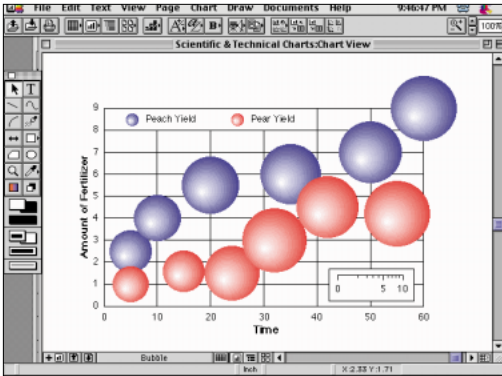


On the downside, it still supports just two SCSI IDs, 5 or 6, and the case still rattles when you shake it.

When reading or writing a file to the new 250MB media, the new Zip is zippier, offering a 40 per cent performance boost over the old drive. However, the new drive is a bit slower than the original when writing to 100MB media.

With the original Zip drive, Iomega put its software utilities on the included Zip cartridge, inviting users to install the software and then overwrite the cartridge. IomegaWare now comes on a CD that includes Mac and PC versions.

Iomega has honed its Tools application, which lets you create a rescue disk with a complete or minimal System Folder and a copy of Apple's Disk First Aid software. After a system crash, you can boot from the cartridge and check the internal drive.



The floating world

This nicely shaded bubble chart is one of more than 80 aesthetically optimized presentation styles in DeltaGraph 4.5.

cleaner and easier to modify than Microsoft PowerPoint's. To change any element of a chart's appearance, you just double-click on the element and make a few selections.

Also new in DeltaGraph 4.5 is the option to export Web-ready JPEG graphics and import Excel 97 and 98 files. It lets you generate QuickTime 3 slide shows and data animations, and adds a Pantone colour-picker extension to guarantee colour consistency in printed output. Convenient new multipurpose File dialogue boxes echo the style of System 8.5's Apple Navigation Manager; new AppleScripts help you set up DeltaGraph as a networked "chart server" and automatically generate Web-based or printed reports. Version 4.5 also adds 11 new chart types: three styles of high- and

The software also lets you add copy protection to Zip cartridges. However, the interface is vexing; the opening window presents a set of icons with no labels. The only way to use the program is to take a guess and click on a button.

The CD also includes an easy-to-use audio-capture application called RecordIt, which lets you copy songs from an audio CD or record voices with the Apple microphone. You can then store these sounds on your Zip disks for playback. However, Zip disks are no match for a CD – the RecordIt player pauses frequently during normal computer use.

Macworld's buying advice

Iomega has reason to crow, as the new Zip drive improves on an already strong product. Thanks to the popularity of the original drive, Zip cartridges remain a good way to share data with coworkers. With the new higher-capacity media, the Zip is now more attractive as a backup device. However, Zip disks, while generally reliable, are not the sturdiest removable media you can buy. If you plan to use the drive for archiving, you'll need to purchase backup software and make multiple backup sets.

Iomega will continue to sell the 100MB drive through 1999, and plans a USB version of the Zip 250 for the second half of the year. **Kristina De Nike**

low-close stock market charts, two kinds of intensity scatterplots, and six kinds of bar and column line-overlay charts.

These interface improvements were necessary to adapt DeltaGraph to intranet and Internet computing environments, and their implementation is glitch free. The new chart types aren't quite as impressive, however. Some welcome new types have odd defaults; for example, the Intensity Scatter and Paired Intensity charts open with a nearly useless bicolour intensity ramp, necessitating a bit of tweaking. Similarly, the line-width default in

various bar charts with line overlays is a nearly invisible rule that calls for another adjustment.

But to be fair, the controls for adjusting chart details are nicely arranged and easy to use, and serious users preparing charts for publication nearly always make extensive departures from the defaults.

Macworld's buying advice

If it's your job to prepare charts for print or Web publication on a regular basis, it's time to step up to DeltaGraph 4.5 and leave the Excel-PowerPoint duo behind. You'll spend some time mastering DeltaGraph's details, but you'll be rewarded with a big payoff in better-looking charts. **Charles Seiter**

Reviews continues page 62

Superb, value-for-money CAD package



VectorWorks

Publisher: Diehl Graphsoft

www.diehlgraphsoft.com

Distributor: Gomark (0171 731 7930)

Pros: Incredible value for money; extremely easy to use.

Cons: Nothing of note; one minor irritant is the audio feedback on the Smart Cursor – could be the start of something 'interesting', but currently sounds like a woodpecker trying to hack down a tree.

Price: £595; 5-user licence £1,813; 10-user licence £3,264. All prices ex VAT.

Star Rating: ★★★★★/9.0

Desktop CAD for architects and design professionals has always seemed a two-horse race (Autodesk and Intergraph being the two pervasive names in the industry) and all too frequently, elegant and powerful alternative solutions struggle to gain a foothold in the monotypic CAD marketplace that architects have so unwittingly created for themselves. Fortunately, things are changing and new developments in the underlying operating environments and programming techniques, are presenting developers with business opportunities and allowing users more choice in the tools they use.

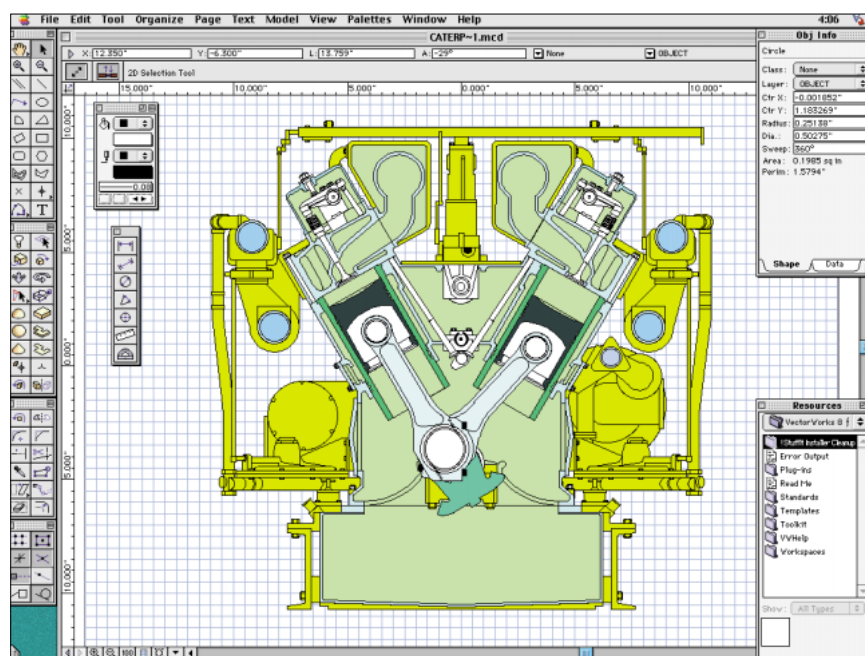
A not-so-small and not-so-new CAD company, Diehl Graphsoft, first introduced its own particular brand of technology and customer support to the CAD market as far back as 1985. Its product MiniCAD started life as the first 3D program for the Macintosh. In 1986 Graphsoft added a 2D drafting component, which has now matured to become one of the industry's most effective and easily-learned drawing tools.

Two years later, Graphsoft added an integrated database/spreadsheet and a macro language, and during the last ten years the product has gained high-end features such as automatic wall, roof and floor tools and a modular design (necessary for the cross-platform versions of MiniCAD).

With the latest release, this giant of a product is dropping its 'mini' suffix, which was perhaps selling it a little short, and changing its name to VectorWorks.

VectorWorks now stands as a highly-evolved, fully-comprehensive design presentation, drafting and management tool, offering a broad-based 2D/3D CAD package with integrated database, spreadsheet and a powerful programming environment called VectorScript. Diehl Graphsoft has actually used the new VectorScript to create many of the new tools available, and users requiring a more sophisticated and powerful approach to designing their own tools will revel in this new found customizability.

VectorWorks' fully-functional 2D drafting



Easy-to-use interface

VectorWorks elegantly splits the interface burden between tool palettes, dialogues, menu bar, cursor feedback and pull-down menus offering access to main commands.

environment is amazingly easy to learn and offers a high degree of control that other systems simply can't match. Although easy to learn, the range of features are sophisticated and the program is accurate enough for any design/build task.

A drafting dream

While in use, VectorWorks provides constant on-screen feedback relating to co-ordinates, object attributes, and selection modes. This feedback comes mostly from the 'Smart Cursor'. This feature automatically finds key points near the cursor, and snaps to geometry and useful targets. While doing so, it provides feedback, using cursor shapes, extension lines, text messages near the cursor (tool tips). The Smart Cursor also offers a slightly irritating audio feedback.

Long overdue, VectorWorks now offers multiple undo/redo. There's nothing worse than undoing an undo only to find that you have lost some of the things you wanted to do! Well, it's sorted now.

MiniCAD has always had a hybrid wall tool for creating floor plans that simultaneously generated 3D views of schemes along with 2D output of elevations from the 3D model. VectorWorks now includes better support for 'Round Walls', including the ability to join them cleanly and automatically to other wall types. The insertion of hybrid 2D/3D window and door symbols into walls, is astoundingly easy to master, shockingly fast, and although lacking the modelling capabilities of packages costing many times more, nothing comes close to the speed of VectorWorks when knocking out 3D models and 2D documents including sophisticated symbol elements and linked graphics and data.

New roof modelling tools in this version now make it possible to knock out complex roofing structures simply by selecting bearing

walls, and running one button commands. Once created, roofs can be reshaped, dormers added and holes cut for skylights.

VectorWorks provides very powerful new collaboration and team-based support through new 'Workgroup Referencing' abilities. This lets different team members work on separate drawing components, which can be linked to a master document containing style guides and critical shared project data. Designed with bigger projects and larger design practices in mind, this level of team support – if used carefully – will allow small groups to tackle much larger jobs in a more efficient manner.

Navigation in 3D is limited, and only responsive if the model is not over-worked. However, I can't remember the last time I came across an architectural model that wasn't overflowing with superfluous data and redundant structures. This being the norm, most CAD users will export 3D models to more capable animation tools for the creation of fly-overs and walkthroughs, and yes, the DXF/DWG import/export feature works first time, every time.

Compatibility

If you're running VectorWorks and someone is sending you DXF/DWG files that aren't translating correctly, or, conversely, they can't read your files, you can bet your bottom dollar the problem isn't at your end.

The ability to send files back and forth effortlessly between VectorWorks and AutoCAD 14 cannot be understated. Compatibility with the industry-standard AutoCAD is considered mandatory – although why anyone would want to buy a product that was as much as five times the price of VectorWorks, needs more hardware and has a steeper learning curve is hard to figure. This isn't simply partisan Macintosh talk,

continues page 64

Playstation games come to the Mac



Connectix Virtual Game Station

Publisher: Connectix

www.connectix.com

Pros: Handles most popular games well; game sound configurable within VGS.

Cons: Incompatible with some less-popular games; game response sometimes feels sluggish; recommended for use only on Apple G3 hardware.

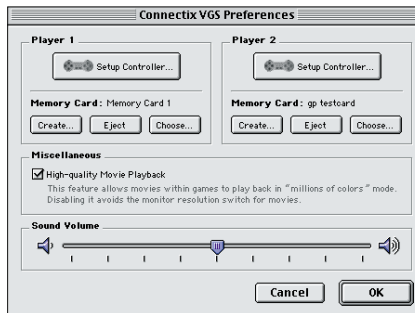
Price: \$50. UK version is being developed.

Star Rating: ★★ ★/6.9

The number of Mac games is growing, but it's still relatively small compared to the wealth of games available for the PC. Connectix's Virtual Game Station (VGS) 1.1 opens up the vast library of Sony PlayStation titles to G3 Macs – including the iMac – using impressive technology that emulates a PlayStation's hardware, including its MIPS RISC processor. Currently available only in the US, a UK version is being developed for release later this year. Be prepared for occasionally sluggish game response, though; this is emulation, after all.

When you insert a PlayStation disc into your Mac, VGS launches automatically. Thanks to the G3's 24x CD-ROM drives, games load faster under VGS than they do on the PlayStation's 2x drive.

In VGS's minimalist user interface, the



Set up your PlayStation

Configuring Virtual Game Station is as easy as setting up the input device (keyboard or game pad) and specifying the games' volume.

main window lets you create and select virtual memory cards – which, like real PlayStation memory cards, you use for saving game states. It is also where you configure input devices and set the volume for VGS, eliminating the need for trips to the Monitors control panel.

Although you can use a keyboard as an input device, PlayStation games are clearly designed with a game pad in mind. We found that the Gravis Gamepad Pro USB, with button placement identical to the PlayStation controller's, made the VGS experience much more like using a PlayStation than like using a computer (although we missed the PlayStation's analogue game pad in some games).

The downside of emulation is always that it's, well, emulation; it's never as good as the real thing. VGS 1.1 is no exception. Connectix admits that it has tested VGS only with the most popular games of the past year or two, so it's no surprise that some games work better than others. Although our test

games were generally quite playable, we did hit some snags. Playing Konami's Metal Gear Solid on a G3/300, we found the response slow during intense action, compared to playing it on a real PlayStation. We had similar experiences with Sony's Crash Bandicoot 2 on an iMac 233MHz.

It was easy to overlook the occasional sound dropout in Sony's Spyro the Dragon and minor graphical glitch in Psygnosis's G-Police, since both games played well otherwise. Shiny's MDK was the only game in our test suite that wouldn't play at all; it consistently got stuck shortly after starting.

Connectix stresses that VGS runs only on Power Mac G3's; it doesn't support older machines with upgrade cards. VGS requires a fast system bus, as well as one of the CD-ROM drives in recent Apple systems so it can verify that the discs it plays are not pirated copies. We tried running VGS on a Umax S900 outfitted with a Newer Technology G3 upgrade card, and CD-ROM-compatibility issues foiled multiple attempts to load a game. Some accelerator vendors claim their cards are compatible with VGS, but don't be surprised if the performance isn't what you expect.

Macworld's buying advice

Connectix's Virtual Game Station is an impressive piece of technology that runs most PlayStation games well, even though it has a few compatibility quirks. The delayed response we saw can make games that require split-second timing much harder to play. Although it's unlikely that VGS will supplant real PlayStations, Mac owners who want more game play will certainly put it on their wish list. **Stephen Somogyi**

New look for this worthwhile utility



Spring Cleaning 3.0.1

Publisher: Aladdin Systems

www.aladdinsys.com

Distributor: Softline (0181 401 1234)

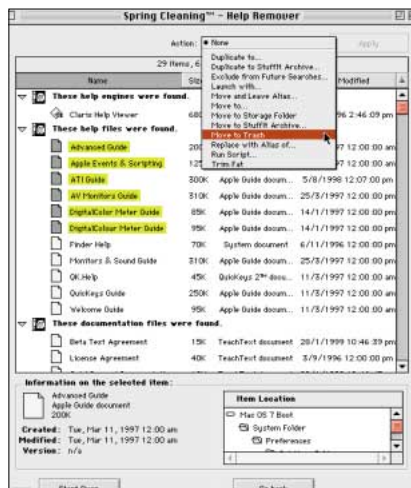
Pros: Good set of search functions; redesigned user interface; fast to use.

Cons: Requires a good working knowledge of Macs; most functions have shareware equivalents.

Price: £29.78 ex VAT

Star Rating: ★★ ★/7.2

When Spring Cleaning first appeared back in late 1996, it hardly set the Mac world alight. Its functionality was already on offer from shareware products though in the handy format of a single package. Aladdin Systems appears to have taken the criticisms onboard and, through the last two years, the eight modules have grown to 11 and the user interface has seen some dramatic changes.



In essence, Spring Cleaning comprises 11 searches, each of which brings up files of a particular nature. While only one of these searches is new to this version (File Checker), here's a quick rundown of the lot. MacUninstaller finds all of an application's related files for a clean uninstall while Font Remover lists every font on your system, in use or otherwise. Help Remover finds all help files on your hard disk; Fat App

Slimmer removes non-PowerPC code from applications; and Alias Fixer tracks down all broken aliases. File Checker checks the integrity of all files, warning of any corruptions, Document Finder finds documents of the same file type for better filing, and Empty Folder Remover and Duplicates Remover are self-explanatory. Orphan Adopter brings up files that no longer have their parent application on your system, and Orphaned Preference Remover does the same with preference files. A pretty comprehensive bunch of search functions.

After running a search, all items that fit the criteria are displayed in a window. A variety of actions are available, from simple delete, duplicate or move through to assign parent, which changes the file creator, and move to storage folder. The latter is useful as decisions on awkward files can be made at the end of a session or the whole lot trashed with the Storage Items Remover function.

Spring Cleaning 3 offers two real improvements, the first being the user interface. Gone are the never-ending confirmation dialogue boxes and the continuous hunting through menus for facilities: Spring Cleaning 3 now boasts an almost comprehensive set

continues page 69

of keyboard shortcuts. The second improvement is key to the way you use Spring Cleaning: Restore. Any decision made that resulted in files being duplicated or moved can be reversed – if you lose the plot, you can always start again, though any function resulting in a deletion is irreversible. Another enhancement is the accessibility of invisible files in the results window, particularly useful when uninstalling a package that has kindly placed various concealed items in the System Folder.

In use, the whole program feels faster, ripping through searches in no time at all. However, there are some odd anomalies –

for instance, Orphan Adopter's list of 1,200 items included Oxford University Press's TrueType fonts and the entire list of modem profiles, while Orphaned Preference Remover brought over 800 items to my attention including Beyond Press 4, Cubase 3, Snapz Pro and Xenofex (all still installed) plus some System items such as Find File. While the 'Exclude from Future Searches' facility is useful when such oddities occur, some functions should carry a computer health warning as wholesale deletion could lead to a very unhappy situation, especially as some applications store your serial number in their preferences file!

Macworld buying advice

Used carefully, Spring Cleaning 3 is one powerful file cleaner. For instance, using the Fat App Slimmer on a dozen applications saved some 25MB of hard disk space while File Checker warned of three files with damaged resource forks. Anyone who already owns a decent selection of commercial and shareware utilities could live without Spring Cleaning 3. Still, the almost exhaustive nature of the searches coupled with the speed of use, restore facility, price and free copy of Aladdin's Desktop Magician make the full package a lot more tempting than its previous incarnations. **Vic Lennard**

Photoshop filter trio offers special effects



Shadow Filter 1.12

Publisher: Andromeda Software
www.andromeda.com

Distributor: Digital Toolbox (0181 282 8383)

Pros: Comprehensive shadow-generating functions.

Cons: A bit expensive for a one-trick pony.

Price: £69 ex VAT

Star Rating: ★★★★★/7.2

Three-D Luxe Filter 3.0

Publisher: Andromeda Software
www.andromeda.com

Distributor: Digital Toolbox (0181 282 8383)

Pros: Easy creation of textured 3D objects.

Cons: Can't import models or modify geometry.

Price: £69 ex VAT. *Demo is available on this month's cover disc.*

Star Rating: ★★★★★/7.5

VariFocus Filter 1.1

Publisher: Andromeda Software
www.andromeda.com

Distributor: Digital Toolbox (0181 282 8383)

Pros: Can apply variable blur or sharpen effects.

Cons: Built-in masks not very useful.

Price: £39 ex VAT

Star Rating: ★★★★★/6.5

Some vendors of Adobe Photoshop plug-ins use the smorgasbord approach, bundling a variety of special-effects filters and other add-ons into one, low-cost package. Andromeda Software takes a different tack, offering individually priced plug-ins that specialize in certain tasks. The latest are Shadow Filter 1.12, for applying elaborate shadow effects; VariFocus Filter 1.1, for performing selective sharpen and blur operations; and my personal favourite, Three-D Luxe Filter 3.0, for creating textured 3D models in Photoshop.

All three plug-ins sport interfaces inspired by MetaCreations' Kai's Power Tools, with controls that resemble what you



Aesthetic appeal

Andromeda Shadow Filter 1.12 features a MetaCreations-inspired interface.

might find on an alien spaceship. The screens appear somewhat cluttered – and baffling – at first, but once you get the hang of the interfaces, the plug-ins are easy to use.

Andromeda's original 3D plug-in, Three-D Filter, let you map Photoshop images to the surface of a cylinder, sphere, box, or plane. The new Three-D Luxe Filter goes beyond its predecessor by letting you add a wide range of photo-realistic textures to 3D objects.

In Three-D Luxe's 3D Geometry mode, you use slider controls to set lighting conditions, apply surface and background colours, rotate and scale the object, and determine how the image is mapped to the 3D shape. You can scale the image, change its position on the object's surface, and create tiled copies. Aside from scaling, however, you can't modify an object's geometry, nor can you import models created in other 3D programs.

Three-D Luxe displays a wire-frame view of the object in a large window, but you can quickly generate a rendered preview that shows lights and shadows. When you're finished, the plug-in produces an image of the 3D object with the photo mapped to it.

The new Texture mode lets you apply a wide range of photo-realistic textures to objects. The plug-in ships with about 75MB of canned textures, organized by type (biological, mechanical, and so on). The textures are beautifully rendered and lend themselves to some eye-popping surface effects. All of them can be bump-mapped, giving the impression that the object's surface is deformed. You can create your own bump-mapped textures or convert the active Photoshop image into a bump map.

Alien Skin's Eye Candy and Extensis PhotoTools both include plug-ins for creating drop shadows, but neither comes close to offering the range of features in Andromeda Shadow Filter. This plug-in lets you generate multiple drop or cast shadows in different colours, at different sizes, with various levels of sharpness. It also offers unlimited undo's.

You can use as many as four light sources and set the angle of the casting plane, the surface on which the shadow appears. For objects (such as fishbowls) that are partially transparent, you can also create translucent shadows. The plug-in can't add noise to a shadow, but you can do that easily enough in Photoshop.

Out of focus

VariFocus adds a few wrinkles to Photoshop's Gaussian Blur and Unsharp Mask filters by letting you apply these effects through a mask. You can use the filter to create depth-of-field effects in which selected parts of an image are focused more sharply than others.

The masks in VariFocus Filter are grey-scale images that determine how strongly the blur or unsharp-masking effect is applied; the effect is stronger in light areas and weaker in dark areas. You can scale masks, or rotate them in increments of 90 degrees.

The plug-in ships with 15 prebuilt masks, but many photographs will require custom-built masks, and creating them can be cumbersome.

Macworld's buying advice

Of the three plug-ins, Three-D Luxe Filter 3.0 probably has the broadest appeal. It offers a great way to add perspective effects and other 3D imagery to pictures, though it's limited to a few standard geometric shapes and can't import models created in other programs. Shadow Filter 1.12 offers a wide range of shadow-generating functions but is probably overkill for most artists, especially if you already have the more modest shadow filter in PhotoTools or Eye Candy. VariFocus Filter 1.1 is probably the least useful of the three, since you can create many selective blur effects almost as easily using Photoshop's built-in tools.

Stephen Beale

Reviews continues page 70

Interface improvements to 3D modeller



Amapi 3D 4.1

Publisher: TGS

www.tgs.com

Distributor: Gomark (0171 731 7930)

Pros: Excellent modelling tools; good price.

Cons: Only basic rendering and animation available; interface still takes a little getting used to.

Price: £269 ex VAT; upgrade £150 ex VAT.

Star Rating: ★★★★★/7.0

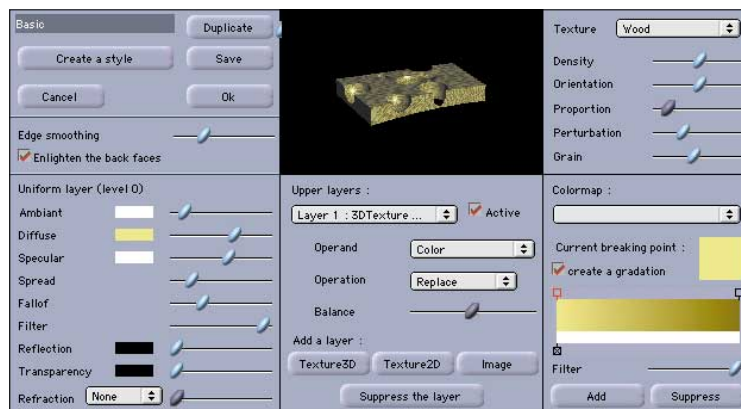
When it comes to idiosyncratic applications, Amapi has always been up there with the early offerings of MetaCreations. Its interface, however, proved to be a turnoff for many 'serious' users. Its recent transfer from YoNoWat software to TGS has been followed by a new release and a new lease of life for this very capable modelling application.

The most notable feature of the new version is that TGS now provides the option of having a more conventional interface. While this can make using Amapi a little faster for first-time users, it's not nearly as much fun. Users can now display either the Standard or the Workshop interface. For users new to modelling, the standard interface is perhaps the best one to choose as it provides a familiar set of tool icons in a floating palette. Although you're prompted to choose which interface to use when installing the software, the appearance of the application can be altered at any time from within the preferences dialogue.

Three basic sets of tools are available in version 4.1: Construction, Modelling and Assembly. Each set has icons that sweep around the right-hand side of the modelling window and can be rotated by moving the cursor to the far right of the screen. The other major toolbox is the control panel, accessed by moving the cursor to the bottom of the screen. This contains modelling support features such as object grouping, hiding, view controls and zoom options. The last major on-screen item is the Catalogue, which is a drag-&-drop container for 3D models or elements.

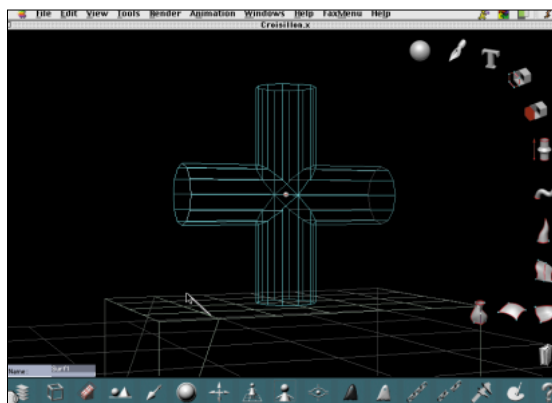
Each set of tools groups together all of the major creation and editing tools, which makes working with highly-complex elements as straightforward as possible. Orientation in 3D space is often confusing and Amapi provides a simple solution to this by placing a 'work bench' on a grid in the modelling window. In reality this is an image of a table, and like the grid, doesn't appear in the rendered version of your scene.

Other helpful features are the Data window and Assistant Palette. The Data window displays information about the current object selected and the tool in use – useful feedback to have when making selections within complex models. The



Above: MultiChannel Shaders

The unlimited number of channels gives you total control over texture creation by adding textures such as Bump or 3D noise. More than 20 pre-defined textures give you endless possibilities for creating shaders.



Left: Workshop interface

In the latest version of Amapi, you can choose to work with either the Workshop interface or more familiar tools.

Assistant Palette has been designed to guide new users through their first projects. It contains iconized versions of the main tools used in the creation of basic models as well as providing access to some tool settings via the tuner icons.

The Scene Manager lets you organize elements within a scene and is opened via the control palette. When the manager is opened you're shown three tabs along with an organized list showing the names of both groups and objects within the scene. Elements can then be organized to suit the project you're working on. Thumbnails of objects on layers are shown in the Layer tab, which is an excellent way to quickly see what is where. The final tab shows materials used in the projects and any element that hasn't been assigned a material.

Amapi's range of tools is impressive, with all the standard object-creation options available. NURB modelling is available as a memory-efficient way to create complex objects, while polyhedral modelling can be used for more basic shapes. A small letter in the bottom left-hand side of the modelling window indicates which modelling method is being used, and object types can be combined in a scene. Extrusion and sweeping are available along with some neat tools like the Hull tool and the Extract Curve and Extract Surface tools.

As with all objects in Amapi, the number of facets used to form an object can be adjusted using the slider that appears after hitting the return key. This slider is extremely useful as it allows every object in a model to be optimized for rendering depending on where it appears in a scene.

Amapi makes animation simple by using

a key-frame system. To create an animation the Key Framer is opened and it records the current appearance of your object or scene. By leaving the Key Framer and making an alteration and returning to it another key frame is added to the timeline and so on. Other options for animation include assigning objects to a path and moving it along this path over time. These features work well, but Amapi hasn't gone overboard on animation tools and many other modelling packages offer a lot more in this area.

Amapi uses 'shaders' for rendering, which can be tailored for most surface effects. Material shaders determine the appearing of surfaces onto which they have been applied. A large number of materials ship with the application and these can be used as the basis of new material by using the Material Editor. The Material Editor can be displayed in either simple or extended versions. Once materials have been created they can be stored in a Catalogue window and be applied using drag-&-drop. A catalogue of model elements is also available allowing you to store objects you may want to reuse.

New in this version is ActiveStyles – a new rendering technology from TGS that allows for the integration of phong, raytrace and artistic rendering in a single scene.

Macworld's buying advice

If you need high-end rendering or animation features then Amapi may not be for you. But for those new to 3D modelling, Amapi is an excellent place to start. It offers a wealth of modelling options, organized in a clear and logical way (once you get used to the unusual interface). **Richard Spöhrer**

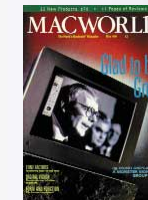
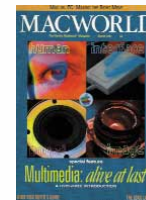
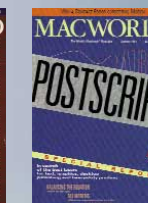
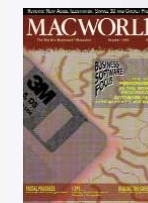
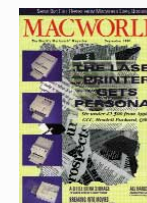
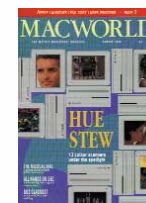
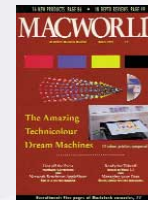
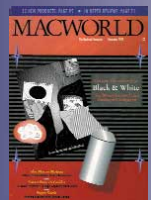
10 Years

From SE to iMac

By Simon Jary

Steve Jobs, the guy who founded Apple 23 years ago, is still in charge of the company. Surely something must have happened in the last ten years for us to fill 120 issues of Macworld? Read on...





10 x 1989

Tech breakthrough: 1.4MB Floppy SuperDrive
Tech tack: Mac Portable – weighs 14lbs
Soft'n'lovely: Silicon Beach's Digital Darkroom
OS of choice: System 6.0.4
Upgrade: Add 4MB RAM to Mac Plus = £400
Apple boss: John Sculley
Chip chase: 25MHz 68030
Apple legal: Beatles sue over Apple music
Dream machine: Mac Ili
Consumer Mac: Mac Plus

1989

Hot on the heels of the Mac SE/30, *Macworld* UK launches as free supplement to IDG's weekly *PC Business World*. Edited by still-*Macworld* regular Ian Winter, issue 1 (MARCH 1989) has 54 pages packed with features, including "Getting started with System 6.0". Reviews for that issue included: MacWrite II; Aldus Persuasion; and QuarkXPress 2.0. Our first issue concentrated on Apple's shift to multimedia computing – jumping another step ahead of its Microsoft opposition. The biggest hurdle appeared to be the fact that "a few seconds of full-motion video will completely fill a 20MB hard disk".

The public wanted more, so the next issue (APRIL 1989) was *Macworld's* first as a stand-alone magazine in the UK. Its 76 pages cost £2 – and there was no free CD-ROM in those days. Why? No Macs had built-in CD-ROMs, and the first one-speed external had only just started shipping.

It was a big month for Apple UK, too, as it moved to its swish new offices at Stockley Park, near Heathrow. The company also launched the Mac Ili, a powerhouse system running a 16MHz 68030 processor, and packing 2MB RAM and 40MB hard disk. Prices started at £3,540 – today that would buy you a 400MHz PowerPC G3 with 384MB RAM, 9GB SCSI-2 hard drive, DVD, Zip drive, 56Kbps modem and 21-inch Studio Display – and give you enough change for a meal for two at Gordon Ramsey's restaurant.

JUNE Apple UK and IDG announce first UK *Macworld* Expo. Wingz 1.0 – what a spreadsheet!

JULY A big month for big software. Adobe buys the rights to image-editor Photoshop. And we review Microsoft's Word 4.0 – still the best word processor available for the Mac in many people's – OK, my – opinion. SEPTEMBER Apple ships the £4,000 Mac Portable (16MHz 68000; 1MB RAM; 40MB hard drive). Weighing a colossal 14 pounds (twice the weight of today's PowerBooks), the Portable was quickly dubbed the "luggable". It broke airplane trays for heaven's sake... Steve Jobs introduces his NeXTStep operating system. Seven years later, it will be bought by Apple as the basis for its next-generation OS, Mac OS X a.k.a. Rhapsody. Adobe declares war on those wretched text jaggies with Type Manager. As a tax write-off, Apple literally buries 2,700 Lisa computers (the proto-Mac first released in 1983) in a big hole.

OCTOBER Despite the arrival of ATM, Apple sells all its Adobe shares, announcing to a shocked world that it is working with Microsoft on a rival to PostScript – eventually to become Windows-favourite TrueType. Aldus PageMaker 3.5 and SuperCard 1.0 reviewed. NOVEMBER *Macworld* has a new editor, Peter Worlock. Check out his ten-year memories on page 80.

1990

JANUARY Forgetting its deal with Jobs ten years beforehand, Xerox sues Apple for alleged copyright violation on its graphical user interface. 9,000 visitors make first UK *Macworld* Expo a success at Islington's Business Design Centre.

FEBRUARY Apple blames shaky \$125 million profit on Californian earthquake. Motorola launches 68040 chip, at speedy 25MHz.

MARCH Advanced R&D guru Jean-Louis Gasse quits Apple – later he sets up rival OS-maker, Be Inc. Six and a half years later, Gasse nearly persuades Apple CEO Gil Amelio to buy his BeOS as Apple's next-generation operating system but is beaten to it by none other than Steve Jobs. "High-horsepower" Mac Ili (40MHz 68030) hits streets from £5,600. Aldus unveils PageMaker 4.0. Adobe ships Photoshop 1.0 – which narrowly beats its nearest rival as Letraset's ColorStudio hogs a mighty 4MB of RAM – so history is made. Steve Jobs' NeXT computers now available in the UK. Hewlett-Packard launches first Mac-compatible LaserJet.

APRIL Quark unveils XPress 3.0. Radius twists monitor design with its Pivot display. *Macworld* interviews new Apple CEO Michael Spindler, and reviews Adobe Photoshop 1.0 – which narrowly beats its nearest rival as Letraset's ColorStudio hogs a mighty 4MB of RAM – so history is made.

MAY Windows 3.0 released. In response, *Macworld* hires Microsoft-baiting Michael Prochak as columnist. JUNE Apple delays System 7 till end of year. Motorola shows off its 96002 'Media Engine' co-processor, promising "high-resolution, full-colour graphics". Xerox loses its copyright-infringement law suit against Apple. Claris FileMaker Pro reviewed.

JULY Apple ships HyperCard 2.0. AUGUST Apple dumps idea to float Claris as separate company. The very thought of it... SEPTEMBER Screen-saver After Dark upgraded with sound. Now you could hear those toasters flapping across your mono screen. Adobe Illustrator 3.0 hits the streets.

OCTOBER Apple launches £575 Mac Classic (8MHz 68000), £1,375 Mac LC (16MHz

68020), and £2,530 Mac Ili (20MHz 68030). With each packing at least 2MB RAM and a 40MB hard disk, the new "low-cost" range was heralded a success. NOVEMBER Apple's shelves are bare as these new Macs sell out in record time. Proto-clone maker Outbound ships its own portable Mac. It too weighs more like a frozen chicken than a feather, but at least is 4lbs lighter than the Mac Portable – sadly, it requires cannibalized ROM chips from a Mac Plus or SE.

1991

JANUARY Apple joins forces with its UK education rival Acorn, and takes a 30 per cent stake in resulting new company, Advanced RISC Machines (ARM). Rumour has it that Apple may use ARM chips in a "future handheld device".

FEBRUARY Apple announces that the Mac Classic is now its all-time best-selling system. In a bid to bolster sales and market share, Apple starts selling Macs in US high-street stores.

MARCH A small Californian company, NuTek, claims it has found a way to legally clone the Mac OS by adapting a Unix interface. *Macworld* Expo moves to Birmingham's NEC. Epson launches its first Mac printer, the £1,999 6ppm EPL7500.

APRIL John Sculley, CEO of Apple, surprises the whole world by joining IBM engineers in presenting a PS/2 Model 70 PC running a prototype operating system that looks remarkably like the delayed System 7. The OS is actually prototype of "Pink", an object-oriented version of the Mac OS that promises to run faster and more efficiently than System 7. FrameMaker 1.0 reviewed.

MAY Steve Jobs' NeXT opens six NeXTCentres in the UK.

JUNE System 7 eventually ships. The buzzword is "savvy" as software makers make a leisurely rush to make their programs System 7 compatible. Claris attacks Microsoft Excel with Resolve – sadly, in name only.

JULY Apple unveils novel System 7 extension, QuickTime, to rocking Jean-Michel Jarre soundtrack. Adobe releases Photoshop 2.0. IBM gets all excited by Apple's planned new operating system, and on July 3 sends a letter of intent saying that it would help create Pink if the OS used its yet-to-be-developed Power RISC chip. *Macworld* reviews Aldus FreeHand 2.0. AUGUST Specular's Infini-D 1.1 reviewed. ClarisWorks unleashed to wage war on

Microsoft Works – Bill Gates reported to sleep soundly. MacroMind updates Director 3.0, making it System 7 savvy. SEPTEMBER Editor Peter Worlock devotes whole page to launch of "amazing" Electronic Arts PGA Tour Golf. Productivity dives to record low in *Macworld* offices. Rumours of Word 5.0 go unnoticed. OCTOBER Apple and IBM sign the "Deal of the Century", to co-create RISC-based (PowerPC) machines and create two companies: Taligent, to develop a new object-oriented OS; and Kaleida, to "promote the exchange of sound, graphics, video, text and animation". Apple junks the massive Mac Portable for the innovative first PowerBooks (models 100/140/170). The Mac Classic II (16MHz 68030) is also released, costing from £1,145 – ouch! It's also 25 per cent slower than the ageing SE/30 – urgh! NOVEMBER Aldus and Adobe draw weapons, respectively shipping FreeHand 3.1 and Illustrator 3.2. Cunning clone-maker BlueMAQ unveils a £3,995 Ili system (25MHz 68030). Apple, meanwhile, adds the 25MHz 68040 Quadra to its Mac line-up: the Quadra 700 (£4,695); and the Quadra 900 that boasts a gigantic 160MB hard drive. *Macworld* begins its Mac Update section – later to evolve into the Star Ratings and current Buyers' Guide sections. DECEMBER Apple-subsiidiary Claris announces it is to enter the Windows market, with an OS/2 version of presentation package, Hollywood. Adobe unveils its Multiple Master font technology. *Macworld* adjudges Letraset's ColorStudio narrowly in front of Adobe Photoshop. What were we thinking?

1992

JANUARY Adobe unveils plan for a universal file-interchange format that will allow any documents to be viewed and edited, regardless of the application or the hardware platform used to create them. Code-named Carousel, the PostScript-based technology would later become Adobe's Portable Document Format (PDF). As busy as it is today, Adobe also launched its Premiere video/sound editor, having bought the program from SuperMac. Steve Jobs announces a version of NeXTstep that runs on an Intel 486 simultaneously with MS-DOS. NeXTWORLD Expo in

continues page 80

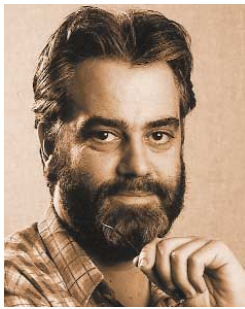
10 x 1990

Tech breakthrough: 68040 processor
Tech tack: Mac Ili – unique RAM & logic board
Soft'n'lovely: Adobe Photoshop 1.0
OS of choice: System 6.0.7
Upgrade: 20-inch 256 colour display = £3,295
Apple boss: John Sculley
Chip chase: 40MHz 68030
Apple legal: Xerox sues over Mac GUI
Dream machine: Mac Ili
Consumer Mac: Mac Classic



10 x 1991

Tech breakthrough: System 7
Tech tack: Pink OS
Soft'n'lovely: Specular Infini-D 1.1
OS of choice: System 7
Upgrade: Radius Rocket = £1,999
Apple boss: John Sculley
Chip chase: 25MHz 68040
Apple legal: Beatles settle for \$26.5 million
Dream machine: Quadra 900
Consumer Mac: Macintosh LC



10 years Peter Worlock

He was there at the very beginning
– well, nearly...

10-10 vision

Macworld is ten years old in the UK, said the editor. I suppose the idea was to cast my Olympian gaze back over the decade, offering up a few pearls of wisdom vis-a-vis the Macintosh, Steve Jobs, John Sculley, Gil Amelio, Steve Jobs again, QuickTime, CyberDog, OpenDoc, Newton and all the other fondly-remembered characters in the soap opera that has been Apple Computer.

I've been writing about Apple since 1983. The first cover of the very first computer magazine I ever worked on (the fondly-remembered *Personal Computer News*) featured the Lisa. The next year I bought my first Apple – a Macintosh 128 – and was introduced to the core experience of Apple ownership: vast outlays of money. The 512K upgrade, the £350 external floppy disk, the move up to a Mac Plus (1MB of RAM!) with external 20MB hard disk – £1,800 to you, squire. Oh yes, things were different when I were a lad.

When I took over the editorship of *Macworld* back in 1989 (my distinguished predecessor Ian Winter guided the magazine through its first three or four issues), desktop publishing was a new experience for everyone. We didn't even have Photoshop, and the workhorse DTP system of the day was a Mac II with 4MB RAM and an 80MB hard disk.

Those eighty megabytes was enough to hold all the applications (Word, XPress, FreeHand and Illustrator, and some I've now forgotten) plus the entire content of the magazine. Our preferred method of sending pages to the repro house was 800K floppies (1.4MB? Luxury!), and everything was archived to floppies, too.

It's difficult to remember now the excitement of cutting-edge technologies like 32MHz 68030 processors, 44MB SyQuest drives and those new-fangled 9,600bps modems.

Some things, though, remain the same. Word, XPress, FreeHand – and, of course, Photoshop – are the key magazine production tools. Everyone still hates Microsoft – although I've always liked Microsoft's applications, and still do despite the company's faults.

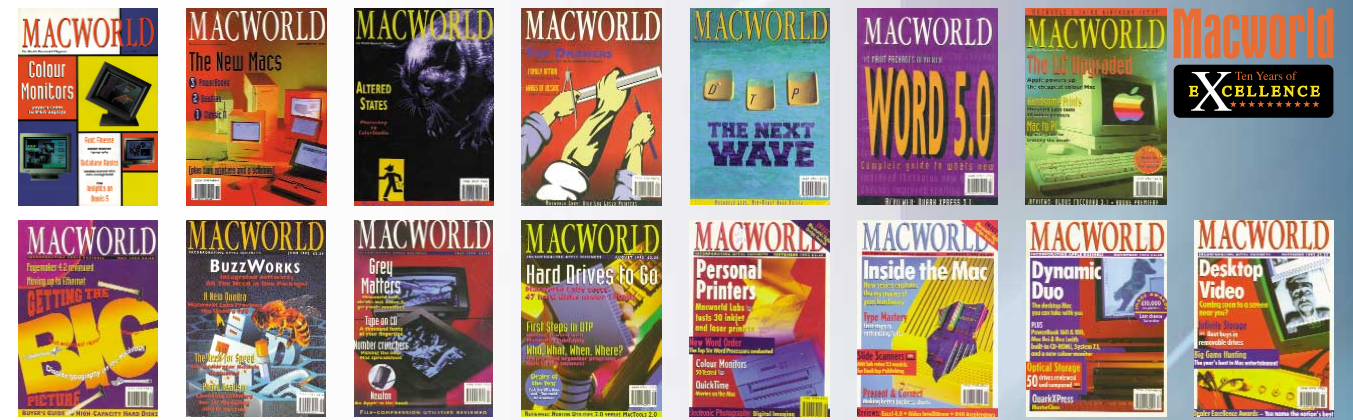
And then there's Apple. I've never been able to determine whether Apple's corporate culture and history is a reflection of the management, or whether the succession of managers simply inherits that culture, but the results are often ugly to behold. Too often in this past decade Apple has appeared as an arrogant, surly, ill-mannered adolescent, the corporate personification of Harry Enfield's Kevin. Grown-up companies use grown-up language: reliability, dependability, value-for-money, customer care. Apple's lexicon starts and stops with "Cool". Our computers are too expensive? Who cares – they're cool. The Newton doesn't work? But it's so cool. Or rather, sooooo kewl!!!!

Like all adolescents, when something goes wrong, it's always someone else's fault. Sorry sir, Bill Gates ate my homework. And like all adolescents, Apple has the attention span of a gnat. From the Newton to OpenDoc, from upmarket, tightly controlled AppleCentres to laissez-faire, anyone-and-his-mail-order-bride resellers (and back again), from corporate to consumer to education to creative marketplace (and round and round again) – this week's great Apple idea is next week's ancient history.

But – and here's the weird thing – despite all that, the company still manages to turn out some of the best computers in the industry. If I could only have one computer it would probably be a Mac (although it wouldn't be a Mac wearing a fruit-flavoured condom).

The company is now in remission from its near-death experience of 18 months ago, and has proved its naysayers wrong again (let the record note that I have never once veered from my belief that Apple would survive). But I want an Apple that can not only survive but thrive. In that spirit, I point Apple at the words of one of the world's leading gurus in management theory, *Match of the Day's* Alan Hansen: don't overstretch, keep it tight in defence, and do the simple things well. Concentration and execution are the watchwords. Thankfully, the company – under the newly mature Steve Jobs – appears to have learned at least some of those lessons.

It's been a fascinating ride for *Macworld* these last ten years, and for me during the last fifteen. So here's to the next decade. And if Apple could at some time in the next ten years deliver that modern, reliable, multitasking, memory-protected operating system it's been promising for the last decade, I for one would be happy to say, "About bloody time." **MW**



10 x 1992

Tech breakthrough: QuickTime

Tech tack: 21MB floptical drives

Soft'n'lovely: Brøderbund TypeStyler 2.0

OS of choice: System 7.0.1

Upgrade: 2GB hard drive = £3,250

Apple boss: John Sculley

Chip chase: 33MHz 68040

Apple legal : Apple loses bulk of Microsoft case

Dream machine: Quadra 950

Consumer Mac: Performa 600CD

San Francisco is cheekily held at the same time and in same city as Macworld Expo. **FEBRUARY** Apple ships QuickTime, and shocks world with plans to ship the multimedia technology to Windows. **MARCH** Microsoft introduces Windows 3.1. Besides a minor tweak to version 3.11, Windows remains untouched and unstoppable for three years. **APRIL** Apple ships the LC II (16MHz 68030), just in time for its first UK high-street presence at John Lewis department stores. Macworld Expo joins forces with the Which Computer? Show. **MAY** Microsoft ships Excel 4.0. Apple previews voice-recognition technology code-named Casper – yeah, it didn't stand a ghost of a chance. More significantly, Apple promises a Unix-like microkernel as a System 7 plug-in – dream on, guys... On top of this, two years before PowerPC, the company showed off a prototype RISC-based Mac running a Motorola 88000 processor. In a special oxymoron edition, *Macworld* comes with free *Apple Business* supplement, and a floppy disk packed with 1.4MB of goodies.

JUNE Apple unleashes the £5,695 Quadra 950 (33MHz 68040), pictured right. d2 shows off its first hard-drive cases designed by Philippe Starck. A £595 CD-ROM packed with 400 royalty-free images wows artists everywhere – it's called PhotoDisc.

JULY Apple unveils the Newton personal digital assistant, which uses an ARM RISC processor – see, we told you so. Claris ships FileMaker Pro 2.0 on Mac and Windows simultaneously.

AUGUST Radius launches RocketShare, its system for turning the Mac into a multi-processing computer. Apple strikes back at Microsoft with a new ad campaign: "Microsoft says they're 'making it easier'. We say they shouldn't have made it so hard in the first place". PowerBook 145 ships.

SEPTEMBER Arch-rivals SuperMac and Radius demo rivals Digital Film and VideoVision, respectively. Adobe premieres Premiere 2.0. Microsoft's Bill Gates and Apple CEO John Sculley share a stage to outline plans to work together on future technologies. Microsoft, for example, promises to incorporate QuickDraw GX in all its future products – *really*...

OCTOBER Apple signs Mac deal with high-street giants Dixons and Currys to sell the Classic, LC and PowerBook 100 but no Performas – which is especially annoying as the US-only (for now) Performa 600

includes an internal CD-ROM drive. The first Macworld Agfa Graphic Excellence (Image) Awards is announced. **NOVEMBER** Apple releases the chameleon PowerBook Duo (from £1,695), a portable that quickly becomes a desktop system via some nifty docking technology. The classic PowerBook 180 joins the team, as do the £1,575 Mac IIvi (16MHz 68030) and £2,225 IIvx (32MHz 68030). Multimedia company 21st Century Media offers a CD-burning service for under £250 per disc. **DECEMBER** Adobe announces Photoshop 2.5, which also ships on Windows for the first time. Quark announces upgrade of XPress to classic v3.2. Microsoft joins in the fun with also classic Word 5.1 upgrade. Proto-PDF technology emerges in Adobe's SuperATM. Apple wins coveted "Best of Comdex" awards for the PowerBook Duo and QuickTime 1.5 for Windows.

1993

JANUARY Apple lays out its plans for compatibility between its forthcoming IBM PowerPC machines and System 7. The company also releases its first colour printer – proudly naming it the Apple Color Printer. Aldus adds colour to PageMaker 5.0. **FEBRUARY** Coinciding with the shipment of the ten-millionth Mac, Apple makes its largest-ever product intro: Colour Classic; Centris 610, Centris 650; Mac LC III; PowerBook PB165c, pictured left; and Quadra 800. There's understandable outrage as Apple UK announces that the Colour Classic will be available only to educational customers. To calm people down, Apple at last releases its Performa consumer Macs in the UK. Steve Jobs lays off half his NeXT employees on "Black Tuesday", flogs his hardware line to Canon, and concentrates only on the NeXTStep OS for the Intel x86 platform. Adobe unveils its first Acrobat products – and names the underlying new technology, PDF. Iomega launches its "floppy-killer" 21MB Floptical disk drives for just £435.

APRIL The Floptical bandwagon gathers pace, with Silicon Graphics announcing it will use it instead of the old floppy standard – the very idea... Adobe introduces gradient fills and layers in Illustrator 5.0. Motorola ships the first 50MHz and 66MHz PowerPC 601, thus beginning the first generation of PowerPCs.

MAY Apple releases its first Workgroup Servers, and PowerCD – a consumerish CD-

continues page 83

10 x 1993

Tech breakthrough: PowerPC

Tech tack: Newton

Soft'n'lovely: Kai's PowerTools 1.0

OS of choice: System 7.1

Upgrade: 1-speed CD-R = £4,000

Apple boss: Michael "The Diesel" Spindler

Chip chase: 40MHz 68040

Apple legal : Did Apple copy its Newton logo?

Dream machine: Quadra 840 AV

Consumer Mac: Colour Classic





ROM/audio CD player. AppleScript makes quiet arrival. Avid's Media Suite Pro makes much noisier entrance.

JUNE Michael "The Diesel" Spindler replaces John Sculley as CEO of Apple. The Diesel later suffers so much stress that he is often found cowering under his desk at Apple HQ. Sculley – the man who sacked Steve Jobs eight years earlier – remains chairman, but his days are clearly numbered. Adobe, Microsoft, Quark and Aldus announce support for PowerPC.

JULY PowerBook 180c adds colour to the high-end portable. Macworld Lab tests dual-speed CD-ROM drives.

AUGUST Apple commits itself to licensing System 7 for use on Intel-based PCs as well as PowerPC systems. US reports suggest Compaq and Dell are due to release PowerPC-based Macs. Apple's Portable StyleWriter is "small enough to fit in a briefcase". Smaller still, the handheld Newton gets its first UK review in *Macworld*. QuickTime 1.6 can convert any audio CD track directly to a QuickTime movie. At Macworld Expo, Boston, Live Picture is launched to huge applause. The company perseveres with the innovative image-editing technology until March 1999.

SEPTEMBER Software developers, most notably Aldus and Adobe, show beta native-PowerPC versions of their applications. Claris retires MacDraw in favour of Claris Draw and Impact. We report that "hundreds" of developers are working on Newton software, but groan at £650 MessagePad price-tag. Apple gets audio-visual with new Quadra and Centris AV models. QMS launches "first colour laser printer". Quark finally ships long-announced XPress 3.2. Public – wisely – doesn't hold its breath for version 4.0.

OCTOBER IBM releases 50MHz, 66MHz, and 80MHz PowerPC 601, and an 80MHz 604. Sculley resigns from Apple. "System 7 Pro" announced, featuring PowerTalk and AppleScript. Wow – Apple unveils the Mac TV, a combination of LC III, colour telly and CD player. See picture right.

NOVEMBER Apple licenses PowerPC ROMs to DayStar Digital, so it can begin creating PPC upgrade cards. DayStar later becomes one of the first Mac OS licence holders, as well as top-dog in multiprocessing PowerPC Macs. Aldus FreeHand 4.0 released. Apple announces plans for DOS-compatible Mac, and shows off new FireWire connection technology – no date set for commercial release. We must wait over five years before

FireWire becomes a standard Mac port. **DECEMBER** Microsoft announces Word 6 – later reviled as worst software upgrade ever. Excel 5 better received. Apple releases PhotoFlash – a "low-cost competitor to Adobe Photoshop". Peter Worlock implores Adobe to release a DTP program to topple inadequate Quark and Aldus products. Adobe would later buy Aldus, but PageMaker's decline was unstoppable. Five and a half years after Worlock's plea, Adobe launches InDesign.

1994

JANUARY *Macworld* celebrates the tenth anniversary of the Macintosh with a 20-page special feature. Apple releases the 66MHz PowerPC Upgrade Card, the first commercial PowerPC product. It also unveils eWorld, a would-be but won't-be global online service. A record million Macs were sold in the previous quarter – but Apple saw profits drop to just \$40 million despite being named Number 1 computer maker in the US and leading manufacturer of sub-notebooks (US and Europe) with booming PowerBook Duo sales.

FEBRUARY Apple announces the Copland Project – a grand scheme to totally modernize the Mac OS. World begins long – and ultimately fruitless – wait for this "System 8". Thanks to blunders, delays and procrastination, Copland will eventually cost the company billions of dollars in wasteful R&D, lost market share and the destruction of all public confidence. Sly Stallone's 1997 movie of the same name is great, however.

MARCH Apple delivers the first Power Macs – 6100/60 (from £1,299), 7100/66 (£2,099), and 8100/80 (£3,977). Macworld Lab tests prove they run up to six times as fast as the old Quadra 800. Sensing a real threat, Intel buys big chunk of *Macworld*'s advertisement space. Software code written specifically to take advantage of the new processors is known as "native" – supplanting System 7 "savvy" buzzword. Digital cameras come to the world's attention, with Apple's cute QuickTake 100. The StyleWriter goes colour. *Macworld* coos over new flat-screen monitor technology. Claris loses its Resolve to compete with Microsoft's Excel spreadsheet.

APRIL Adobe Illustrator 5.5 is first big program to go PowerPC native. Finally taking notice of Worlock's DTP demands,

continues page 85

10 x 1994

Tech breakthrough: PCI

Tech tack: Apple eWorld

Soft'n'lovely: Mosaic Web browser

OS of choice: System 7.1.2

Upgrade: 1.4Kbps modem = £199

Apple boss: Michael "The Diesel" Spindler

Chip chase: 80MHz PowerPC 601

Apple legal: Bob Dylan & Carl Sagan sue Apple

Dream machine: Power Macintosh 8100/80

Consumer Mac: Macintosh LC 630





Adobe buys PageMaker and FreeHand owner Aldus. Graphics industry worries about the fate of "Adobe FreeHand", in light of Illustrator clash. Tektronix follows suit, snapping up rival printer-maker RasterOps. Apple unveils QuickTime 2.0 – with much-improved music support. Macromedia shows off Director 4.0.

MAY Macworld News proudly predicts "Gershwin and OpenDoc: the future of the Mac OS". Apple announces System 7.5 and AppleGuide technology. QuickDraw GX, however, fails to make the grade, suffering new delays. OpenDoc planned to usher in new order of itchy-bitsy applications. Getting somewhat ahead of itself, Apple promises Copland "next year", and super-duper microkernel-based Gershwin OS "sometime in 1996". Kaleida lays off 20 per cent of its employees. Adobe Premiere 4.0 next to go native. First PowerPC 604 units produced.

JUNE Apple releases System 7.5, and non-PowerPC PowerBook 500 series (from £1,650). Lotus withdraws from Mac market. **JULY** Adobe reveals native Photoshop 3.0, with new Layers palette. Microsoft releases Works 4.0. Arch rivals in the monitor and video-hardware markets, Radius and SuperMac announce merger.

AUGUST Epson releases first Color Stylus printer (£639). Macworld reveals poetic winner of its one-off limerick competition:

"A 660 8/80 AV
(80 MV HD + CD)
A 68040
SFR so sporty
But 04A PowerPC"

SEPTEMBER Apple licenses the Mac OS to Radius and Power Computing. Aldus/Adobe returns FreeHand to original developer Altsys – whose president vows to make the company "the best high-end graphics company in the world". QuickDraw GX announcement expected any month now.

OCTOBER QuickTime VR announced, and eventually ships – but world still waiting for a decent excuse to use it. No excuse needed to use marvellous Painter 3.0, but some red faces for those artists who chucked in Photoshop for Power Fauvre's xRes – later loudly bought but quietly suffocated by Macromedia. Macworld comes with free Publish supplement – extolling virtues of QuickDraw GX... hmm...

NOVEMBER Apple promises "new Mac interface" to fight off expected challenge of Microsoft's forthcoming Windows 95, and "aggressive 3D" strategy. LC range dumped for more Performas.

DECEMBER Apple, IBM and Motorola alliance (AIM) announces plans for a new PowerPC-based Common Hardware Reference Platform (CHRP) – also known as PReP and PPCP. Problems immediately surface with IBM unable to develop OS/2 for PowerPC and Motorola still grappling with its Windows NT for PowerPC. AIM does better with new 66MHz and 80MHz 603, and a 100MHz 604. Altsys merges with Macromedia. All-out war with Adobe now inevitable. Macworld announces end of NuBus with exclusive look at new PCI cards rumoured to replace the ageing slot standard. Apple again declines to announce FireWire arrival date.

1995

JANUARY The first three Mac clone makers officially revealed. Bright cloning future forecast. Apple and Bandai unveil Pippin game machine. Apple confirms arrival of PCI slots in future Macs. In meantime, Power Mac 6100/66, 66AV, and DOS Compatible, 7100/80 & 80AV enter scene, but Apple UK says no to PowerPC-based Performas. Macromedia shows off effects-crazy FreeHand 5.

FEBRUARY Apple stops making jokes about Microsoft's delayed Windows 95, as it announces own setbacks to Copland's arrival – blames PCI. IBM and Motorola introduce the 100MHz 603e, up to 30 per cent faster than a 603.

MARCH Apple sells millionth Power Mac, shows off QuickDraw 3D, but stalls on OpenDoc delivery – with 370 per cent increase on quarterly profits. It does, however, win partial victory in its lawsuit with Microsoft over "stolen" QuickTime code in Video for Windows. Apple alleges Microsoft threatened to drop Mac software development. Angry Bill Gates condemns Apple's "lack of candour and honesty". Pots and black kettles stunned into silence.

APRIL Quark joins with JVC to develop QuarkXposure "Photoshop killer". Adobe releases its first branded version of PageMaker (version 5.0). IBM releases 120MHz 601 PowerPC. Macworld interviews "bullish" Copland engineers.

MAY Quark ups ante again with planned Orion XTension that will allow XPress users to create interactive multimedia documents – this later becomes Quark Immedia. Macworld publisher IDG launches Mac Action magazine, covering "100% pure Macintosh entertainment".

continues page 86

10 x 1995

Tech breakthrough: Mac clones

Tech tack: Pippin

Soft'n'lovely: Netscape Navigator

OS of choice: System 7.5

Upgrade: Iomega Zip Drive = £159

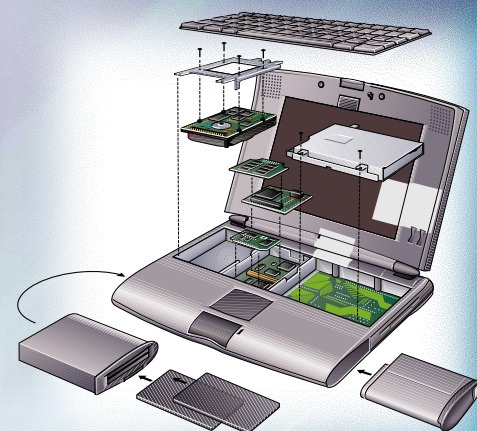
Apple boss: Michael "The Diesel" Spindler

Chip chase: 120MHz PowerPC 604

Apple legal: Microsoft "nicks" QuickTime code

Dream machine: Radius VideoVision workst'n

Consumer Mac: Power Macintosh 5300/100





10 x 1996

Tech breakthrough: PowerPC CHRP specs
Tech tack: QuickDraw GX
Soft'n'lovely: Kai's Power Goo
OS of choice: System 7.5.5
Upgrade: Epson Stylus Pro = £459
Apple boss: Gil "Transformation Man" Amelio
Chip chase: 200MHz PowerPC 604e
Apple legal : Microsoft "nicks" QuickTime code
Dream machine: Power Tower Pro 225
Consumer Mac: Power Macintosh 4400/160

JUNE Power Computing releases the first Mac clones, including the Power 100 (left). Apple fights back with 5200 and 6200 Power Macs, and the first PCI Mac, the Power Mac 9500/120. Apple posts third record quarter in a row, while rumours surface of a takeover bid by Canon. Apple boss Michael Spindler explains why no big name PC makers have licensed the Mac OS: "They don't want to get shot in the head". By Intel, he means... I think...

JULY Compatibility problems with System 7.5.1 begin to appear. Power Computing is first to offer Zip drive as internal option. Apple announces plans to drop SIMMs for DIMM memory chips. IBM begins producing high-end Mac clones for Radius. ClarisWorks 4.0 released. Quark announces plans for XPress 4.0 "this year". Adobe promises PageMaker 6.0 "this month". SyQuest unveils "Zip-killer" EZ drive.

AUGUST Apple enters strategic partnership with Netscape. The battle for next-generation CDs begins with Sony/Philips' HDCD vs Toshiba's DVD. Simon Jary becomes new editor of *Macworld*. Our special report asks "Is Apple really serious about clones?"

SEPTEMBER Apple ships second generation of Power Macs – 7200 (from £1,055), 7500 (£1,825) and 8500 (£3,529). Small Swiss company Quix ports the Mac OS to IBM's CHRP-based computer.

OCTOBER Apple releases first PowerPC-based PowerBooks. Product numbering hell begins in earnest with the new PowerBook 5300 sharing the same number as Apple's new Performa 5300 and Power Mac 5300. DayStar previews first multiprocessor Genesis Mac clones. Apple's director of Mac marketing, Michael Mace, says Windows 95 is "no threat", and will have no "measurable impact" on Mac OS sales. Ceneca launches first WYSIWYG Web editor, PageMill. System 7.5.2 released.

NOVEMBER Disaster as Apple recalls PowerBook 5300 – with the just-released portable's lithium-ion batteries exploding into flames. Apple clings on as second place PC maker behind Compaq. FreeHand 5.5 fights Illustrator 6.0. Apple R&D chief Dave Nagel claims Copland is only "two days behind schedule". AIM releases the CHRP specifications, expecting first systems in mid-1996.

DECEMBER Apple plans to ship Copland beta "next month". Adobe buys stake in mFactory – producing mTropolis rival to Macromedia's Director. Eventually, in 1997

mFactory is sold to Quark, which strangles it several months later. Macromedia, meanwhile, unveils Shockwave technology. Apple demonstrates a Power Mac with internal DVD drive. Former Apple chief technologist Jean-Louis Gasse launches dual-603 PowerPC BeBox. *Macworld* asks "Can Be inherit Apple's mantle?"

1996

JANUARY Power Computing unleashes PowerWave clones faster than any Power Mac. Apple gets jitters about clone policy. IBM, Sony and Hewlett-Packard rumoured to have made bids to buy Apple. More problems beset PowerBooks.

FEBRUARY Apple No.1 PC maker in US again, but, with margins down, expected to announce loss. Company sacks 1,300 staff – including CEO Michael Spindler. Gil Amelio – nicknamed the 'Transformation Man' – installed as new boss. Apple licenses the Mac OS to Motorola, allows authority to sublicense for the first time. Macromedia pitches image-editor xRes 2.0 against Photoshop. CHRP fears as IBM scraps OS/2 PowerPC support.

MARCH Quark announces delay to XPosure, but unveils Immedia. Apple says Copland may ship by "early 1997". CorelDraw joins Mac illustration-software battle. Apple releases CyberDog Web-access tool; but can't decide whether to dump ADB connection for Intel's forthcoming USB. Apple and Acorn form joint company Xemplar to carve up UK education market. Clone licensee Radius realizes terrible gamble on high-end clones only, and drops out in favour of Umax.

APRIL Apple celebrates its 20th birthday, announcing the 20th Anniversary Macintosh (left) to commemorate the occasion. IBM releases 166MHz and 180MHz 604e. Power Macs 8200 and 7600 arrive. Apple and Microsoft clash over 3D standards. System 7.5.3 tackles yet more bugs. Amelio promises Copland "soon". Umax ships its first Mac clone, the Pulsar.

JUNE Apple ponders releasing Windows NT server – signs Microsoft licence. Amelio admits no Copland "till 1997". Apple announces massive \$740 million loss for second quarter. QuickTime 2.5 released. Power Computing's PowerTower clones now fastest Macs. Apple left in dust...

JULY Apple licenses Mac OS to IBM. PowerPC 603e and 604e reach 200MHz. Apple reportedly working with IBM on Mac portable – later surfaces as lightweight

PowerBook 2400, which sadly never reaches UK. Adobe refocuses with range of new Web techs. Newton setback as PalmPilot debuts. Rumours abound of capability to run Windows apps in Copland. Nobody bothers to listen by this stage.

AUGUST Apple finally kills Copland Project. BeOS gets demo at Macworld Expo, Boston. IBM and Motorola demo CHRP prototypes. The third generation of PowerPC processors (G3) is announced. Apple releases multiprocessing Macs. Adobe announces Photoshop 4.0. FreeHand reaches 7, without even touching version 6. PageMaker gets to 6.5 – where it remains. Massive world crash in memory prices. Adaptec announces first FireWire card. MetaTools shows off PowerGoo face-wonker. Apple demos V-Twin technology, which sees light of day two years later as Mac OS 8.5's Sherlock search engine. PDF boost as Adobe releases Acrobat 3.0.

SEPTEMBER PowerTower Pro Mac clone "fastest desktop computer ever". Where is Apple in this speed race?, asks Apple.

OCTOBER System 7.5.5 is introduced. Motorola debuts StarMax clones; Umax shows off Apus. Apple junks the Duo. Amelio reassures Apple shareholders of company's financial "health". Browser wars heat up as Netscape clashes with Microsoft.

NOVEMBER Apple execs ponder whether to resurrect Copland technologies for the next-generation Mac OS or simply buy the BeOS. Apple shows off startling new eMate (right) educational portable – running Newton OS. Macworld Online (www.macworld.co.uk) launches on the Web.

DECEMBER Apple surprises everyone by buying Steve Jobs' NeXT for \$430 million. NeXTStep to form basis of next-generation Mac OS. CHRP plans in tatters as the development of Windows NT for PowerPC stops.

1997

JANUARY System 7.6 is released exactly 13 years after the introduction of the Mac. New OS strategy in place: Mac OS 8, Rhapsody, Allegro, and Sonata. More importantly, Steve Jobs "in place" as "part-time advisor" to Amelio.

FEBRUARY The PowerBook 3400 released as the fastest laptop in the world. 200MHz 7300/8600/9600 Power Macs fail to ship on time.

MARCH Bloodbath at Apple as Amelio wields executive axe – big cheeses cut alongside 4,000 Apple troops. Graphics

giants MetaTools and Fractal Design merge, later to swallow 3D company Specular and become MetaCreations. Director 6 released. Apple continues to resist calls to license Mac OS for portable clones. Still no sign of those Power Macs.

APRIL Apple loses another \$708 million. Oracle CEO and Jobs pal Larry Ellison makes \$1 billion bid for Apple. 20th Anniversary Macintosh finally introduced on Apple's 21st anniversary. No one killed in rush to buy this collectors' item. Those Power Macs now "due in May". Performa consumer brand scrapped. Mac OS 8 plans slip. OpenDoc and QuickDraw GX snuffed out. CyberDog put down.

MAY Adobe ships Illustrator 7. Apple previews QuickTime 3.0. Painter 5 released. Macworld Lab tests first PowerPC G3 chips. QuarkXPress 4.0 actually sighted.

JUNE Motorola introduces 350MHz Mach 5 604e. Apple plans Rhapsody for Intel chips. Apple spins out Newton into a separate subsidiary company.

JULY Apple losses unstoppable as another \$56 million flows away. President and CEO Gil Amelio (now, ironically, an advisor to an advanced profit-analysis software maker) and VP Ellen Hancock are forced to resign. Co-founder Steve Jobs back in control. Mac OS 8 is finally released. Selling 1.25 million copies in less than 2 weeks, it becomes the best-selling software in that period.

AUGUST Steve Jobs announces alliance with Microsoft at rowdy Macworld Expo keynote in Boston. Among the agreements are a cross-platform licence, \$150 million invested in Apple stocks, an undisclosed amount of money (rumoured to be \$800 million) for Apple to settle all patent disputes, the production of Microsoft Office for five years, and MS Internet Explorer as the default browser for the Mac OS. Several Apple board members – including founding chairman Mike Markkula who OK'd Sculley's sacking of Jobs in 1985 – are out; Larry Ellison is in. Motorola previews G3-based StarMax 6000 clone – the first CHRP Mac, and way faster than anything Apple has to offer.

SEPTEMBER Apple releases Power Mac 604e-based 9600/350; buys Power Computing's licence and core assets, and halts all CHRP licensing. Motorola flees Mac-clone market altogether. IBM soon does the same. Jobs becomes "interim CEO" of Apple, and remains so to this day.

OCTOBER Heads roll as old Apple execs

continues page 88



10 x 1997

Tech breakthrough: PowerPC G3 processor
Tech tack: Syquest SyJet
Soft'n'lovely: Macromedia Director 6
OS of choice: Mac OS 8
Upgrade: 128MB RAM = £500
Apple boss: Steve Jobs
Chip chase: 266MHz PowerPC G3
Apple legal : Microsoft gives millions instead
Dream machine: Power Macintosh G3 266
Consumer Mac: Apple Creative Studio



10 x 1998

Tech breakthrough: Mac OS X

Tech tack: Java

Soft'n'lovely: Microsoft Office 98

OS of choice: Mac OS 8

Upgrade: Home ISDN = £200

Apple boss: Steve Jobs

Chip chase: 350MHz PowerPC G3

Apple legal: Apple attends Microsoft DOJ trial

Dream machine: Power Macintosh G3/300

Consumer Mac: iMac



sacked. Newton back as Apple product. Jobs launches 'Think Different' ad campaign. XPress 4.0 starts shipping. Macromedia announces Dreamweaver Web editor. Adobe knives Persuasion in face of massive PowerPoint lead by Microsoft. **NOVEMBER** G3 Power Macs and PowerBooks introduced. Apple Store opens in US. DayStar pulls out of clone market. **DECEMBER** Larry Ellison claims Apple is building a new type of Mac that is bootable from a network – the iMac will later have this capability.

1998

JANUARY Jobs announces a projected \$47 million profit for the first quarter, finally bringing Apple back to profitability. Power Computing goes out of business. Adobe announces plans for a "Quark killer" DTP tool. Macromedia announces FreeHand 8. Claris bites the dust as Apple spins off FileMaker Inc. Microsoft Office 98 takes Macworld Expo, San Francisco, by storm. **FEBRUARY** All Newton products – including MessagePad and eMate – are handed notice. Bandai stops playing with @World (Pippin) consoles. IBM shows off a 1.1GHz PowerPC processor. Customer anger as Apple pulls plug on planned Power Express Macs – leaving only three-PCI-slot Macs. **MARCH** Adobe previews Photoshop 5.0. Rumours of Mac-based eMate surface. Apple attacks Intel with series of TV ads lampooning Pentium. Mac OS 8.1 and QuickTime 3.0 ship. GoLive's CyberStudio rivals Macromedia's Dreamweaver. **APRIL** Apple releases flat-screen Studio Display. G3 hits 300MHz. Adobe and Macromedia square up with ImageReady and Fireworks Web-graphics tools. **MAY** Steve Jobs shatters deafening silence on company direction by unveiling the translucent-blue joys of the iMac. World hushed in awe. Floppy-drive fans agast. Rhapsody plan becomes Mac OS X. As Adobe is showing off Premiere 5.0, Apple acquires rival Final Cut video-editing software from Macromedia. New-style (Wall Street) G3 PowerBooks ship. Umax last to exit Mac-clone business. Motorola develops AltiVec multimedia add-ons for future PowerPCs. **JUNE** Web-based Apple Store opens in UK. Macromedia and Adobe clash over vector formats. Nasty Worm virus attacks Macs. **JULY** Apple announces \$101 million quarterly profit. Tomb Raider's Lara Croft a busy hit at Macworld Expo, New York.

Adobe catches FreeHand with Illustrator 8. Apple prunes once-great Imaging Division to one product, the LaserWriter 8500. Motorola releases 333, 366, and 400MHz G3 chips. US government accuses Microsoft of threatening to exterminate QuickTime. **AUGUST** The iMac, Apple's bloomin' marvellous Bondi-blue box, is released in the US, becoming the fastest selling computer in Apple history. It sells 300,000 in its first six weeks. ADB is out – USB is in. Apple goes over \$40 a share, its highest stock-market price in three years. **SEPTEMBER** The iMac ships in the UK. Radius, renamed Digital Origin, bails out of the hardware business. Quark tries to buy Adobe – unrealistic bid spurned. **OCTOBER** Adobe hits back by previewing its new DTP tool – with plans for a June 1999 release as InDesign. Apple announces its first profitable year (\$309 million) since 1995; and promptly pulls out of UK's Apple Expo. Mac OS 8.5 is released – even some Copland features appear, four years after first being announced. Motorola releases specs for PowerPC G4. **NOVEMBER** Apple and Microsoft clash in court over QuickTime and MS Office. Former storage giant SyQuest erased. **DECEMBER** iMac tops US desktop PC sales. Macromedia announces Director 7 and Dreamweaver 2.

1999

JANUARY iMac buzz adds fresh impetus to Macworld Expo, SF, and \$152 million quarterly profits. 266MHz iMacs released in five fruit flavours. Apple's demand for FireWire royalties from hardware makers causes stink. Adobe buys CyberStudio and releases it as GoLive 4.0. Apple buys out Acorn share to take over Xemplar. **FEBRUARY** Apple unveils new blue-&-white G3 Power Macs up to 400MHz, with USB and FireWire ports – significantly cheaper than old 16MHz Mac IIcx ten years previously (see 1989). Corel rumoured to be considering bid for Adobe. **MARCH** Adobe unveils InDesign. Microsoft pulls ahead of Netscape in browser war. Apple announces key parts of Mac OS X will be open source. Apple rumoured to have pulled out of imaging market altogether – farewell then, LaserWriter. **APRIL** Under-fire Microsoft still won't be pinned down on release date for Windows 2000. Apple future assured – even rosy. Another rollercoaster 10 years expected – hold on.

MW



Flat-out layout

Adobe's InDesign re-ignites the DTP race with XPress.
By David Blatner

IF YOU'RE A PROFESSIONAL PUBLISHER OR DESIGNER, CHANCES are you put food on your table by using QuarkXPress, Adobe Photoshop, and perhaps Adobe Illustrator. For quite a while, Adobe has wished you'd switch to an all-Adobe diet, but the company's page-layout program, Page-Maker, has failed to attract high-end publishers. That may be about to change. Macworld got a chance to work with a pre-release version of Adobe Systems' (www.adobe.com) newest and brightest hope for taking back the page-layout crown.

CHRISTINA READ

continues page 92

The program – code-named K2 and now known officially as Adobe InDesign – will ship this summer with an estimated street price of £299. From what we saw, InDesign promises to at least give professional publishers pause to think, and may offer them a real alternative to QuarkXPress for the first time in years.

First impressions

Let's get one thing straight: InDesign is not an upgrade to PageMaker. Adobe will release PageMaker 6.5 Plus this summer at an estimated street price of £299. This refocused application will be chock-full of wizards, templates, and clip art and will be aimed at the (mostly Windows) business and consumer markets.

So what is InDesign? Well, it's a brand-new page-layout program, built from the ground up. (Notably, it will work only with Mac OS 8.5 and later, to some users' chagrin).

The first thing you'll notice is that this is clearly an Adobe program – from the familiar Navigator palette to the layout of the Tool palette (see the screen shot "The InDesign world"). As you look more closely, though, you'll also observe elements of PageMaker and QuarkXPress, with a strong dash of Illustrator too.

Some PageMaker traits are absent. For example, you lay out InDesign pages much as you do QuarkXPress designs, on a large

pasteboard. InDesign's Control palette – command central for making changes to items on your page – is broken down into three palettes: Transform, Character, and Paragraph. It also lacks PageMaker's ability to alter every setting in the palette using keystrokes (although it contains more settings than the one in QuarkXPress). PageMaker's long-document features such as indexing are also missing.

InDesign does appear to have some of the flexibility that PageMaker users have always crowed about. For example, the program lets you place text and graphics on the page with or without drawing a frame first. Still the big news is not how similar this program will be to PageMaker but how it might meet, or exceed, the features designers have come to know in QuarkXPress.

It's the little things

InDesign doesn't introduce many new big-and-flashy features to desktop publishers. Where it appears to shine is in attention to small but important features, removing many of the frustrations that have long plagued users of both PageMaker and QuarkXPress. (For a more complete list, see the sidebar "Ten great features").

Timesaving touches A simple example of InDesign's attention to detail is the program's unlimited number of undo's, which will free you to experiment with designs as you can in many other apps.

Similarly, InDesign lifts some other barriers that QuarkXPress users have learned to work around, such as the inability to anchor a box outside a column of text or to move a box past the edge of the pasteboard. InDesign will even spare you the hassle of having to choose whether a frame is for a text block or a picture: frames are always generic until you put something in them.

A tamer of troublesome text InDesign's text features will appeal to designers and production people tired of the drudgery of manual copy-fitting and kerning. The Multi-line Composer feature can calculate hyphenation and justification settings by examining an entire paragraph (or as many lines as you specify), instead of just a single line, to create better-looking text (see the screen shot "Better-set type"). In the process, it notably reduces the amount of manual tweaking necessary and will be especially helpful if you're trying to avoid multiple word breaks in a design with awkward text wraps. Similarly, the program's Optical Kerning feature does its best to find optimal character spacing, even if you've mixed different type sizes and faces. The program's text-linking features are also quite well designed (see the screen shot "New linking scheme").

A clear view Taking a cue from Photoshop, InDesign will offer one feature that will probably become a favourite of many desktop publishers: the ability to open multiple views of a document. This means that you'll be able to zoom in on some type you're formatting in one window while seeing how your changes affect the page design as a whole in another window.

A whole new approach

You can't really see the most revolutionary aspect of InDesign, a feature of the program that ensures its future competitive potential: it's almost completely modular. That means most of the tools and features will be based on plug-ins and shared libraries. At first glance this is pretty dull news, but it has several important effects.

Powerful plug-in possibilities Third-party plug-in developers will have an unheard-of amount of power to create new features and change existing ones. Don't like the InDesign interface? Change it. Need to connect the program to a mainframe database? No problem. Have your own proprietary hyphenation schemes? Great – plug 'em in. In fact, many QuarkXPress XTension developers have already started developing for InDesign, including Extensis, a lowly apprentice production, and Em Software.

Quick fixes Adobe will be able to update existing features (and eradicate the inevitable bugs) quickly. You'll even be able to set a built-in preference in InDesign to check periodically for new updates on Adobe's Web site and download them automatically.

Supremely scriptable Just about everything in the program can be automated with AppleScript (on a Mac) or Visual Basic (in Windows). The ability to automate tedious and complicated tasks in QuarkXPress has long been one of the program's key advantages for professional users.

The big switch

All of this sounds great, but the real question is, will QuarkXPress users make the switch? Adobe certainly is going to try to make the process as painless as possible.

Familiar surroundings As a longtime QuarkXPress user, I was immediately pleased by InDesign's customizable keyboard shortcuts. The product will ship with a complete set of shortcuts that match the ones in QuarkXPress, making the transition between applications much less time-consuming. Similarly, many of InDesign's dialogue boxes and menu items will be comfortably familiar to QuarkXPress stalwarts.

Perhaps most importantly, InDesign will be able to open QuarkXPress documents (from versions 3.3 and 4.0) and retain the majority of the documents' formatting, so you won't have to re-create your templates from scratch. Of course, it's still too early to tell just how well the program will do the conversions.

Potential pitfalls On the other hand, some of InDesign's features may be confusing to QuarkXPress users. In general, the program's illustration features appear to be similar to those in QuarkXPress 4.0, with the important exceptions that you won't be able to put text on a path and there are only basic merge features for

continues page 95

Ten great features

1 EPS display You will be able to magnify an EPS file and see its contents instead of viewing only an inexact bitmapped preview. (In fact, you won't even need to save previews with EPS files anymore, which means smaller files.)

2 Typographic controls InDesign will be able to apply hyphenation and justification based on a whole paragraph rather than just line by line. Plus, optical kerning and optical margin alignment (even better than hung punctuation) will help you create great-looking type.

3 Character styles The ability to apply styles at the character level is quite powerful. QuarkXPress 4.0 lets you do this, but in some ways InDesign will offer greater control.

4 Bézier paths Although drawing bézier curves for lines and frames is fun, the ability to copy or drag paths from Illustrator and then edit them is truly useful. InDesign will also recognize embedded clipping paths in images or create them on the fly.

5 PDF Support The rumour that InDesign's internal file format would be Adobe's Portable Document Format (PDF) isn't true. Nonetheless, InDesign will offer extensive support for PDF, including the ability to read and write files without the help of Acrobat Distiller. This is great if you need to place PDF files in your document or do minor edits, but don't expect to reconstruct an entire PDF document.

6 Language support InDesign will ship with dictionaries and hyphenation rules for most European languages and will even be able to set the language for a single word in a paragraph. In addition, it will be Unicode compliant, so you can open files from the Japanese version of InDesign (although you won't be able to edit the text fully).

7 Nesting objects You will be able to paste a rectangular text box inside an oval frame, place that group inside some text that has been converted to paths, and then still go back and edit the original text or text box with the direct-select arrow tool.

8 Guides and grids You will be able to quickly build a grid of guides on your page, or even place or position a single guide numerically.

9 Consistent imaging model Because Adobe is building the same imaging model into all its programs, you should get significantly more-consistent colour and screen display among Illustrator, Photoshop, and InDesign. You will also be able to place Illustrator and Photoshop files in your documents without first saving them as EPS or TIFF files.

10 Better master pages You will be able to quickly turn a document page into a master page, and even build master pages that are based on other master pages (so a change on one master page can ripple through several others).

The InDesign world

New tools

InDesign's Tool palette includes many tools familiar to Illustrator users, including the Bézier pen tool, the scale and rotate tools, and the direct-select tool (the tool that looks like a hollow arrow).

Easy-access

stroke and fill QuarkXPress users may think it odd that there are Fill and Stroke boxes in the main Tool palette (this program is for page-layout, not drawing, right?), but Illustrator users will appreciate the easy access.

Multiple document views

InDesign lets you open multiple views of the same document so that you can, for example, keep track of how changes to one page affect the document as a whole.

Innovative page possibilities

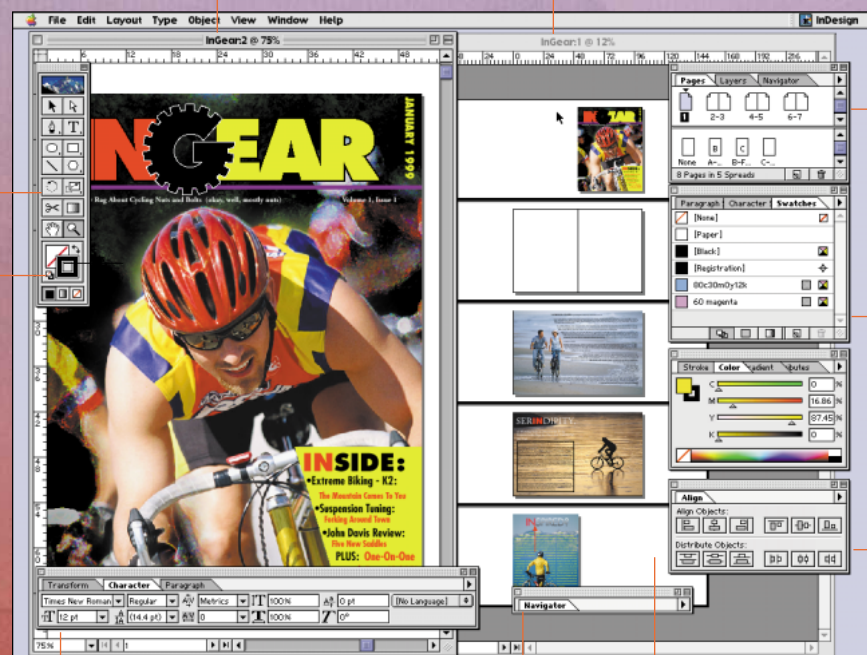
The Pages palette is similar to QuarkXPress's Document Layout palette, but includes several innovative features. For instance, you can base one master page on another.

Quick colour application

Easily seen and understood icons in the Swatches palette make for swift decisions when applying colours.

Elegant alignment

The Align palette offers you an intuitive way to align objects in your design. This is a step up from QuarkXPress's ugly modal dialogue box.



Customizable control

The Control palette can be split into three parts that you can view vertically – if you prefer your palettes tall instead of wide.

Familiar territory

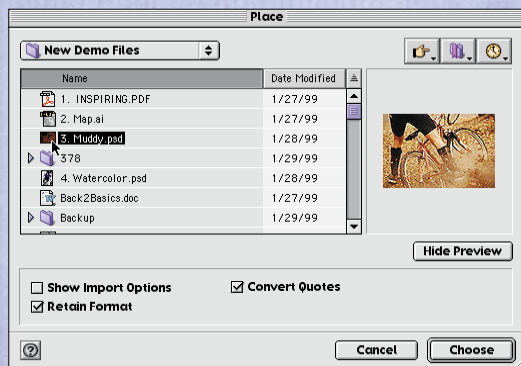
InDesign looks a lot like other Adobe products, from the familiar Navigator palette to the Layers palette. With more than 17 palettes, it's also fortunate that you can dock and minimize them (as shown here).

A plentiful pasteboard

InDesign's pasteboard is virtually identical to QuarkXPress's, but it doesn't have the same space constraints.

Little steps, big pay-off

There's not enough space in this article to describe all the features that will be in the upcoming InDesign, but here's some extras that might make a difference to you.

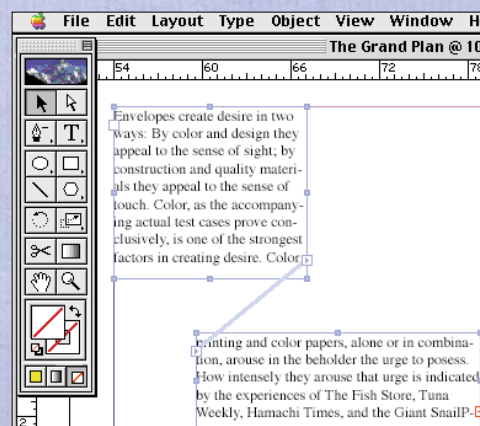


File-type freedom

Gone are the days of converting all your images to TIFF and EPS before placing them. InDesign can accept native Illustrator, PDF, and Photoshop files. (Layers automatically get flattened in Photoshop files). You can even do low-level editing of Illustrator and PDF files within the program.

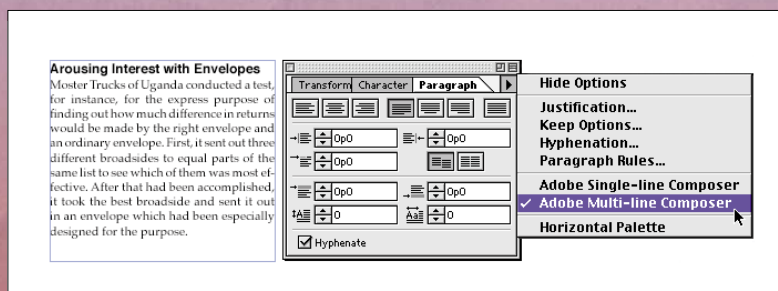
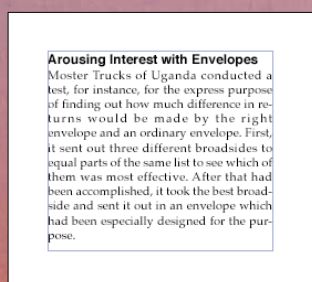
Artistic bonuses

You can apply a gradient to text without losing the ability to edit that text freely – you can even edit Bézier points in your drawing files.



New linking scheme

InDesign's elegant text-linking feature gives you quick feedback about which way your text is flowing by assigning each text frame an "in-box" and "out-box".



Better-set type

In the Before shot (left) InDesign calculated line breaks in the traditional way – by applying settings one line at a time – with mediocre results. In the After shot (right) the Multi-line Composer considered different line-break schemes across multiple lines to get better-looking justified type.

combining multiple paths. But some of the ways these features are implemented may trip up Illustrator-ignorant users.

For example, there are Stroke and Fill boxes in the main Tool palette, which will make little sense to some people since this is a page-layout program. The version we looked at also defined and applied colours in a way that will be unfamiliar to people who live and breathe QuarkXPress. For instance, the current beta version of InDesign doesn't support the building of multi-ink colours (inks that are a combination of other spot-colour inks), an easy task in QuarkXPress.

The last word

If you've worked in publishing for a while, you remember when PageMaker and QuarkXPress would periodically leapfrog each other

in features and usability. Those were exciting days when we all had a lot to look forward to each time a new version hit the shelves.

It doesn't look like InDesign 1.0 will represent a quantum leap over QuarkXPress 4.0 when it ships, but the program will offer some exciting new features that will raise the bar for page-layout pros. Multiple undo's, the ability to display high-resolution vector EPS graphics at any magnification, and powerful typographic controls will whet the appetite of PageMaker and XPress users alike.

We'll have to wait for the review to see who will be victorious, but one thing is definitely clear – this summer, Adobe will be right back in the fight.

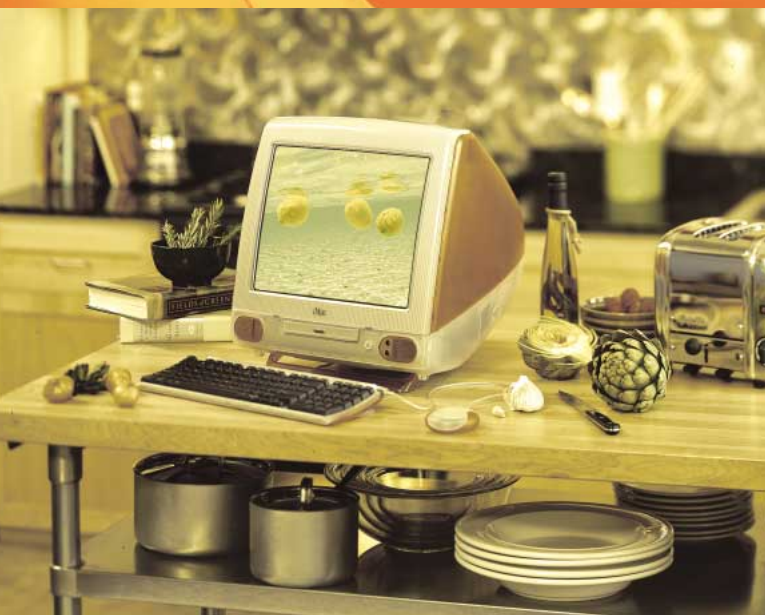
David Blatner is the author of *The QuarkXPress 4 Book* (Peachpit Press, 1998) and co-author of *Real World Photoshop 5* (Peachpit Press, 1999).

Your perfect

Mac

No matter what your needs there's a Mac system that's right for you.

By Christopher Breen



A YEAR AGO, MACINTOSH USERS HAD STOPPED

asking the age-old question “Which Mac should I buy?” and instead wondered whether their next computer should be a Mac at all. Given Apple’s uncertain future and the power of the seemingly unstoppable Wintel juggernaut, you could hardly blame people for cocking an inquiring eye at the Windows platform.

But that’s all changed now.

With the exception of the eagerly anticipated consumer portable, Apple has provided configurations to accommodate just about every type of user. Whether you’re a publishing maven, mobile or office-bound professional, hobbyist, or die-hard gamer, there’s an ideal Mac for you out there.

So after gathering every shipping Mac and putting

them through their paces in the Macworld Lab (see the benchmark “A Mac for all seasons”), we pulled in our resident know-it-alls – techies, artists, and editors with vast experience in publishing, multimedia, office productivity, and entertainment media – to offer essential advice for finding the best Macs, peripherals, and software for four different profiles: multimedia and publishing gurus, business professionals, home users, and die-hard Mac gamers and enthusiasts.

Each section provides the best core products to help get you started, along with a wish list of awesome extras. Browse among our suggestions and pick those products best suited to the way you work and play. (Prices given are manufacturers’ list prices unless otherwise noted).

continues page 98



Business



Although the rest of the computing world seems to cry out with a rebel yell for more, more, more – more-powerful CPUs, more hard-drive space, more PCI slots – typical business applications don't require the kind of power demanded by multimedia, graphics, and entertainment programs. Most business users will find that a Power Macintosh G3/300 provides plenty of computing muscle at a reasonable price.



The basics

Display Apple Studio Display 17-inch (£319; Apple, 0870 600 6010); Mitsubishi 19-inch 900u (£475; Mitsubishi, 0800 731 1222). Bright, clear, and large enough screens for all but the most demanding users.

Mouse Kensington Mouse-in-a-box (£24.95; MacZone, 0800 393 696). Eschew the round mouse and go with this comfortable plain grey model.

Printer Hewlett-Packard HP LaserJet 4000N (£986; HP, 0990 474747). At 17 pages per minute, this networkable printer is both fast and affordable.

Internet Connection Corporate Ethernet, ISDN. If you expect your business to be on the move, your Internet connection should be as well – a 56K modem is too slow for your needs.

Network Sonic Systems SonicWall for ten users (£476; Gomark, 0171 731 7930). Keep peeping creeps out of your network with these security appliances.

Software Microsoft Office 98 (£374; Microsoft, 0345 002 000); FileMaker Pro 4.1 database (£169; FileMaker, 0845 603 910); Microsoft Outlook Express (included). Everyone who's anyone in business uses Word and Excel, FileMaker is a great database application, and Outlook is a free and reasonably capable email client.



SYSTEM SPECS
Power Macintosh G/300,
512K cache, 64MB of RAM,
6GB Ultra ATA hard drive,
24x CD-ROM. £1,069

Wish list

Software Adobe GoLive 4.0 Web-page design software (£119 introductory offer; Adobe, 0181 606 4001); Chronos Consultant 2.53 organizer (£50; Softline, 01372 726 333); Netopia Timbuktu Pro 4.8 twin-pack remote-control software (£149; Principal, 01756 704 000).

SCSI Card Adaptec 2906 SCSI Card (£49; Adaptec, 01276 854 50). There's no need to retire old SCSI peripherals.

Digital Camera Kodak DC260 (£595; Kodak, 0800 281 487). Consider the DC260, for its picture quality and good controls, or its soon-to-be released successor, the DC265.

Scanner Umax Astra 1220U (£99; IMC, 01344 871 329). It's cheap and provides decent-quality scans.

Your perfect Mac

Portable

When your work isn't confined to the office, consider a powerful on-the-go partner – a G3-based PowerBook. Today's PowerBooks have nearly everything you need in one convenient package: a fast modem; a CD-ROM drive; and, of course, a display, keyboard, and pointing device. For a mighty PowerBook that can also double as a desktop computer, the right Mac for the job is the PowerBook G3/266.



Your perfect Mac

The basics

Display Included.

Mouse Included.

Printer Hewlett-Packard HP DeskJet 340 (£208; HP, 0800 281 487). On occasion, you must print while on the road. This portable printer is small enough to take along with you.

Additional Storage Expansion bay, floppy drive from Apple (£69; Apple, 0870 600 6010)

Software Microsoft Office 98 (£374; Microsoft, 0345 002 000); FileMaker Pro 4.1 database (£169; FileMaker, 0845 603 910); Microsoft Outlook Express (included).



SYSTEM SPECS
PowerBook G3/266
1MB cache, 64MB of RAM,
4GB hard-drive, 20x CD,
56Kbps modem. £1,849

Wish list

Software Chronos Consultant 2.53 organizer (£49.99; Softline, 01372 726 333)

Dock Newer Technology BookEndz (£155; IMC, 01344 871 329). Connect to your desktop peripherals in a jiffy with this PowerBook dock.

Digital Camera Agfa ePhoto 1680 (\$899; 978/658-5600, www.agfa.com).

Display Apple Studio Display flat panel (£699; Apple 0870 600 6010). A PowerBook screen is fine for the road, but at your desk you'll appreciate this larger, crisp display.

Laptop Road Tools CoolPad (£14.99; Teleadapt, 0181 233 3000). This pivoting plastic pad provides a cooling airspace for your PowerBook as well as plastic feet that really grip a rickety airplane tray table.

Headphones Sony MDR-G61 (around £25).

Batteries An extra battery from Apple Computer (£139).

continues page 100

Enthusiast

For true enthusiasts, your Mac is a source of both pride and entertainment. Although you know the value of a pound, expense is a secondary consideration. You want a fast computer such as the 350MHz Power Mac G3: loads of memory, and tons of toys. You'll outfit your system with any device that will give you

amusement – a DVD player, high-fidelity speakers, a digital camera, several game controllers, and plenty of games to boot. Face it, you're a gear-head and damned proud of it.



The basics

RAM Upgrade to 128MB (approximately £70).

Display Apple Studio Display 17-inch (£319; Apple, 0870 600 6010). An inexpensive monitor that's plenty big enough for gaming and crafting cool Web sites.

Keyboard Macally iKey keyboard USB (£39.95; Macintosh Accessory Centre, 0191 296 1500). The bundled Apple keyboard's arrow keys are far too small for computer gaming. Try this one instead.

Mouse Kensington Thinking Mouse (£54.95 MacZone, 0800 393 696); Macally iMousePro (£24.95; Macintosh Accessory Centre, 0191 2961500).

Face it – with contextual menus you need a mouse with more than one button.

Printer Epson Stylus Color 740 (£193; Epson, 01442 261 144).

An affordable USB printer that produces glorious results with the right kind of paper.

Internet Connection ISDN. If you expect to compete in online games of Myth II, you'll need a fast Internet connection.

Software Microsoft Office 98 (£374; Microsoft, 0345 002 000); FileMaker Home Page 3.0 (£70; FileMaker, 0845 603 910).

Suggested Games MacSoft's Unreal (£34; Softline, 01372 726 333); Aspyr Media's Tomb Raider II (£38; Softline); Bungie Software's Myth II: Soulblighter (£34; Softline); Blizzard Entertainment's Starcraft (£34; Softline).



Your perfect Mac



SYSTEM SPECS

Power Macintosh

G3/350 DVD

1MB cache, 64MB of RAM,

6GB Ultra ATA hard drive,

5x DVD player. £1,349

Wish list

Speakers Sonigistix's Monsoon MM-1000 Multimedia Speaker System (£169; Boston, 01923 699 399). These speakers provide crystal-clear sound and look hip as hell.

Game controllers CH Products Gamestick 3D (£42.54; Softline, 01372 726 333); Gravis GamePad Pro (£32 Macintosh Accessory Centre, 0191 296 1500).

SCSI Card Apple Ultra SCSI (\$49).

Scanner Umax Astra 1220U (£99; IMC, 01344 871 329).

CD-Rewritable Drive La Cie 4-x-4-x-16 CD-RW drive (£329; 0171 872 8000). Cool cats cut their own CDs. Plus, it's useful for backing up.

Digital Camera Kodak DC260 (£595; Kodak, 0800 281 487).

continues page 102

Home

A Mac at home needn't be terribly expensive – but it should be easy to set up and maintain, compact, and powerful enough to handle whatever you throw at it. That means the family finances, the kids' favourite art program and, of course, just about any game you care to play. Since you don't need a machine that's going to drain your bank account or one that requires an enormous initial outlay of funds for software, consider the affordable and versatile iMac.



The basics

RAM Upgrade to 64MB (approximately £50).

Display Included.

Keyboard Included.

Mouse Macally iMousePro (£24.95; Macintosh Accessory Centre, 0191 296 1500). Ditch the iMac mouse.

Printer Epson Stylus Color 740 (£193; Epson, 01442 261 144). Get great colour prints at a low price.

SYSTEM SPECS
iMac 266MHz
512K cache,
32MB of RAM,
6GB hard drive,
24x CD-ROM
£779

Your perfect Mac

Wish list

Floppy Drive Newer Technology uDrive (£84; IMC, 01344 871 329). Those floppies are still handy to have around.

Speakers Cozo (£69.95; Enosis, 0181 309 6446).

Game Controllers CH Products Gamestick 3D (£42.54; Softline, 01372 726 333); Gravis GamePad Pro (£32 Macintosh Accessory Centre, 0191 296 1500).

Encyclopædia Britannica reference CD-ROM (£99; Acclaim, 0800 282 433).

Suggested Games MacSoft's Unreal (£34; Softline, 01372 726 333); Aspyr Media's Tomb Raider II (£38; Softline, 01372 726 333);

Bungie Software's Myth II: Soulblighter (£34; Softline, 01372 726 333); Blizzard Entertainment's Starcraft (£34; Softline, 01372 726 333).

Scanner Umax Astra 1220U (£99; IMC, 01344 871 329) A fine scanner for putting pictures on the Web, in your email, or in electronic holiday cards.

Digital Camera Canon PowerShot A5 (£549; Canon, 0121 666 6262). An easy-to-use camera that takes perfectly reasonable pictures, without any trips to the chemist.

USB Removable Storage Card Newer Technology uFlash (£79; IMC, 01344 871 329). An essential card for the Canon non-USB digital camera.

Creative arts

Multimedia and publishing gurus – who work with digital video and/or audio on a daily basis – understand that budget takes a backseat to the practical need for a powerful processor and fast storage. Because Adobe Photoshop can take a long time to render complex images on a slow computer, you'll be happiest with nothing less than the top of the line – the 400MHz Power Macintosh G3. And although FireWire's promise is bright, a slew of SCSI peripherals will benefit from this Mac's Ultra SCSI II PCI card (see the sidebar "Maintaining a legacy").



Your perfect Mac

The basics

RAM Upgrade to 1GB (approximately £2,400).

Display Apple Studio Display 21-Inch (£939; Apple, 0870 600 6010)

Keyboard Macally iKey keyboard USB (£39.95; Macintosh Accessory Centre, 0191 296 1500).

Mouse Kensington Thinking Mouse (£54.95 MacZone, 0800 393 696); Kensington Orbit trackball (£44.95)

Printer Epson Stylus Color 900N (£591; Epson, 0800 220 546). Prints on a variety of papers, including card stock.

Internet Connection ISDN.

SYSTEM SPECS

Power Macintosh G3/400
1MB cache, 128MB of RAM,
9GB Ultra II SCSI hard drive
with SCSI card,
24x CD-ROM.
£2,029

Wish list

CD-Rewritable Drive La Cie 4x4x16 CD-RW drive (£329; 0171 872 8000). Multimedia users will appreciate the ability to cut custom CDs for clients, and graphics users will like the inexpensive storage.

Graphics Tablet Wacom Intuos (£129; CU, 0181 358 5857).

Second Display Apple Studio Display flat panel (£699). What better place to view the countless QuarkXPress, Photoshop, and Adobe Premiere palettes?

Digital Camera Canon PowerShot Pro 70 (£999; Canon, 0121 666 6262). Top-quality professional digital camera.

Speakers Sonigistix's Monsoon MM-1000 Multimedia Speaker System (£169; Boston, 01923 699 399).

Scanner Umax PowerLook 3000 (£3995; IMC, 01344 871 329).

Software Adobe Premiere 5.1 video-editing software (£449; Adobe, 0181 606 4001); Adobe Photoshop 5.0.2 image editor (£449); Adobe Illustrator 8.0 illustration software (£299); QuarkXPress 4.0 page-layout software (£749; Quark, 01483 445 566); Adobe GoLive 4.0 Web-page design software (£119 introductory offer); MetaCreations Painter 5.5 Web Edition graphics software (£299; CU, 0181 358 5857).

continues page 105

Maintaining a legacy

With the arrival of the iMac and new Power Macintosh G3 systems, Apple has left behind many of the conventions of computing in the 1980s. Gone are the serial and SCSI ports of old – faster, hot-pluggable protocols, such as USB and FireWire, are the flavours of Apple's future. But while USB and FireWire are promising, what are today's users supposed to do with their accumulated serial and SCSI devices?

Although Apple has moved on, other developers have stepped into the breach and are providing solutions for connecting old hardware to new Macintosh models. With the help of an adaptor or two, your legacy hardware can live on to work another day.

Printers and modems

Since all of Apple's current desktop models have 10/100BaseT on board, you won't have trouble using a printer that has ethernet. However, if you have a LocalTalk or serial printer, you need an adaptor.

Be warned, however, that some adaptors don't work with all serial devices. For example, although Keyspan's USB Serial Adaptor allows you to connect certain modems and printers to your USB-compatible Mac, it doesn't support LocalTalk printers and networks, nor does it work with MIDI devices – such as MIDI interfaces and synthesizers that include a serial port.

Griffin Technology's (Alta, 0171 622 6606) iPort and gPort adaptors, on the other hand, support not only standard serial devices, such as modems, but LocalTalk devices and MIDI as well. The iPort mounts inside the older iMacs and also provides an external video port (the iPort is currently incompatible with the multi-coloured fruit 266MHz iMacs).

Although the gPort doesn't provide additional video output, it does offer a single serial port. The gPort connects internally to the blue Power Mac G3's motherboard.

Farallon (Principal, 01756 704 444) solves the serial/LocalTalk problem with an adaptor for each – the iPrint LT and iPrint SL. Both of these devices allow you to print via your Mac's ethernet port. The iPrint LT supports up to eight LocalTalk devices, including iMacs and G3's, and the iPrint SL allows you to print to an Apple StyleWriter.

Input devices

One lonely ADB port remains on the blue Power Mac G3's, but it's completely absent from the iMac. If you'd like to use an ADB keyboard and mouse, buy Griffin Technologies' £49 USB-to-ADB iMate adaptor. For more game controllers see last month's USB: Serial Killer feature.

Hubs

USB allows you to connect multiple devices to your new Mac, but to do so you need a hub – a box that bears several USB ports.

A range of hubs has already hit the market. The first wave include models from Entrega (0118 965 7751) and Interex (ProMedia, 01923 266 400). These will be closely followed by the funky hubs from Newer Technology, that have been designed with no sharp edges, like the iMac.

Hubs enable you to connect more than 100 devices, but you will need to turn to a powered hub if you use more than a couple of devices at any one time.

SCSI

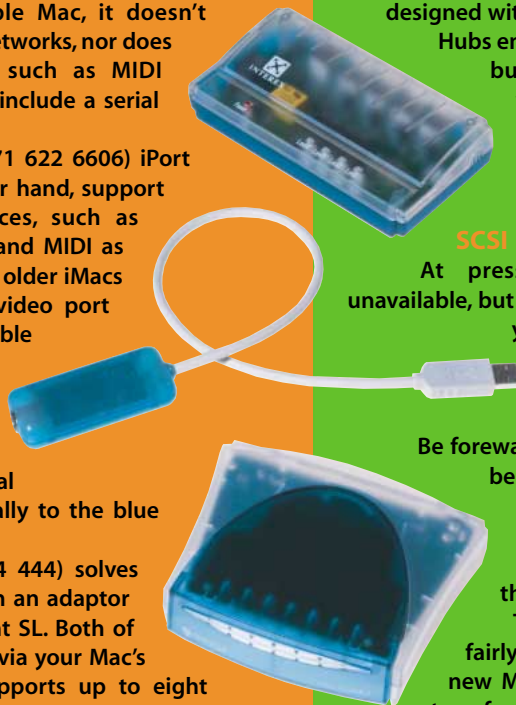
At press time, USB-to-SCSI converters were unavailable, but three of them should be ready by the time you read this. Newer Technology (IMC 01344 871329) is preparing the £69 uSCSI; And Microtech (CU, 0181 358 5858) is slated to ship the £50 Xpress USB.

Be forewarned: before you buy one of these devices, be sure to consider their limitations.

Data moves over USB at only 1.2 MBps – slower than the 5-MBps transfer rate of most Macs' external SCSI and far slower than any SCSI card.

This means that not only will data move fairly slowly between your SCSI drives and your new Mac, but applications that require fast data transfer – audio- and video-editing programs, for example – may not be able to pull data quickly enough from these drives.

Also, at least one of the manufacturers claims that its product is intended to work only with storage devices; SCSI scanners, for example, may not work with these converters. Although iMac owners will have to rely on such converters for SCSI support, Power Mac G3 users should simply add a PCI SCSI card.



continues page106

Essentials for every Mac

There are as many ways to build a perfect Mac as there are Macintosh users. But some products will enhance any user's computing experience. For example, although Apple has become increasingly generous in its allocation of RAM and hard-drive space, we still feel that your computer can never be too fast. And while Apple provides a serviceable set of utilities, you can do a lot better with the addition of a few troubleshooting, backup, and Internet tools.

Memory To Mac users of old, 32MB of RAM may seem extravagant. But in these days of memory-munching applications, it's barely enough to load the Mac OS and a word processor. Although additional RAM won't make most operations go any faster unless your Mac currently relies on virtual memory, it does allow you to open more applications.

Troubleshooting Apple's Extensions Manager is a good start, but it's not nearly as capable as Casady & Greene's Conflict Catcher 8 (£81; Softline, 01372 726 333). There's simply no better tool for managing control panels and extensions, and it's also invaluable for tracking down crash-causing extension conflicts. If your screen is littered with extension and control panel icons when you start up, you need this utility.

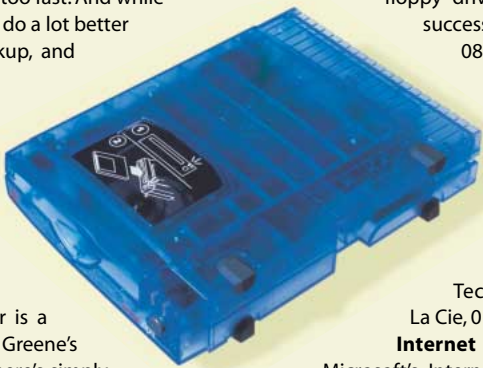
Backup Regardless of how you use your Mac, you must back up

your data, and a member of the Retrospect family can do just that – Dantz Development's excellent Retrospect 4.1 (£159; Computers Unlimited) or Retrospect Express 4.1 (£29).

Removable media Apple has shown the way: the floppy drive is dead. From all appearances its successor is Iomega's Zip drive (£89, Iomega 0800 973 194). Despite the occasional reliability problems with these drives, the Zip provides handy and relatively fast storage at a reasonable price. If it's not already installed, we'd add one to each of our recommended configurations. PowerBook users can add VST Technologies' PowerBook Zip (£219; La Cie, 0171 872 8000).

Internet utilities Although Apple bundles Microsoft's Internet applications, Internet Explorer 4.5 and Outlook Express 4.0, on all Mac models, there are additional Internet applications that every Mac should have.

Given some Web sites' preference for one particular browser, it would be wise to install Netscape Communicator 4.5 (On the cover CD) on your Mac. Likewise, Simon Fraser's MT-NewsWatcher 2.4.4 (free;



Conflict killer Conflict Catcher keeps your system running smoothly, by helping to avoid system clashes.

www.best.com/~smfr/mtnw/) is an excellent newsgroup reader. And if you need to employ FTP services, download a copy of Stairways' Anarchie Pro 3.5 (\$35 shareware; www.stairways.com).

System enhancements To navigate around your Mac more easily from within Apple's limited Open and Find dialogue boxes, buy a copy of Power On Technology's Action Files 1.1 (£49; Gomark, 0171 731 7930).



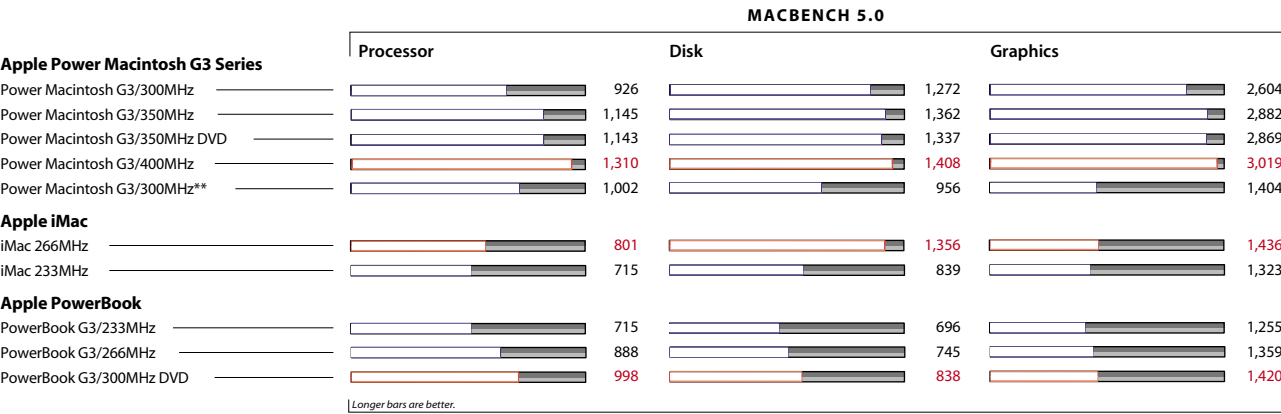
The last word When it comes to finding the perfect Mac, you're the best judge of which provides you with all the necessities and fits your budget at the same time. However, certain home truths must be considered when deciding which Mac you should buy. If you're working with high-end graphics and video, you need the fastest Mac on the planet, complete with as much RAM and hard-drive space as you can afford. The entry-level Power Macintosh G3 is a smart business buy, but if you're working on the go, consider a swift PowerBook G3. You'll find no greater bargain in the Apple universe than the iMac – perfect for the home or dormitory. And the enthusiasts just need enough power and exotic peripherals to keep them entertained until Apple begins shipping the next generation of processors.

And there you have it in a single, neat package – the Mac you should buy, the configurations you should consider, the core applications you should have for the work you do and games you play, and numerous suggestions for simultaneously enhancing your Mac and draining your bank account. The Mac you purchase will certainly have the Apple logo affixed to it. But the rest is up to you. **Christopher Breen is co-authoring a forthcoming book about the iMac (IDG Books Worldwide, 1999).**

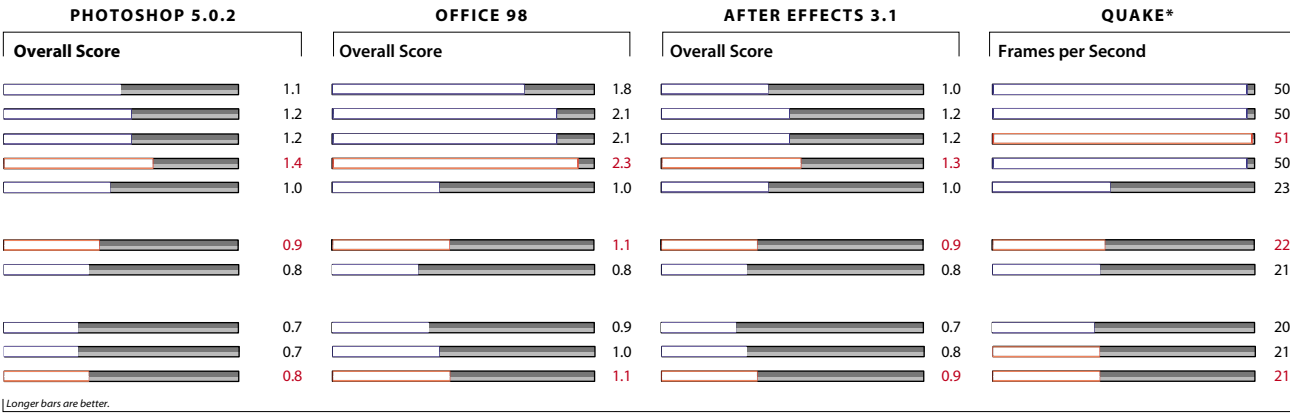


A Mac for all seasons

The new Power Macintosh G3s have mastered the art of speed. All four minitowers outperformed the first-generation Power Macintosh G3/300MHz, with the G3/400MHz scoring the highest overall. The high Quake scores indicate that these systems are optimized for improved game-play, with the new ATI chip-set. As you'd expect, the iMac 266MHz outperforms the 233MHz version. And although the PowerBook G3/300MHz DVD is the fastest portable of the lot, the G3/266MHz is more cost-effective.



*At a resolution of 640 by 480 pixels. **Previous G3 architecture. Test unit differed from MacBench reference systems in OS version, screen resolution, and hard drive.



Behind Our Tests

The MacBench sub-system tests are tuned to measure and isolate the performance of the processor, disk, and graphics subsystems. (Download your own free copy of MacBench 5.0 from www.macbench.com.) For application testing, several tasks were performed; the results were averaged and then normalized to the baseline.– **Macworld Lab testing supervised by Gil Loyola**

A question of colour

Laser printers are making quality A3 colour-printing accessible. **By David Fanning**

Colour printing has, over the past few years, become far more of an option for far more people. No longer the domain of hideously expensive dye-sublimation printers, colour is now commonly used in the home. The low-cost, high-quality ink-jets now available have led the way – raising people's expectation of office printing. Ink-jet printers are slow, but the quality is great.

So, if you can print in colour at home, why not the office? Of course, art departments are used to having colour – but at a price. Cromalin and dye-sub printers are both excellent for proofing, but remain expensive options. Not all proofing is colour-critical though, but people expect better than monochrome proofs.

The answer to these issues is A3 colour laser printers – or, in the case of the Phaser 380, solid-ink printing.

An A3 colour printer can be all things to all users. It can print A4 monochrome pages quickly for letter writing; it can print A4 colour pages for sales presentations; and it can print A3 colour for first proofs.

Some models can even print oversize A3 separations on polyester plates that can be used for short-run printing. Affording an A3 colour printer may be easier than you think.

This month we look at five printers capable of at least A3-size colour. Though many use the same printer engine, we did witness a variety of different characteristics. We also perceived a range of solutions for speeding the colour-printing process.

If you are particularly interested in colour proofing then you should also look at more specialized printers. Dye-sublimation, the most popular method of digital proofing, is now having to compete with special printers that use ink-jet technology. One example is the Epson Color Proofer 5000, which uses a Fiery RIP to get accurate colour. If money is tight, then even the cheaper Epson printers are capable of decent A3. The problem with the low-end ink-jets is lack of speed, and things like PostScript and networking tend to be

Editors' Choice

Tektronix Phaser 780

Macworld Rating ★★★★★/8.6

The Phaser 780, more than any of the other printers, is capable of being all things to all people. Prices start at just £3,595, so they are among the cheapest on offer. Print-quality matches the best on test, and speed is second only to the Lexmark. For general mono printing, it cranks out 16 A4 pages per minute



extras. If your budget is tight, you can still put them to good use.

If your needs are more in the area of office colour for presentations and the like you can make big savings by choosing an A4 colour printer. You may be surprised how cheap A4 colour printing now is, having come down more than 50 per cent in the last couple of years. For example, the

continues page 111

The lowdown on PostScript

All the printers have PostScript of one sort or another, but not all PostScript is the same. Adobe PostScript is a computer language that describes the appearance of a page – including elements such as text, graphics, and scanned images – to a printer or other output device. Since its introduction in 1985, the PostScript language has become the language of choice in Macintosh printing. Adobe PostScript technology is in a wide range of output devices, including black-&-white printers, colour printers, imagesetters, platesetters, screen displays, and direct digital presses.

PostScript 3 is the latest implementation of the technology, bringing many new features and improved image quality. For

example, fonts and images are now processed separately rather than treating them all the same. This means that both images and fonts are of the highest quality. Gradient blends are also improved in both colour and mono images.

There is also support for HiFi colour-separations, a process that gives more vibrant colours when printed.

Speed is another improvement over previous versions of PostScript. Adobe claims that PostScript 3 is as much as six times faster when rendering complex graphics. The QMS and the Lexmark printers that we tested use PostScript 2 emulation. All other models use true Adobe PostScript 3.

Tektronix Phaser 740 is available for just under £1,400 – about what you'd have paid for a mono-laser not so long ago.

Prices for A3 colour printers start around £4,000, but lookout for hidden extras when ordering a printer. Often, printers need network cards or PostScript upgrades and these are not always included in the initial price. It's also a good idea to check for different memory configurations, as some models will be capable only of 600dpi resolution without a memory upgrade.

Colour technologies

The technology used in colour laser printers is very similar to mono laser printers. The difference is that colour lasers need four passes to get each colour printed. This is usually done using a carousel to flip between colours for each pass. The speed that can be achieved using this carousel method is limited and the most popular engine, from Xerox, has reached this limitation for the technology.

This is the same engine that is used in the Epson, the QMS and the Tektronix 780, and all print at roughly the same speed. The Lexmark is the only laser to use a different engine design. Instead of flipping from one toner cartridge to another in a carousel, the colours are laid down one after another in a straight line. This is equivalent to lashing four printers together and having the paper pass directly through each one. No spinning carousels mean that

the speed is closer to a mono laser, and has the potential to be improved further.

As the Lexmark Optra 1200 is the first to use this technology, the printer itself is not the prettiest around. The four-in-a-row design makes for a particularly big and unsightly printer. For speed, however, it's unbeatable – cranking out 10 A3 pages in an amazing 1 minute 25 seconds.

For colour laser technology to become faster, other manufacturers will need to adopt this single-pass method of printing. It's the only way to increase the speed of colour laser printers.

Laser is not the only method of printing for this market, Tektronix has its solid-ink technology. Solid-ink is a derivative of ink-jet technology, developed by Tektronix. It uses solid blocks of wax, rather like square crayons, that are melted and shot onto the paper. The results are a very glossy image with vibrant colours. All the colours are laid down together, which makes this a single pass process – and though it's

continues page 113

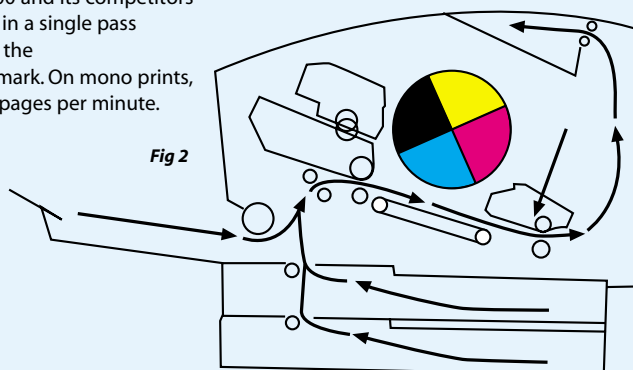
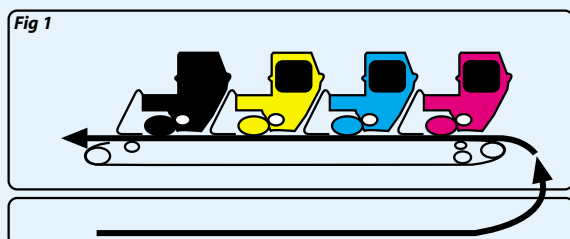


Speed king

On speed, the Lexmark Optra 1200 is unbeatable, cranking out ten A3 pages in 1 minute, 25 seconds.

Anatomy of laser printers

There is a big difference in speed between the Lexmark Optra Color 1200 and its competitors (see speed chart, page 114). This is because it lays down all four colours in a single pass (see figure 2). The other lasers tested use a carousel that spins to access the colours (see figure 1). This means it does four times the work of the Lexmark. On mono prints, however, the carousel doesn't need to move and can print as fast as 16 pages per minute.



Colour lasers: which hits the spot?

PRODUCT	PRICE	STAR RATING	RESOLUTION (dpi)	RAM	MAX PAPER SIZE (mm)	MAX PRINTABLE AREA	CONTACT	TELEPHONE
Epson ColorPage EPL-C8000	£7,595	★★★★/8.4	600-x-1,200	192	330.2-x-483	297-x-431.8	Epson	0800 289 622
Lexmark Optra Color 1200	£4,999	★★★★/8.3	600-x-600	64	297-x-420	288.5-x-411.5	Lexmark	01628 481 500
QMS Magicolor 330	£4,495	★★★★/8.2	600-x-1,200	196	330-x-483	320-x-457	QMS	01784 442 255
Tektronix Phaser 380	£4,495	★★★★/8.2	600-x-300	48	332-x-471	322-x-457	Tektronix	0870 241 3245
Tektronix Phaser 780GN	£4,695	★★★★/8.6	600-x-1,200	196	330-x-483	320-x-457	Tektronix	0870 241 3245

nowhere near as fast as the Lexmark model the technology can still be made faster.

So, the future of A3 colour printers will bring more speed – but what about resolution? The maximum currently is 1,200dpi, and it's possible that this could be improved. There's no real pressure for this to be improved just yet, as the benefits are small, and the costs high. What's more likely to happen is that printers will be capable of 1,200dpi as a standard configuration. Prices will continue to fall.

Time tests

When we tested the printers, the easiest thing to measure was speed. We timed the printing of both A4 and A3 colour pages using a very complex PostScript image. Once the image has been processed it should print at the engine's speed, though in some tests this was not the case. At first, the problem was due to an old driver, which goes to show how much difference the supporting software and firmware makes. If you have any of the colour printers we have tested and find that printing is slower than the quoted speeds it's worth checking for updated drivers. In our tests we actually print 11 pages but start the clock after the first page emerges. We then time the next ten pages.

The processing time is more difficult to isolate. One machine did process the PostScript file noticeably slower than the competitors, though. The QMS appeared to struggle with the heavy PostScript test file, though with the simpler test files it was fine. I suspect this is because the QMS emulates PostScript, rather than using true Adobe PostScript.

The Tektronix solid-ink printer has a theoretical advantage when simple files are printed, because the ink is always ready to print. This means the first page out should be quicker than a laser, because lasers take a few seconds to warm up. With the complex files that we printed, we could not detect this effect, but it's definitely noticeable on other solid-ink models.

If graphics is your area of interest, then maximum paper-size and print area is important. The only model to be unable to print oversize A3 was also the fastest printer, the Lexmark – presumably to remind us that you really can't have the best of all worlds. If you need to print full-bleed A3 you won't be able to do it at the top speed. The biggest paper size any of these printers can handle is the Phaser 380,

at 332mm-x-483mm, although the rest are just 2mm behind. This size, also known as A3W, is perfect for all but the largest proofs.

One thing that's easy to forget when you don't see these printers in the flesh is their size: they are all big – and I mean big. The Phaser 380 weighs in at a massive 100kg, about two-and-a-half times the weight of an average A4 laser printer. The rest tip the scales at around 60-70kg. Whatever you do, don't try to pick one of these monsters up unaided. Also, bear in mind that any of the printers we've tested will take up your whole desk. It's definitely worth spending time planning a space for your printer.

The first thing you need to do when you have the printer out of the box – after a lie down, of course – is install the toner. Those printers using the Xerox engine (QMS, Epson and Phaser 780) have cylindrical toner cartridges that slide into a carousel. It's a relatively clean way of working, especially if you have used any of the older printers that used loose toner. You need to spin the carousel to get each cartridge in. The Lexmark Optra Color 1200 is easier to access, because you simply lift the lid and all four toners are sitting on top of the print path. But easiest of all is the Tektronix Phaser 380. The 380 uses solid-ink blocks that are clean to handle, and you can top up the ink at any time, not just when you run out. This is especially convenient when you need to do a big run of prints – and you know when you are low on a particular colour. With most printers, you need to wait until your toner has run out, but with the solid ink you can top-up and go off to do other things: there's less baby-sitting involved.

The four coloured ink blocks have slightly different shapes that fit into corresponding holes in the printer. This is to stop you putting magenta in the yellow slot, or black in the cyan. It's reminiscent of a nursery game and soothing compared to toner replacement.

continues page 114

Flexible friend

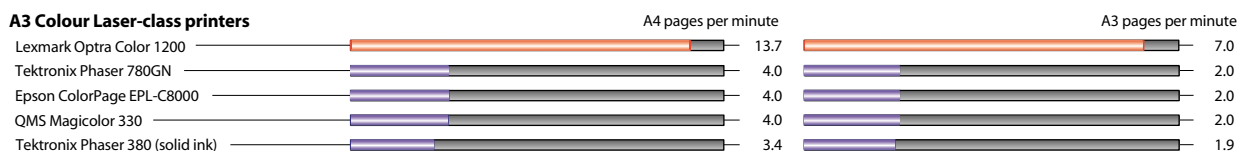
The Epson ColorPage EPL-C8000's external RIP allows customizable settings and print queues, although at £7,595 it's not a cheap option.



Lexmark leaves the rest in its wake

Best results in test. Longer bars and higher scores are better. Speeds shown are the speeds achieved printing ten pages of complex graphics. The speed shown is representative of engine speed rather than processing speed.

A3 Colour Laser-class printers



Behind our tests

To separate engine speed from processing speed, the figures shown above are based on ten identical pages with full-colour ink coverage. To do this, we printed 11 pages but only started timing after the first page was delivered. This means that the results are not affected by network conditions or varying computer speeds.



That's magic

The £4,495 QMS Magicolor 330 has the largest printable area, measuring 320mm-x-457mm.

unit. It did appear to function very well, but it adds to the cost significantly, so its benefits must be weighed up carefully. Once up-and-running, the software on all the printers tested was simple to use. The QMS was a tad temperamental if the wrong driver was used, but with the most up-to-date driver it ran smoothly.

The quality of the print tests were all excellent, even though all displayed slightly different characteristics.

The Lexmark has a decidedly matt finish, which isn't a bad thing – but it did distinguish it from the rest. It also suffered from a slight halo effect when text was over a colour background. This happens when the software doesn't accurately remove colour from underneath black text, and a gap is left. It's only a minor problem, but art departments won't like it. In most cases this problem has been resolved.

The solid-ink Phaser 380 had a glossy finish, which is a characteristic of the solid-ink process. The others also had a glossy finish, but require higher quality paper than average photocopy stock. Solid-ink is glossy no matter what the stock. One criticism of the Phaser 380 is that its ink

is sometimes too thick and can be scratched off. It's also difficult to write on.

So, that just leaves the three printers that use the Xerox engine. Predictably, the results were similar, though not always identical. All three have a different way of working with PostScript. The Epson has the external RIP, the Phaser 780 has on-board PostScript 3 and the QMS has emulated PostScript 2. With limited testing time, few differences showed up. It could be that troublesome graphics may be more likely to work with real PostScript 3, but otherwise everything was pretty much equal.

The final word

In the final analysis, all the printers tested are high-quality models. You can sacrifice a degree of quality by buying a speedy Lexmark Optra Color 1200, as it is designed as an office printer – with less attention paid to its graphics functionality. Also, because of the single-pass design of the Lexmark, monochrome prints are no quicker at 12 A4 pages per minute (ppm). The carousel-style laser models become single-pass printers when printing mono, so the speed is increased to 16 ppm. That's faster than the Lexmark. If graphics is your thing, the A3W printing area of the remaining printers is a must. The QMS has the ability to print on polyester plates used in short-run, sheet-fed litho. Only QMS can do this, so if it's a feature you need, QMS is the one to choose.

For flexibility, the Epson is good. Its external RIP allows customizable settings and print queues, although at £7,595, it's not a cheap option. Of the two Tektronix printers, this version is aimed squarely at the graphics market, with the laser version, the 780, being more of an all-rounder.

The Phaser 780, more than any of the other printers, is capable of being all things to all people. Prices start at just £3,595, so they are among the cheapest on offer. Print quality matches the best on test, and speed is second only to the Lexmark. For general mono printing, it cranks out 16 A4 ppm. For its balance of features, it's the Phaser 780 that has our vote,

MW



Unix got balls

Mac OS and Linux are bringing Unix out of the dark and onto your Mac. **By Stephen Somogyi**

MOST MACINTOSH USERS BREAK THE WORLD OF COMPUTER OPERATING SYSTEMS down into two camps: Us (the Mac OS) versus Them (Windows). But that black-&-white view of the computer world ignores an operating system you probably rely on every day without knowing it – and one with the promise to turn your Mac into a far more powerful computer than you ever imagined possible.

We're talking about Unix, the operating system that keeps the Internet up and running, poses one of the greatest threats to Microsoft's monopoly, and is poised to sweep into Macintosh users' lives with the introduction of Mac OS X, expected later this year.

Unix has a reputation for being a scary, complicated system that's the polar opposite of the friendly, easy-to-use Mac OS. And that reputation is somewhat deserved – but that's not the whole story.

What's in a name: he many colours of Unix

Unix isn't just one operating system – it's a term that's often used to describe all sorts of operating systems. The original Unix began life as a research project at AT&T's Bell Labs in late 1969; Unix's built-in clock considers January 1, 1970, the dawn of time.

The University of California, Berkeley was also working on a version of Unix, based on AT&T's project, that ultimately saw the light of day in 1975.

Berkeley's Unix was known as BSD, short for Berkeley System (or Software or Standard, depending on who you ask) Distribution, and was intended for higher-education, non-commercial use.

Over time, AT&T released several revisions

of its Unix; the one that really made its mark was called System V. The Unix name has been a source of legal contention, and its trademark has changed hands several times during various corporate purchases and mergers.

Because of some licensing restrictions, intellectual-property rights, and also technical preferences, several Unix clones have been developed from scratch over the years, specifically to allow them to evolve independently of the large legal entities that owned the rights to the Unix name and the operating system. Minix was one such clone, as is Linux, which began development in 1991 under the guidance of then-student Linus Torvalds. In the years since, Linux has remained

open-source software – all of its source code is freely accessible to users and modifiable by anyone who would choose to do so.

There are also a number of open-source BSD derivatives out there – FreeBSD, NetBSD, and OpenBSD to name but a few.

While they haven't had the public acclaim that Linux has enjoyed, each has its own fans; for example, Yahoo uses FreeBSD on all its servers. Since the different BSDs and Linux are open-source systems, there is occasional cross-pollination between the two camps.

MkLinux, for example, uses various bits of device-driver code from NetBSD. Apple's Mac OS X Server is even based in part on FreeBSD.

– **Stephan Somogyi** and **Geoff Duncan**

New versions of Unix that run on Mac hardware are giving slow Power Macs new life by turning them into screaming-fast Internet servers. Apple is also hard at work on the upcoming Mac OS X, making the power of Unix more friendly and appealing to the average Mac user.

That's why, even if you've made the solemn vow never to type on a command line, knowing about Unix will help bring the future of the Mac (and perhaps the entire computer industry) into sharper focus for you.

Uncovering Unix

The first thing to understand about Unix is that it's not one single product from one developer, like the Mac OS or Windows. It's more of a specification for an operating system – in addition to the official Unix versions there are countless clones and variants, including one of the most popular ones around, Linux (www.linux.org).

Linux is a free version that is developed by a group of volunteer programmers on the Internet and has taken the software world by storm – mostly because it's free, it's stable, it isn't controlled by any single monolithic corporation, and it doesn't come from Microsoft. Software giant Corel is even working on a Linux version of its WordPerfect Office suite in an attempt to break Microsoft's dominance in both the operating system and office-suite markets.

Unix has been evolving since the early 1970s, long before the dawn of personal computers. Thus, Unix wasn't designed to run on personal computers at all – it was designed to run on expensive servers, with users logging in remotely from terminals or low-powered computers.

As time has passed, personal computers have evolved to the point that they now can run Unix themselves, rather than just logging in to a remote Unix server.

While most of the

personal computers using variations of Unix are still Intel-based PCs, the number of Macs running Unix has begun to grow rapidly.

Unix's face Unix's basic user interface (called a shell) is about as far from the Mac OS as you can get – it's plain text, just like DOS. Unix doesn't have a built-in graphical user interface like the Mac OS or even Windows.

When graphical user interfaces first began their proliferation – still during the days when Unix ran only on servers – researchers at MIT developed X Windows, a framework that lets developers write Unix programs that have a graphical interface.

But while the Mac has the Finder, there's no common face for Unix. Many different programmers have developed many different graphical user interfaces – typically called desktop managers – for Unix. Most of them will be just familiar enough that users can perform basic work, but they're a far cry from the intuitive interface that Mac users have come to expect – partially because there are no cohesive user-interface guidelines for Unix as there are for the Mac.

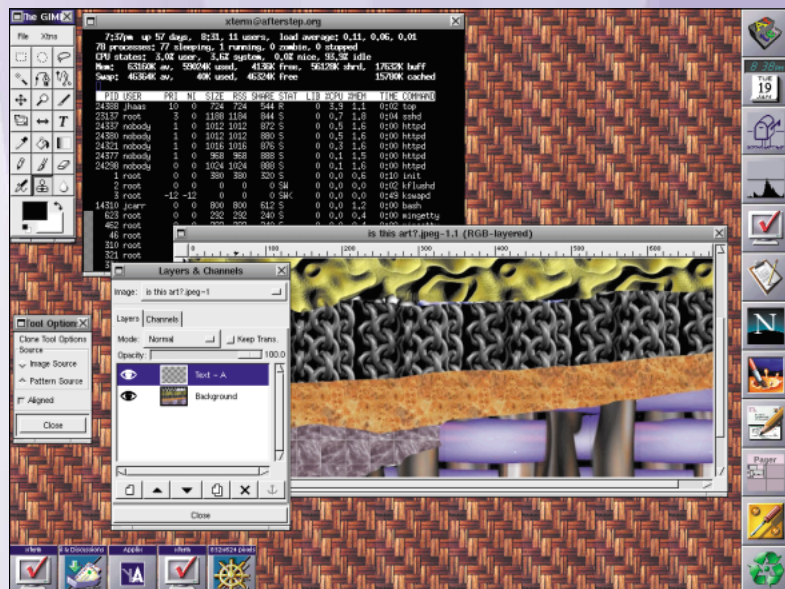
Unix's power So if Unix is complicated and scary, why would any Macintosh users care to run it on their Macs? The answers are speed and stability.

Underneath its complex facade, Unix is a stable, fast operating system that is especially appropriate for use as an Internet server. In fact, Power Macs that start to feel too slow for the Mac OS can gain new life as Unix servers, hosting Web sites or routing a workgroup's email.

Although the Mac OS of today is a precariously balanced construction of code, Unix is designed to do its business as quickly as possible, leaving your computer's processor mostly free to do actual work.

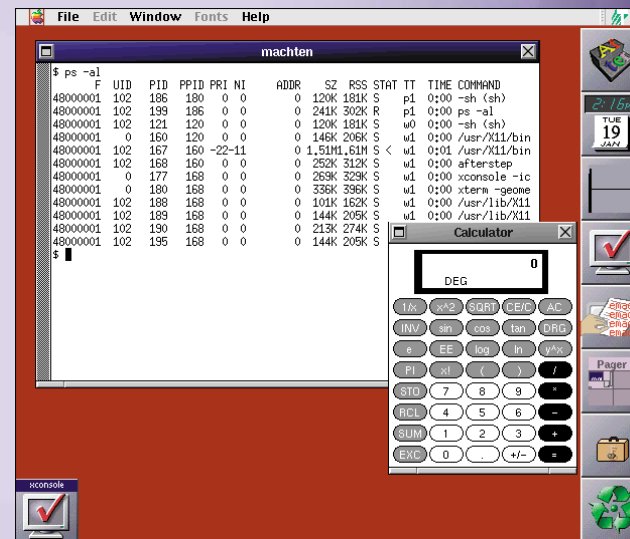
Unix is far more efficient than the Mac OS in the way it manages processing horsepower and memory.

Unix uses preemptive multi-tasking, a system of controlling applications so that no single program can hog all the processor



Linux now

This sample X Windows interface from LinuxPPC shows an image-editing program, a program-launching tile utility, and a window containing a Unix command-line session. Unlike Mac apps, however, X Windows apps can have widely varying interfaces.



Mach speed

Tenon Intersystems' Power MachTen 4.1.1 lets you run Unix as an application within the Mac OS. Note the Windows-style interface and the lurking command line beneath that friendly Mac menu bar.

power – but programs that need a lot of power can take priority over ones that are less vital. If you've ever noticed how sluggish your Macintosh can run when some other program is working in the background, you've seen the result of the Mac OS's less efficient co-operative multi-tasking. Unix also offers memory protection, a scheme that essentially provides an impenetrable wall around every running program. That way, if one program goes nuts, it not only can't hurt any other program but it can also be shut off without harming your system or forcing you to reboot.

If you've ever had to reboot your entire system because of a misbehaving application – and this happens to every single Macintosh user – you can see what an improvement memory protection is. As a result, even the slowest Power Mac can be shockingly fast and stable when it's running Linux. And that means organizations can keep putting those computers to use long after they would've otherwise been written off as useless.

The Mac OS meets Unix

Sure, Unix's strengths sound great – but its weaknesses (its lack of a consistent, graphical user interface; its complexity; and certain security issues) loom even larger.

Thankfully, Apple has decided to merge the best of Unix and the Mac OS, and the result is Mac OS X. Apple has made it clear that the version of Mac OS X intended for regular Mac users will provide the same friendly Mac interface we use every day – perhaps with some new innovations. But hidden away beneath the surface will be Unix, providing the speed and stability that Unix built its reputation on.

The promise of OS X If Apple does its job right, using Mac OS X will feel like using the Mac OS and not some Mac-Unix hybrid. The same can't be said of Mac OS X Server, Apple's new server operating system that's an intermediate step between the Unix-rooted NextStep environment and the Mac OS.

Apple is billing Mac OS X Server as a powerful software package for Web serving, and it's hard to argue against this: because of its Unix underpinnings, Mac OS X Server can run Apache, the free Web server software that's the most popular Web server package on the Net. What Mac OS X Server adds to Apache is a user interface – Apple has written Mac-style control panels and assistants to make setting up Apache easier than it would be on, say, a standard Linux system. (Whether it'll be as fast as Apache on Unix is still unknown – at press time, Apple wouldn't allow *Macworld* to test a pre-release version of OS X Server.)

This isn't Apple's first time working with Unix – the company used to offer its own variant of Unix, A/UX.

continues page122

Unix on Power Mac: where to get it

PRODUCT	PRICE	COMMENTS	COMPANY	PHONE
LinuxPPC Release 4	\$32 *	Fast and stable; doesn't work on NuBus Power Macs.	LinuxPPC	www.linuxppc.com
MkLinux DR3	Free on Macworld cover disc	Compatible with old Power Macs; slightly slower than Linux PPC.	Full Moon software	
Power MachTen 4.1.1	£330	Runs within the Mac OS; susceptible to Mac OS crashes.	Tenon Intersystems	01628 660 242

*Also available as a free download from <ftp://ftp.linuxppc.org>.

Running Unix today

Whether you want to be prepared to be a Mac OS X power user on the day the new OS is released or you just want to see how fast that old Power Mac of yours can be as an office email, Web, or file server, you can get Unix experience today by running a version of it on your Power Mac.

There are two different ways to run Unix on Macs: either you can run Unix inside the normal Mac OS or you can completely replace the Mac OS with Unix.

Unix inside The gentlest way to introduce Unix into a Mac environment is to use the £330 Power MachTen 4.1.1, from Tenon Intersystems (www.tenon.com). It's a full-blown version of BSD 4.4 Unix, with X Windows, networking capability, development tools, and everything else Unix has, but it runs as a Mac application. This means that you can switch from the Mac universe to Unix with the click of a mouse. The downside of this solution is that MachTen is as vulnerable as any other Mac OS app to the misbehaviour of other software.

Despite these limitations, don't be fooled into thinking that MachTen is a Unix emulator, in the same way that Connectix's Virtual PC is a Windows emulator. The Unix software inside MachTen executes instructions native to the Mac's PowerPC chip, meaning that MachTen and its apps run at native speeds. If you're careful not to run too much other stuff on your Mac, using MachTen is a particularly convenient option because of the ease with which you can switch back and forth.

Linux takeover Although it's popular to run Linux on Intel-based PCs as an alternative to Windows, there are also two popular versions of Linux that run on Power Macs: MkLinux and LinuxPPC. (Another, Yellow Dog Linux (www.yellowdoglinux.com), is on the horizon.)

Unlike Power MachTen, both MkLinux and LinuxPPC need to take over your entire Mac when they're running. This means that you have to restart your computer whenever you want to switch between Linux and the Mac OS. You'll also have to dedicate at least 500MB of hard-disk space to a Linux installation. Fortunately, however, MkLinux and LinuxPPC are similar enough that, despite the differences between the two, both can run the same apps.

MkLinux First introduced in 1995, MkLinux is the oldest Linux for the Mac, and its development was originally funded by Apple. It's completely free – you can download it from <ftp://ftp.mklinux.apple.com>. For those who don't want to spend time downloading its multi-hundred-megabyte bulk we have included it on this month's *Macworld* cover CD.

MkLinux's main advantage is hardware compatibility: it runs on just about every Power Mac out there, including the original 6100, 7100, and 8100 series. Since those are the PowerPC-based Macs that are most likely to be declared too old to use, they're also the most likely candidates for conversion into Linux-based systems. The result: Macs once slated for the giveaway pile can provide solid performance in their new lives.

LinuxPPC The other Mac-based Linux is LinuxPPC (www.linuxppc.com). Unlike MkLinux, whose evolution has floundered, LinuxPPC is under very active development, bringing continuous improvements in usability, speed, and reliability with it. LinuxPPC

can also be downloaded for free, but it's much more convenient to purchase the \$32 set of two CDs that contains all the software and source code.

LinuxPPC is leaner and meaner than MkLinux. Its developers have taken advantage of the more open systems that Apple designed and built in the days of Mac clones. The LinuxPPC team has created a Linux that is even more streamlined – and therefore faster – than MkLinux.

Unfortunately, LinuxPPC runs only on Power Macs that have a PCI bus. The good news is that it does work on all PowerPC-based systems other than the 6100/7100/8100 family; its Performa siblings; or the PowerBook 1400, 2400, and 5300 models. (The definitive list of supported hardware is at <http://linuxppc.org/hardware/>). It's a pity that the first Power Mac generation is left out, but unless Apple provides the LinuxPPC team with the necessary documentation, MkLinux will remain the only option for those Macs.

Perhaps the most important thing about LinuxPPC is its attention to making Linux as painless to install as possible. The latest version of LinuxPPC, release 5.0, will include a brand-new graphical installer that will help you set up Linux on your Power Mac fairly easily. You can even set Linux to boot directly into an X Windows graphical user interface rather than a scary command-line interface, if you so desire.

However, all these improvements to the process don't mean that running LinuxPPC is as easy as running a Mac – Linux is still something for people with a techy mentality. And much more than is the case with computers running the Mac OS, Unix-based systems are vulnerable to attack if you're not careful. Unix will often load a number of server applications invisibly and by default. If you're planning on running a Linux server that's accessible to the whole

Internet, you must learn a bit more about Unix system administration than if you are just setting up a local workgroup server.

And while there are only a few general-use Linux applications out there, the numbers are growing. You can run Netscape Communicator (www.netscape.com) on LinuxPPC, and Applix (www.applix.com) will soon offer a version of its Applixware suite of business apps for LinuxPPC. One by one, the barriers to getting started with Unix are disappearing. Hopefully, by the release of Mac OS X they will have faded away completely.

The last word

Unix definitely isn't something to be afraid of; instead, it's something to be curious about. Its performance tweaks make it a faster, more reliable operating system than the Mac OS.

Until Mac OS X arrives, you'll have to forfeit some ease of use if you want to give Unix a try. Whether you're just interested in experimenting with the new Linux operating system that everyone's talking about or you're actively preparing for Mac OS X, you have lots of options today for running Unix on your current Power Macintosh.

And although Apple has committed to keeping the "classic" Mac OS alive well into the next millennium, the long-term future of the Mac OS is based on Unix technology. If Apple's engineers do their job right, regular users won't have to know about Unix buzzwords or see its command-line countenance in order to reap the rewards of its power and stability.

MW



Building sites

How to master cascading style sheets. By Tom Negrino

Web designers benefit from vastly broadened possibilities for their sites with the advent of Netscape's and Microsoft's version 4 browsers. Thanks to technologies such as Cascading Style Sheets (CSS) and JavaScript, designers can create pages with precisely positioned elements and easy animation, and they have fine control over the look and style of text.

But there's a catch: Cascading Style Sheets are deeply geeky and hard to code by hand, and JavaScript is an honest-to-gosh programming language that requires serious effort to master.

In fact, under the rubric of Cascading Style Sheets, there are actually two different critters: CSS1 and CSS-P. CSS1 allows you to specify the look and style of type and some other Web-page objects; CSS-P (P for positioning) lets you specify the position of page objects and animate objects on the page.

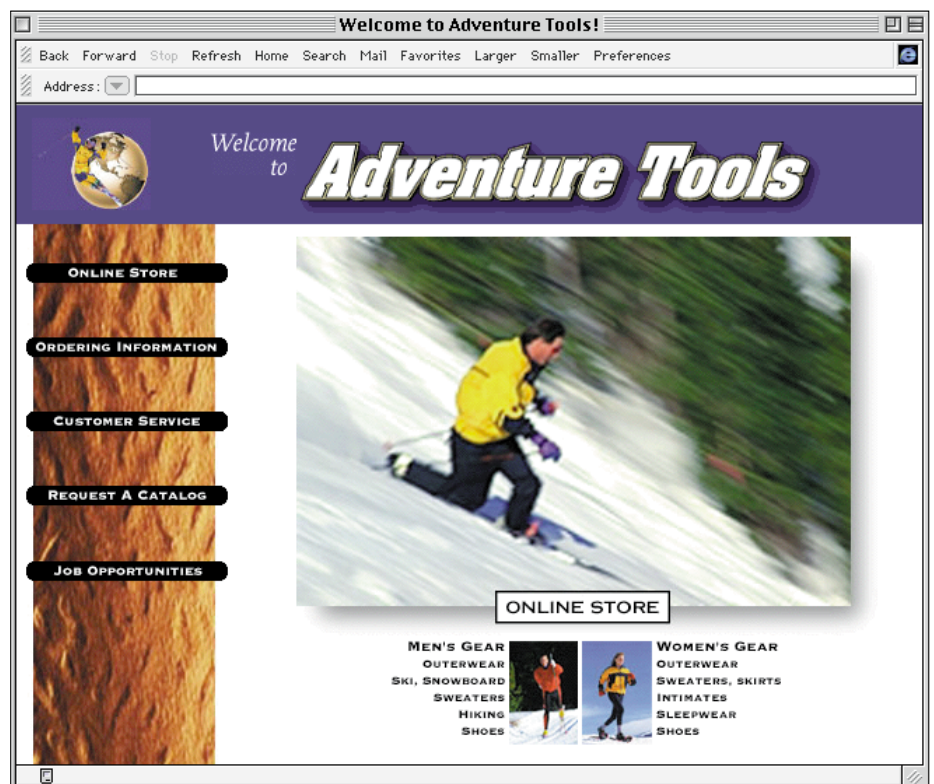
Dynamic manipulation

You can manipulate both types of style sheets via JavaScript, and the result is called Dynamic HTML, or DHTML for short.

Another catch is that you can view DHTML effects correctly only using version 4.0 or later browsers. Even then, some effects are Internet Explorer-specific and some are Navigator-specific. It's essential to preview your pages in both browsers, preferably in both the Mac OS and Windows.

Whole books explain how to code DHTML, but we'll leave the programming to people who enjoy that sort of thing. For the rest of us, there's Adobe GoLive 4.0 (available until 16 June for £119, www.adobe.co.uk), which offers friendly, visual DHTML tools. While you simply drag objects around on the screen and fill out a few Inspector dialog boxes, GoLive 4.0 hums along behind the scenes, writing the Cascading Style Sheets and JavaScript code.

To illustrate some DHTML elements, we created a few pages of a mythical sporting-goods site called Adventure Tools (you can see this site in action at



www.macworld.com/more/). The opening page of the site is an animated splash screen with three elements that fly across the page and assemble to form the Adventure Tools logo (see "Open with animation").

A few seconds after the animation ends, the splash screen automatically jumps to the site's home page (shown above).

With DHTML-savvy tools, such as GoLive 4.0, designers get to concentrate more on designing and less on programming, and don't have to rely on Web programmers.

You can create sites faster and more easily – and in the world of Internet Time, this is an important consideration. **MW**

Tom Negrino is co-author of *JavaScript for the World Wide Web*, *Visual QuickStart Guide*, second edition (Peachpit Press, 1998).

continues page 128

Open with animation

The splash screen is your site's snazzy "foyer", which ushers Web surfers to the main page. This is a great place to employ animation. There are three moving elements on our splash screen: a globe, a skier, and the Adventure Tools title. Each element is a transparent GIF image embedded in a floating box. The animation consists of the GIFs flying in along different paths, finally assembling the complete logo (see this in action at www.macworld.com/more/). It's important images be transparent GIFs, so you can see one image behind another.

1 Drag the Floating Box icon (A) from the Basic tab of the GoLive Palette onto an empty page you've named Splash.html. You do this once for each image in your animation. Into each floating box, drag an Image placeholder (B) from the Basic tab of the Palette. In the Image Inspector, specify the image file with the Browse button (C) or use the Point-&Shoot button (D) to find the image in the Site window. Resize the floating boxes so they fit snugly around their images, and then position the boxes where you want the images to be at the end of the animation.

2 To animate the first floating box, click on the edge of the box. Then open the Timeline Editor by clicking on the Timeline Editor button (E) in the right corner of the document window. In the Timeline Editor window, there are three tracks and three keyframes, one for each of the floating boxes. The keyframes show where images will finish, so you need to reposition them accordingly.

3 Decide how long you want the animation to last, and drag the three keyframes to that spot on the timeline. After you move the keyframes, you'll notice that each track leaves behind a dimmed keyframe at the beginning of the timeline (indicating that the track is not visible at that point on the timeline). Click on the dimmed keyframe on track 1 to select it. Click on the Visible check box in the Floating Box Inspector, and then drag the floating box to where you want it at the beginning of the animation. Click on the play button (F) at the bottom of the Timeline Editor to preview your animation. You can adjust the speed of the animation by changing the frames per second via the FPS pop-up menu (G) at the bottom of the Timeline Editor.

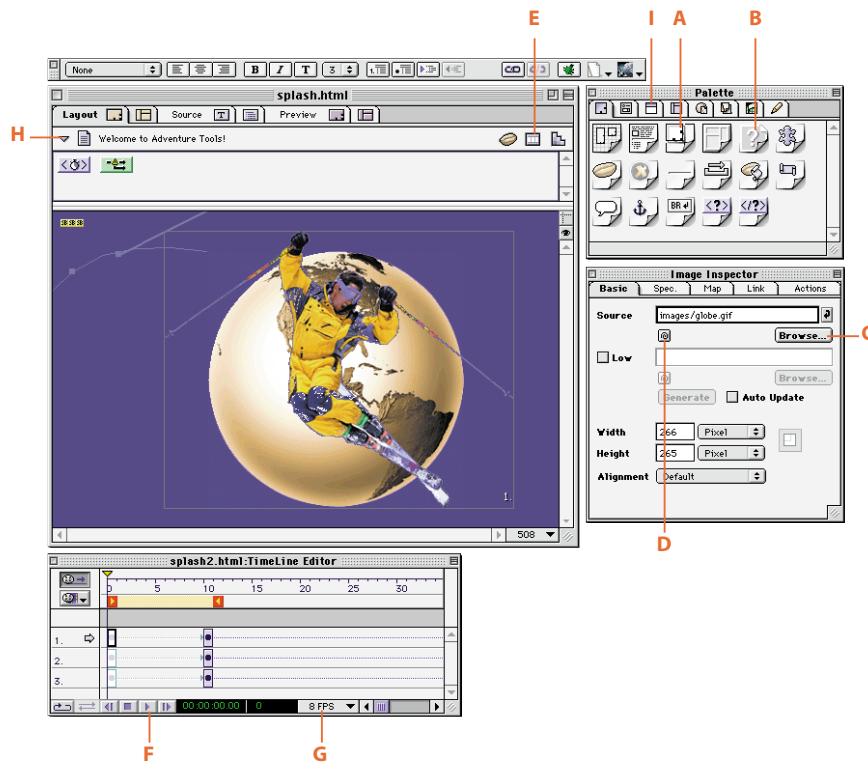
4 If you want, you can add keyframes by clicking on a track on the timeline. This allows you to create a complex path the image will follow. You can smooth the path by choosing Curve under Animation Type in the Floating Box Inspector.



5 Repeat the above processes to animate the other two floating boxes.

6 To make the splash screen switch to the home page, you'll use an HTML tag that goes in the header of the page. It's a short bit of code, so if you like you can switch to GoLive's Source mode and type `<metahttpequiv="refresh" content="5;URL=`

`index.html">` between the `<HEAD>` and `</HEAD>` tags. For Layout mode, click on the disclosure triangle (H) to open up the Head Section of the page. Under the Head tab (I) in the Palette, drag the Refresh icon to the Head Section. In the Refresh Inspector that appears, enter a delay time in seconds click on the URL button, and enter the name of the page to which you wish to jump.



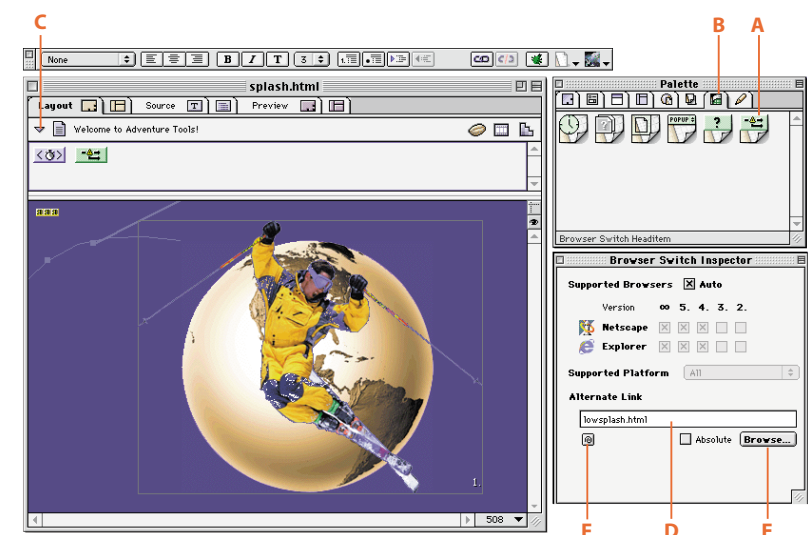
What browser is that?

Fancy DHTML animation looks great to people who have version 4.0 or later browsers, but people with earlier versions (and that includes most people who use America Online) won't see the animation. For these folks, the Adventure Tools splash page will just look like a blank, coloured page. You can't control what browsers people use, but you can make your page handle older browsers gracefully by having it perform browser

detection, which sniffs out the browser version that's loading the page. If the browser is capable of handling DHTML, the page loads normally. But if it isn't, the browser switches to a simpler page you've prepared without DHTML. You can use browser detection on the entry page of your site to redirect users with older browsers to a completely different, simpler version of your site.

1 To add browser detection to the splash page, drag the Browser Switch Item (A) from the GoLive tab (B) in the Palette to the header of the splash page (click on the disclosure triangle (C) to open up the Head Section).

2 The Inspector window changes to the Browser Switch Inspector. It's usually fine to leave Supported Browsers set to Auto, but if you have custom JavaScript on your page that you know works with some older browsers, you can enable those browsers here. In the Alternate Link field (D), type the name of the page to which you want the user's browser to jump if that browser doesn't pass the version test. You can also use the Browse button (E) to find the alternate page on your hard drive, or you can use the Point-&Shoot button (F) to select a page in the Site window.



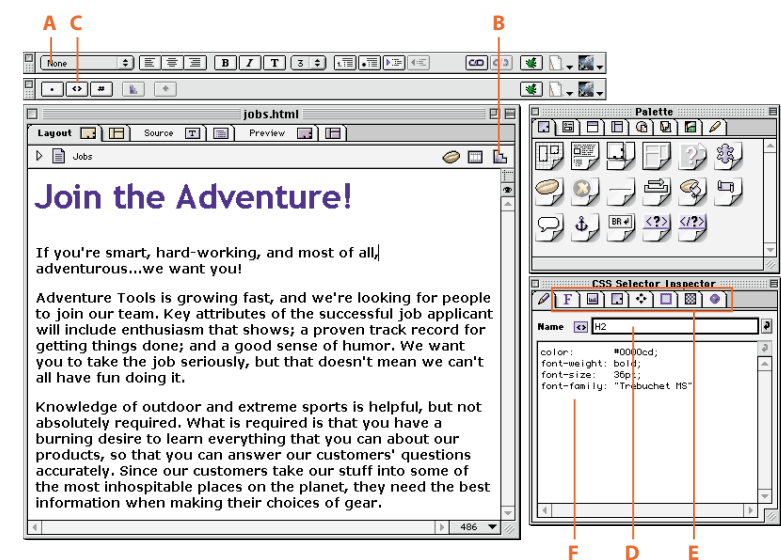
Styling text

Cascading Style Sheets help solve a pet peeve of Web designers: lack of fine control over the style and appearance of text. The detailed ins and outs of Cascading Style Sheets are beyond this article's scope, but we can show you how to create Tag Styles, which

let you apply style rules to any HTML tag within a document. For example, you can apply instant styling to all of the `<H2>` tags throughout your document so that when you change the style definition, all text in your document tagged as H2 also changes.

1 Select some text on your page and choose Header 2 from the tool bar's Paragraph Format pop-up menu (A). To create a text style sheet, click on the Style Sheet button (B) at the top of the document window. A new style-sheet window opens and the style tool bar appears on top. Click the New Tag button (C) on the tool bar.

2 In the CSS Selector Inspector, type H2 in the Name field (D). Type in the name of a valid HTML tag, but omit the usual angle brackets (`<` and `>`). Set the font, style, background and other attributes for the new H2 style using the rest of the tabs (E) in the CSS Selector Inspector. Note that as you change the attributes, the text you designated as H2 also changes. When you're done, the formatting you selected appears under the Basics tab (F).



continues page 122

Make easy rollover buttons

One of the most useful DHTML effects is the button rollover. This simple animation makes a button change appearance when the user moves the mouse cursor over the button or

clicks on it. What happens is the browser swaps one version of the button image for another. The Adventure Tools site uses rollovers in the navigation bar on the main page. Here's how.

1 First, make a button. Adobe's ImageStylet and Macromedia's Fireworks make creating rollover buttons much easier than with Adobe Photoshop. No matter what you use, make sure the images for the button's various states (rollover, click on, and so forth) are the same size and resolution. Otherwise, the browser will scale the second image to fit into the same space the first image took up, and the transition between the images will look awkward. Also make sure your buttons are opaque GIFs or JPEGs, not transparent GIFs. If the image is transparent, the user will see one button on top of another, instead of one button replacing another.

2 Open the page that contains the button. In the Inspector Palette, click on CyberObjects tab (A), and drag the Button Image icon (B) to the document window.

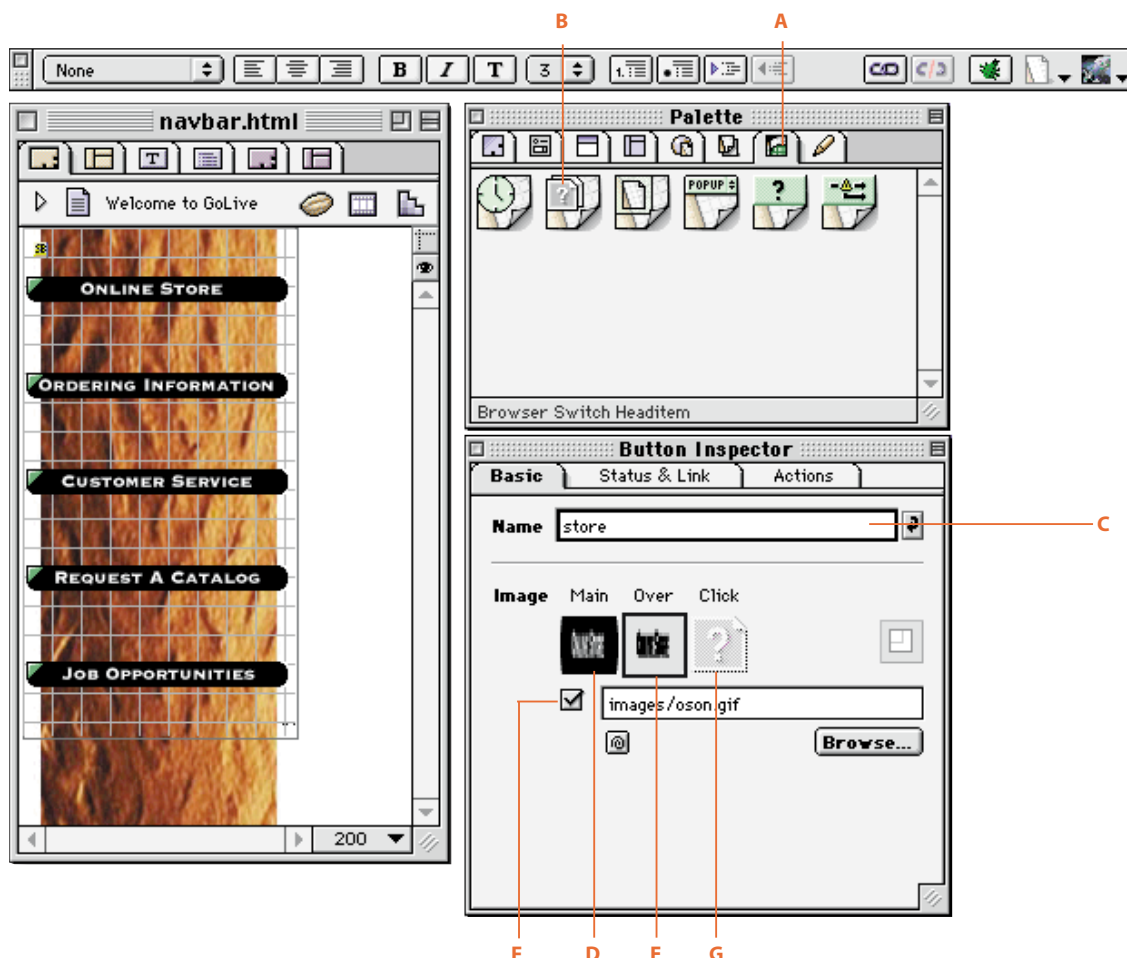
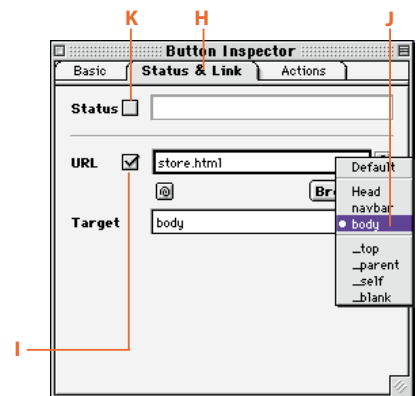
3 Name the button in the Button Inspector (C), and then click on the square marked

Main (D). This is the image you'll see when the cursor is not hovering over the button. Use the Browse button or Point-&-Shoot button to select the image.

4 Click on the box in the Button Inspector marked Over (E). Click on the check box next to the Image Path field (F), and then use Browse or Point-&-Shoot to select the image you'll see when the cursor is over the button. If you like, you can repeat the process a third time with the Click box (G), which replaces the button image with a third image when the user clicks on the button.

5 Buttons are usually linked to other pages. Click on the Status & Link tab (H), click on the URL check box (I), and then use Browse or Point-&-Shoot to create the link to the new page. Because the navigation bar on this page is part of a frame set, you'll need to set the target of the link. Choose Body from the pop-up menu next to Target (J).

TIP If you want a text message to show up in the status bar of the browser when the user rolls the cursor over a button, click on the Status check box (K) and enter your message.



Presentable HTML

HTML can add another dimension to your presentations. By Jim Heid

About to participate in a dog-and-pony show? Besides washing your dog and brushing your pony, you're no doubt also planning to create an on-screen presentation to accompany your pride and joy. In fact, you were probably about to open PowerPoint 98 when I interrupted you. Good thing. Microsoft PowerPoint 98 is a great program, but in today's Web-centric world, it might not always be the best choice for creating a presentation. A better choice may be an HTML editor such as Macromedia's Dreamweaver 2 or Adobe's GoLive CyberStudio – or even Apple's SimpleText.

Even if you aren't the type who dreams in HTML, you'll find that creating presentations using HTML isn't too difficult. To make it even more painless, I've created a set of template pages to get you started (see "A simple HTML presentation"). And if you just can't bear to tear yourself away from PowerPoint 98, you can use its HTML-export features to turn your PowerPoint presentation into HTML (see "Convert PowerPoint presentations to HTML").

Why HTML?

With PowerPoint 98 able to do everything except wash dogs and brush ponies, why would you want to descend into the depths of HTML to create a presentation? Several reasons.

Easy distribution You can quickly post the presentation on your company's Web site after the event. If you build the presentation using relative links (as I describe shortly), you can also distribute it on floppy disks or CDs.

More depth Chances are that the Web is teeming with sites that relate to your topic. In an HTML-based presentation, it's a cinch to include links to those sites. Your presentation then evolves from a simple series of bullet points into a deeper information resource – a pint-size, portable Web site unto itself.

Playback versatility The nightmare: five minutes until showtime and you realize you've forgotten the PowerPoint player – or for some reason you can't install it on the presentation computer. But virtually every



personal computer on the planet has a Web browser, making HTML a broadly supported foundation on which to build your pitch.

Multimedia support Thanks to browser plug-ins and Dynamic HTML, you don't have to strip QuickTime movies, animations, audio, and other glitz from your presentation. You will sacrifice some of its playback versatility, since in order to take advantage of these flashier goodies you'll need to bring and install necessary plug-ins on the presentation machine. But if you're willing to make the effort (and risk the glitches that can accompany using plug-ins), you can do almost anything with HTML that you can in PowerPoint.

continues page 134

A few building tips

Whether or not you use the templates I created, employ these tips for building your HTML presentation. Many of these also apply to conventional Web sites.

Watch your screen size PowerPoint and other presentation programs automatically resize slides to accommodate the screen resolution of the computer you're using. Web browsers reflow text but won't resize graphics and other elements. So, keep your destination screen size in mind when creating the presentation – a good rule of thumb is to design for a screen resolution of 640-x-480 pixels.

Name files carefully To ensure that

your presentation will run properly on any Web-aware platform, name your HTML pages and their support files using all lower case letters, and in the boring 8.3 style (up to eight characters, a period, and a three-character file extension): for example, dogshow.htm instead of Westminster.html.

Keep your links relative When linking to graphics or to other pages in the presentation, use relative links rather than absolute ones. A relative link describes a location relative to the location of the page with the link – for example, /images/graphic.gif. An absolute link spells out a complete location – for example, harddrive/presentation/images/graphic.gif

A simple HTML presentation

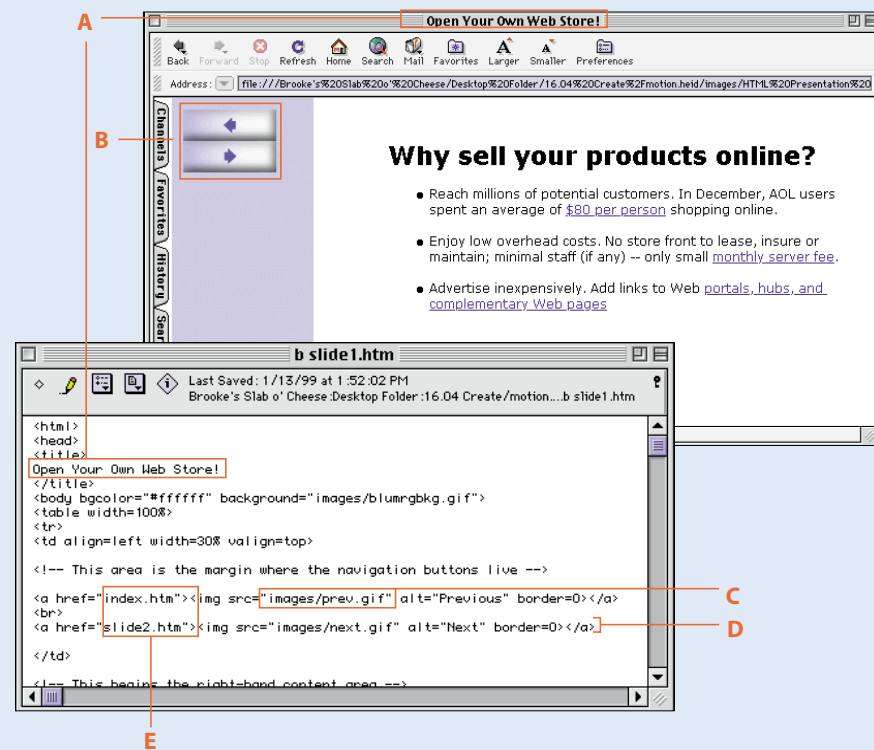
To give you a head start in building HTML-based presentations, I created a set of simple template pages, which you can download from www.macworld.com/more/. There's one template for a title slide, one for a bullet-point slide, one for images, and so on. The templates have a simple design that works across different browsers and platforms – they're not built for adding flashy animated effects common to PowerPoint presentations.

You can open and modify the template pages with a text editor such as SimpleText or Bare Bones Software's BBEdit (Full Moon, 01628 660 242), or with a WYSIWYG HTML-editor, such as Macromedia's Dreamweaver 2 (www.macromedia.com) or Adobe's GoLive CyberStudio or PageMill (www.adobe.com). If using a WYSIWYG editor, switch to HTML view in order to see the comments I've planted in the HTML. Here's how to work with the templates.

1 Adapt the title slide I called the title slide index.htm, the name most commonly used by Web servers to denote a directory's default home page. It simplifies posting your presentation on the Web: simply stash the presentation in its own directory, and refer to it with a nice clean URL such as www.yourdomain.com/speech/. If you're using a Mac-based server such as StarNine's WebStar (www.starnine.com), you might need to change this file's name to default.html. If you're willing to spell out a full URL – like www.yourdomain.com/speech/title.htm – for the online version of the presentation, you can change its name to anything you like. But keep in mind the file-naming recommendations I mentioned in the main text.

You'll also need to replace the text between the template's <title> tags (in the browser window's title bar) and any other text in the template that reads "Insert ... here."

2 Stash the images If your presentation contains graphics, tuck them in the Images folder and use relative URLs to refer to them.



Text between the <title> tags (A) appears in the browser window's title bar. Images for slide navigation buttons (B) are accessed using relative links (C), which make your presentation portable. Edit each slide's previous and next tags (E) to reflect the file names of the previous and next slides, and omit this entire line (D) in the last slide.

3 Duplicate and modify If your presentation is like most, many of your slides will contain several bullet points – base these on the template file slide1.htm. For slides that have a single idea, statistic, or quote, use slide2.htm. Using the Duplicate command (⌘-D) in the Finder, make as many duplicates of these two files as you need and modify each duplicate accordingly. Remember to edit the HTML for each slide's navigation buttons so the next and previous buttons work properly.

4 Install the right fonts I used Microsoft's Verdana font, which is designed to be legible on low-resolution monitors and is included with the Mac OS and with Windows 98.

If your presentation machine doesn't contain Verdana, the browser will fall back to Geneva, Helvetica, or Arial (a Helvetica look-alike in Windows).

You can download Verdana and other screen-optimized fonts from www.microsoft.com/typography/fontpack/

Convert PowerPoint presentations to HTML

You can't imagine standing at a podium without PowerPoint 98, but you still want the distribution flexibility that HTML provides. The answer: PowerPoint's Internet Assistant, which swings into action when you choose Save As HTML from PowerPoint's File menu.

The Internet Assistant's six dialogue boxes provide a broad array of options for converting your presentation. You can, for instance, have the presentation's slides displayed within a frame set, with one frame providing one-click access to each slide. You can even make the original presentation file available for downloading.

The Save As HTML feature converts each slide into a graphic, which enables PowerPoint to retain the slide's formatting – all the way down to its colour scheme and template design. On the downside, this means that each slide is much bigger than an equivalent screen created in HTML. PowerPoint also creates text-only versions of the slides, but they're bland and bare as bones.

PowerPoint's Internet Assistant does a good job of bridging the gulf between PowerPoint and HTML; there's no better way to quickly convert a PowerPoint pitch for display in a browser. But if your primary goal is to create a truly HTML-based presentation, you're better off using an HTML editor.

The Internet assistant

A Choose between standard and framed layout. (Framed layout accesses slides faster).

Relative links make it easier to move the presentation (or site) from one disk drive or server to another.

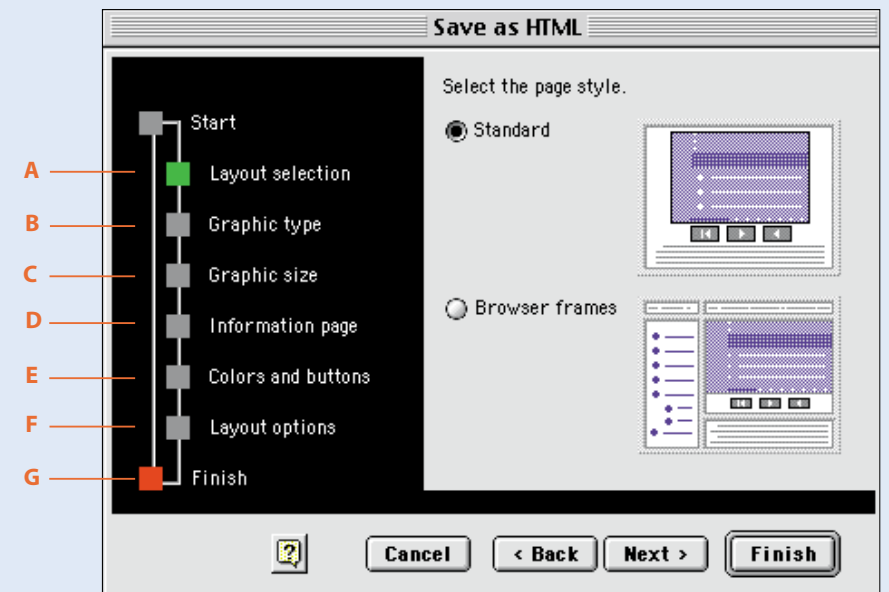
Absolute links tie your project to a specific disk or Web address and won't function when your project is moved. Most current Web-authoring tools create relative links automatically, but it's possible sometimes to wind up with an absolute link.

Test it before showtime After creating your presentation, move it to another machine and test it to make sure all your links work properly. If you don't have a second computer, move the entire presentation folder to a different location on your hard drive and test it from there. This will at least let you sniff out any link problems.

Carry it on a PC disk The best medium for transporting your presentation is a PC-formatted disk or removable-media cartridge. Because all PowerPC Macs can read PC-formatted media, you'll be able to copy your presentation onto either a Mac or a Windows computer with no worries.

After the Show

Your pitch doesn't have to end when the presentation is over. As already mentioned,



B Convert each slide into a GIF or a JPEG file. (Opt for GIF unless slides contain photographs).

C Choose how large you want each graphic to be. (The default setting, 640-x-480 pixels, creates the smallest and most portable files).

D Enter your email address, home-page URL, and other information that you want

appear on the presentation's opening page.

F Choose between standard browser colours (the default, which I recommend) or custom colours for the background, text, links, and visited links. Specify placement of the slide-navigation buttons, and whether to include slide notes on each page.

G Click to carry out the conversion.

using relative links throughout makes it easy to post your presentation on a Web site or distribute it on floppies. But to really make an impression, consider distributing it on business card-size CDs, such as ROM cards, from the MCB Group (0800 0624 2141).

ROM cards have dimensions identical to those of dead-tree-based business cards, but they can be used in any standard CD drive. A ROM card holds only 18MB, a fraction of the 600MB capacity of a normal CD – but more than enough to hold an ambitious presentation containing

QuickTime movies.

ROM cards are a bit pricey – as much as £4.99 each, depending on how many you order. But their unique capabilities and high-tech appeal make them a striking finish to big-budget presentations. Anyone who receives one is likely to try it out just to see if it really works.

It's a great way to guarantee that someone will take another look at your ideas – all of which are crisply showcased in a snazzy and accessible HTML-based presentation.

Jim Heid writes and lectures on Web development and multimedia.

create print

Extend yourself

QuarkXPress XTensions can really boost productivity. By David Blatner

Almost all QuarkXPress users know about XTensions – those plug-ins that add functionality to XPress – but relatively few people go out of their way to use them. This is unfortunate, because although QuarkXPress is a good program, you won't really see it shine until you start using it with XTensions.

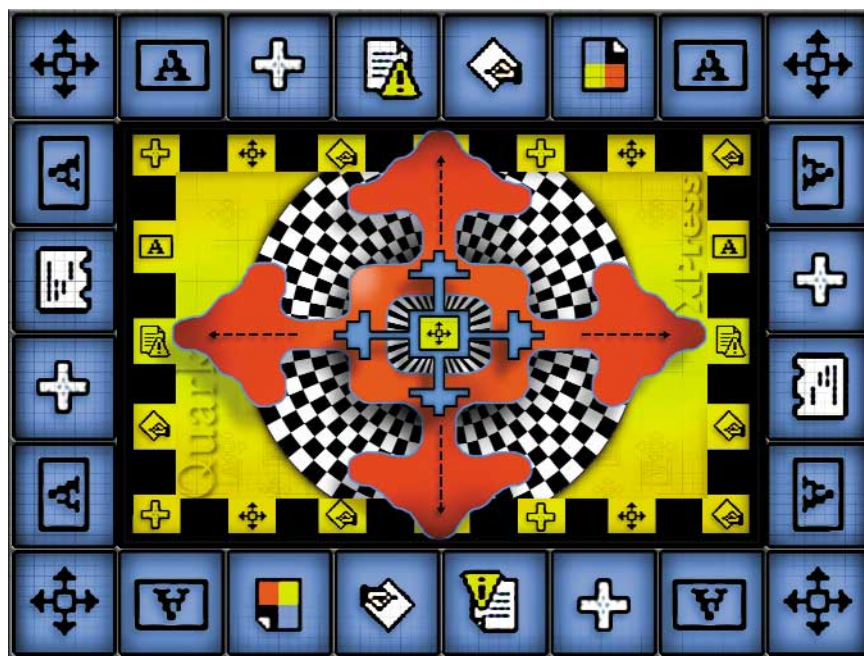
There are two reasons people tend to shy away from XTensions: First, it's often cost-prohibitive for small companies to buy more than one or two (so some don't buy any at all). Second, people still feel the burn of the worst disaster in desktop publishing history: Pasteboard XT.

When Pasteboard XT first came out, it changed people's documents so that you had to have this free XTension loaded to be able to open the document. People were so angry that the developer soon released a new version to fix the problem. But in the short time that lapsed, the old XTension made its way around the world. Even though every version of the XTension since then has removed the requirement, the old version still haunts us. (If you run into this problem, visit the Markzware Web site [www.markzware.com] to get a newer version of the XTension or PBFix; then just open the file and resave it. Also from Markzware, Pasteboard XTterminator batch-removes the requirement from all the XPress documents on your hard drive.)

If you suffer from XTension woes, the antidote is an raft of other XTensions that are free or inexpensive and that cure troubles, not cause them. We can't guarantee the XTensions in this article are bug-free, but most of them are so simple that not much can go wrong. For those who have asked, "Why won't XPress let me do this?" the answer is just a download away.

Watch out

One of the most important rules of XTensions is to be careful of the outdated ones. Some older XTensions – such as the Bob and Son of Bob XTensions from Quark – can cause major crashing problems with newer versions of XPress. Other older XTensions may cause subtle problems or simply won't run. It's best to avoid using an XTension on important documents until you know that it works for you. Another potential pitfall is not having enough RAM



allocated to QuarkXPress. The more XTensions you have loaded, and the more complex those XTensions are, the more RAM XPress needs.

Maximum efficiency

While some users still balk at using XTensions, it's clear that adding functionality to XPress will increase your productivity. Sure, there are expensive XTensions out there – and the people who need them are happy to pay for them. There are also low-cost bundles of XTensions – such as QX-Tools, from Extensis (£99; XChange, 0171 637 2966); XPert Tools from a lowly apprentice production (£99; Digital Toolbox, 0181 961 6622); and Xdream, from Vision's Edge Software (£89; XChange) that offer a lot of punch for a little money. Nothing beats the joy of a freeware or shareware XTension that saves you an hour's worth of time. Not every XTension featured overleaf will be exactly what you need, but you should find at least a few jewels here. MW

David Blatner is the author of *The QuarkXPress 4 Book* (Peachpit Press, 1998) and *Real World Photoshop 5.0* (Peachpit Press, 1999).

continues page 138

Essential freeware XTensions



Quark's XTensions

Quark (www.quark.com/) has released several XTensions, including two that are must-haves for anyone who makes pages in QuarkXPress.

Type Tricks This adds Make Fraction and Make Price features (which automatically format fractions and prices), plus the ability to remove all manual kerning or add word spacing to selected text.

Jabberwocky Fills text boxes with dummy text. If you're tired of the old lorem ipsum, then this is the XTension for you.

Quark's Web site offers several other XTensions, such as a filter that lets you import GIF images and another that lets you import text from Microsoft Word 98.



Text

QuarkXPress lets you do a lot with text, but there's always room for improvement. These four XTensions help you manage your text better than ever.

Sort Text (Durrant Software; www.durrant.co.uk) sorts every paragraph in a selection alphabetically or numerically (as long as the paragraphs are numbered).

Text Insets (Durrant Software) lets you change the text-inset amount for each of the four sides of a text box.

Word Counter XT (Markzware; www.markzware.com) counts the number of characters, lines, and words in your selection, your text box, or even the entire page. If you're an editor or a writer, this XTension is essential.

Overflow XT (Markzware) provides you with a palette that lists all overset text boxes (boxes that contain more text than they can hold). It even lets you automatically enlarge boxes until the text fits. Very nice.



Pictures

Any way to speed up working with pictures in XPress will put a smile on a production artist's face. Here are three XTensions that do the trick.

David's Place XT (Jintek, www.jintek.com) lets you import graphics or text without first having to make a picture or text box. What's more, the XTension builds picture boxes on the fly that are exactly the size of the picture. A copy of David's place can be found on this month's cover-mounted CD.

PictAttributes XT (Markzware) saves the scaling, rotation, skew, and offset of your graphics when you use Get Picture to replace an image in a picture box.

Drag-n-Drop XT (Extensis, www.extensis.com) lets you import pictures by simply dragging them from your desktop to your QuarkXPress page. If you've got a big monitor, you'll love this convenience.

EnhancePreviewXT-SE (Koyosha, www.koyosha.com) replaces XPress's murky screen previews of TIFF files with high-resolution images. It lets you see how your pages really look.



Preferences

Why can't you lock guides in XPress? Why is there no way to tell a spot colour from a process colour in the Colours palette? Fortunately, there are XTensions that let you control these and other preferences.

S&R Default Folder (Durrant Software) fulfills one of the most common requests: the ability to change the default settings in the Step And Repeat dialogue box. It's easy, it's quick, and it's essential for any hard-core XPress user.

PageBorder XT (Vision's Edge Software, www.visionsedge.com) places a border around your page when you print your document. This is



extremely useful when you're printing a proof of any page that's smaller than the paper you're using.

Bold Spot XT (Markzware) is tops for helping you determine which colours are spot colours and which are process in the Colours palette: when the XTension is loaded, the spot colours appear in bold type.

Lock Guides XT (Markzware) gives you two options: lock all the guides or unlock all the guides. It's basic, but anyone who has ever accidentally moved a guide knows this could be a real lifesaver.



General productivity

Here are a handful of other XTensions that give you some clever shortcuts.

QX-Shadow (Extensis) is a godsend for anyone who has to make more than one drop shadow per week. It automatically builds drop shadows behind any object on your page. There are commercial XTensions with more features, but this one has everything that many people need.

xStyle (Em Software; www.emsoftware.com) lets you create, edit, and apply style sheets much faster and more conveniently than with XPress's built-in Style Sheets palette.

PasteBox XT (Markzware) lets you paste a box or group of boxes to another page, giving the box exactly the same placement on the new page that it had on the original. You can even paste the box or group to the same spot in another document.

Navigator XT (Vision's Edge Software) opens a palette that displays your page geometry and lets you navigate around your document quickly. Again, there are commercial XTensions that do this better, but this one is free.

Script Manager XT (Vision's Edge Software) is a natural for anyone using AppleScripts with XPress. It lets you list and run your scripts and even offers script sets and on-screen object naming (instead of making you do this through a script).

Addressed to kill

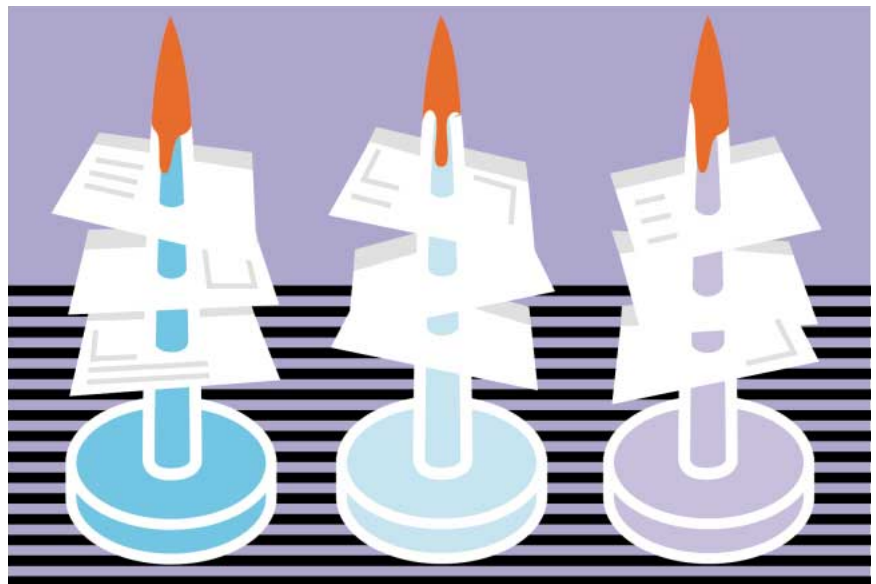
The Mac OS can make sense of any URL anarchy on your machine. **By Joseph Schorr**

Literally thousands of new Web sites pop up on the Internet every day. Unfortunately, at least half of them seem to end up getting bookmarked on my computer. The result, of course, is a mess: huge lists of bookmarks; unwieldy, disorganized browser menus; and dozens of stray URLs in documents randomly scattered all over my system.

With Web and email addresses coming at you from every direction, it's good to know that there are plenty of powerful URL-management shortcuts built right into the Mac OS. If you know the right tricks, you can wrangle, redirect, and reorganize those URLs with a few simple mouse-clicks.

Detect and connect

The best way to extract URLs from documents of any kind is by using Apple Data Detectors (ADD) 1.0.2, an incredible free utility from Apple that helps you find, save, and connect to Internet addresses located in documents anywhere on your system. If you're not already using ADD, you should be. To download it, go to <http://asu.info.apple.com> and search for Apple



Data Detectors. (You can use ADD with System 7.6 or later). With ADD installed, you can simply control-click on a selection of text in a document to create a contextual pop-up menu that lists the URLs in that

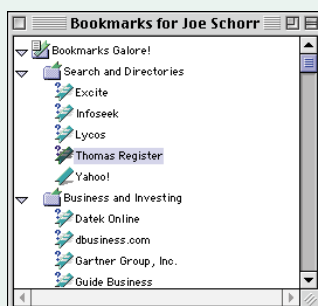
selection. The pop-up menu also lists a number of options for launching or saving the URLs (see "Click to connect").

The detector can recognize email addresses, continues page 145

The keyboard connection

Both Internet Explorer and Netscape Navigator provide a number of shortcuts for opening your favourite Web pages, but have you noticed, there's no obvious way to navigate to frequently visited sites using only the keyboard? Generally, you have to click on a button or pull down a menu or sub-menu in order to get

to a bookmarked location. However, both Web browsers do allow mouse-free access to the sites you've already added to the Bookmarks (Netscape) or Favorites (Internet Explorer) list. Just use the commands in the figures below to perform such tasks as deleting a bookmark, and going to a favourite site.



Netscape Navigator 4

- 1 Press **⌘-B** to open Bookmarks window.
- 2 Use the up- and down-arrow keys to move to a location in the list.
- 3 Once you've selected a bookmark, press return to launch it.
- 4 To edit the name or contents of a bookmark, select it and then press **⌘-I**.
- 5 Open and close selected folders by pressing return.



Internet Explorer 4

- 1 Press **⌘-J** to open the Favorites window.
- 2 Use the up- and down-arrow keys to move to a location in the list.
- 3 Press **⌘-right arrow** to expand, and **⌘-left arrow** to collapse, selected folders.
- 4 To remove an item, select it and press delete.
- 5 Once you've selected a bookmark, press **⌘-down arrow** to launch it.

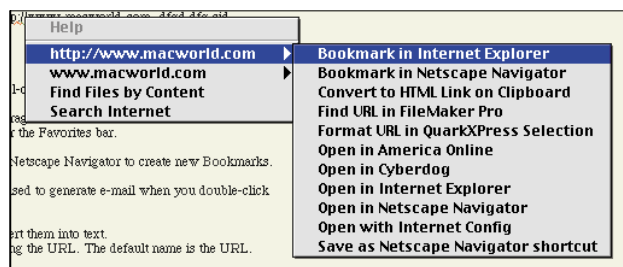
Web sites, newsgroup names, and FTP site addresses. You can, for example, use ADD on a word processing document to find a Web page's address, add the address to the list of bookmarks in Netscape Navigator, and then launch your browser and open the page – all from one pop-up menu right in your word processor. One note about ADD: the pop-up menus provide more options than you probably need; the View In Cyberdog option is one you probably won't use, for example. So after installing ADD, make it a point to visit the Apple Data Detectors control panel, where you can turn off commands you don't plan to use.

Clip those URLs

Even without ADD, Mac OS 8.5 has become quite smart about sniffing out URLs and helping you organize them. For example, you can now create two new kinds of text clippings: Web-page locations and email addresses. Simply select a URL (such as www.macworld.co.uk) or an email address (such as joe@macworld) in the text of any drag-&-drop-aware application, such as Microsoft Word or AppleWorks, and then drag the selection to the desktop (or anywhere else in the Finder). The resulting text clipping becomes a document you can double-click on to launch your default Web browser or email program, which then connects to the designated Web page or creates a pre-addressed piece of email for you.

Once you've created Web-page-location or email-address clippings, there are a number of different ways you can use them.

- Drag a Web-page-location clipping directly into a browser window to connect to that Web site immediately. If you drag the clipping into Microsoft Internet Explorer's Address bar (instead of into the window itself), the URL appears in the Address bar, although you won't actually connect to the site until you press return.
- If you want to be able to access a clipping from the Favorites sub-menu in the Apple menu, control-click on a clipping and choose Add To Favorites from the contextual pop-up menu. This places a copy of the clipping in your system's Favorites folder.
- You can change the name of a clipping without altering its contents, even though by default these clippings have the name of the URL they contain.
- You can drag the clippings into any drag-&-drop-aware application to insert them as text.
- Drag clippings into Internet Explorer 4's Favorites folder to automatically add them



Click to connect

With Apple Data Detectors, you don't have to hunt around for the URLs in a document – they pop right out in a contextual menu packed with options.

to Explorer's Favorites list. Even cooler, drag them straight onto the Favorites bar and they appear right on the bar. This little trick doesn't work with Netscape Navigator, by the way.

■ Double-clicking on a clipping launches your default Web browser or email program. You can change these defaults by opening the Internet control panel and choosing new default applications in the Email and Web panels.

Instant bookmarks

If you generally keep your Web browser running, here's another way you can create shortcuts to your favourite Web sites from URLs you may come across in email and other documents: You can treat a URL within text just as you do a Web-page clipping file. Select the URL, and then drag it directly into the Favorites folder in Internet Explorer – bypassing the Finder completely. The URL instantly becomes available in Explorer's Favorites list. Or, you can drag the selection right onto Explorer's Favorites bar to install a shortcut button right on the bar itself.

You can do essentially the same thing in Netscape Navigator by dragging a selected URL into Navigator's Bookmarks folder.

Of course, even with these techniques, you still have to sort through your collected URLs, organize them into manageable lists, and periodically, weed out the waste. For that job, alas, no one-click tool exists. MW

Joseph Schorr co-authored *Macworld Mac Secrets, fifth edition* (IDG Books Worldwide, 1998).

Macworld's features editor David Fanning and contributing editor Lon Poole answer readers' questions and select reader-submitted tips for this column. Send your question or tip (include your address and phone number) to David Fanning, Q&A, Macworld, 99 Gray's Inn Road, London WC1X 8UT. You can also send mail electronically, marked Q&A in the subject line, to david_fanning@macworld.co.uk or via fax to 0171 405 5308. We pay £25 for each tip published here.

We cannot make personal replies, so please do not include a stamped-addressed envelope.

Q&A

Opening the .exe files

Q How can I open email attachments labelled with the suffix .exe, such as tree.exe?
William Hammond

A Files whose names end with .exe (short for executable) are PC programs. Some .exe programs are compressed archives, which you can expand on your Mac using the freeware Stuffit Expander, together with the \$30 shareware DropStuff With Expander Enhancer, both from Aladdin Systems (www.aladdinsys.com). To run these programs, you need either a PC or PC-emulation software such as Insignia SoftWindows 98 (£129; Insignia, 01494 459 426) or Connectix Virtual PC (£119; Computers Unlimited, 0181 358 5857) for your Mac. If your Mac has PCI or NuBus expansion slots, you can also install a PC-compatibility card from Orange Micro (www.orangemicro.com) and use it to run .exe programs.

Correct dictionary mistakes

Q While using the spell checker in a WordPerfect 3.5 document, I clicked Add instead of Replace and added a misspelled word to my dictionary. How can I remove the added word? And can I remove words from Microsoft Word's dictionary too?
Douglas Mehr

A Corel WordPerfect stores the words you add to the spelling dictionary in a file named User Dictionary (UK), found in the Language folder inside the WordPerfect folder. To edit this file, double-click it. The file opens in the ST Utility program, which lists the words in the dictionary file and lets you delete and add words.

Word 6.0 and Word 98 store your words in a file named Custom Dictionary. To edit a dictionary file in Word 98, choose Preferences from the Tools menu, click the Spelling & Grammar tab, and then click the Dictionaries button. In the dialogue box that appears, select the dictionary you want to edit by clicking its name – not the check box – and then clicking the Edit button. Word 98 opens the dictionary in a document window and – turns off automatic spell-checking. Find the misspelled word in the document window and delete or correct it. You can also type in new words, but make sure you press return after each new word to put it on a separate line. When you save this document, Word 98 may advise that you could lose formatting if you continue saving; click Yes and don't worry. To reinstate automatic spell-checking, choose Preferences from the

continues page 146

Clarify phone-line quality

Tip

Check your phone-line quality by getting your modem to report the phone-line quality while it's connected to your ISP, says William Roemer

In the communications module of ClarisWorks or a terminal program such as ZTerm, which is \$30 shareware (not freeware as stated in January), type AT&F1 and press return.

Then type ATDT followed by the phone number you usually dial when you connect to your ISP – for example, ATDT555-1212 – and press return. After the modem dials and connects, you'll probably see a message from your ISP asking for your log-in name. Ignore this request and type + + + but don't press return.

The terminal program should display OK on the next line. Type AT&V1 and press return. The program displays connection statistics, including an item labelled something like Line Quality followed by a number. A Line Quality value of 25 or less indicates that the

modem can connect at high speeds. Values greater than 25 signify slower connections.

Roemer says factors that affect line quality include your modem's distance from the telephone switching facility and the number of devices (telephones, fax machines, answering machines, and the like) connected to the same line.

For example, with all telephones unplugged from the phone line, Roemer's connection speed hovered between 48 Kbps and 50Kbps. But when four telephones were connected to the same line, the connection speed dropped to between 28.8 Kbps and 31.2 Kbps. In addition, Roemer notes that a V.90 modem will frequently not connect at 56 Kbps if the ISP's modem supports only the X2 or K56flex standard.

Antonino Giuliano observes that if your modem is more than 19,000 feet from the phone company's analogue-digital switch, you can only expect a connection of between 24 Kbps and 28.8 Kbps with any kind of 56-Kbps modem.

Tip

In Mac OS 8.5.X you can scroll through a folder or window simply by grabbing its contents. Just press the ⌘ key, click anywhere in the window, and drag – the pointer turns into a rather splendid white-gloved hand.

Richard Hayes



Scrollin', scrollin', scrollin'

You can scroll through a folder or disk window's contents in Mac OS 8.5 by pressing ⌘ as you click and drag. The bonus: your cursor turns into a little white-gloved hand, à la Mickey Mouse.

Tools menu, click the Spelling & Grammar tab, and turn on the option Check Spelling As You Type. To edit a dictionary file in Word 6, choose Options from the Tools menu, and click the Spelling tab to see a list of custom dictionaries. Select the dictionary you want to edit and click the Edit button. When Word asks if you want to edit the dictionary as a Word document, click Yes. When asked how you want to convert the dictionary file, select Text Only and click OK. The file opens in a document window behind the Options dialogue box; dismiss the dialogue box by clicking its Cancel button. Now you can edit the dictionary in the document window.

Refining your AppleScript

Tip

AppleScript is great for automating everyday tasks, especially when you're using the speedier PowerPC-native AppleScript in Mac OS 8.5. But some AppleScript commands can be troublesome when they run in the background.

For instance, consider the following script, which selects the items in the Recent Applications folder, moves them to the Trash, and empties it:

```
tell application "Finder"
  select every item
  of folder "Recent Applications" of
  apple menu items folder
  delete selection
  empty trash
end tell
```

Chris Garaffa wrote this script, and while it was running he made the mistake of selecting the folder that contained his Web site. To his surprise, the script didn't delete the items in his Recent Applications folder but instead deleted his Web site. The following script doesn't use a Select command, and would have prevented this calamity:

```
tell application "Finder"
  delete every item of folder
  "Recent Applications" of
  apple menu items folder
  empty trash
end tell
```

The moral? Be careful about selecting items while running a script in the background, beware the Empty Wastebasket command (which never displays a warning), and back up your files!

Read mail while roaming

Tip

If you want to read and send email via your regular email account while you're away from your computer, you don't necessarily need a Web email account as described in December 1998's Quick Tips. Ned Smith reports that you can access a POP email account from any computer with a Web browser by visiting the Panda Mail site (www.bstar.net/panda/). There you supply the email log-in or user ID (typically the first part of your email address), email password, and server name (for example,

ISPname.com or pop.ISPname.com).

One caveat: Panda Mail probably won't be able to access your email account if the POP server is behind a firewall – typical with some corporate email servers but usually not so with ISP (Internet service provider) servers. Also, to keep your mail private, don't forget to close the browser window when you're done and clear the browser cache.

Get an instant XPress picture box

Tip

To make an instant picture box in QuarkXPress 4.X that's the same size as the document page, open a new document with the Automatic Text Box option turned on and the four Margin Guides set to 0. Then choose Picture from the Content sub-menu of the Item menu. Voilà!

Randy Oest

Forced text in Excel

Tip

A leading hyphen causes Microsoft Excel to interpret the contents of a cell as a formula. If you want to use a leading hyphen but not create a formula, use an en dash (option-hyphen) or an em dash (shift-option-hyphen), not a hyphen. Excel treats them like any letter or number.

Jim Henderson

■ You can also force Excel to treat the contents of any cell as text by typing an apostrophe at the beginning of the cell.

Peter Worlock



Apple is a byword for graphics
excellence – but for how long?

Creative vision on

It's often hard to remember now, but Apple's key contribution to the world was not desktop publishing but rather the broader concept of graphical computing. DTP was an effect; graphical computing was the cause.

Before the Macintosh, the personal computer did a very poor job of mixing text and graphics. The market-leading IBM PC-compatible of the mid-1980s was an ugly thing, lacking even the ability to show different typefaces on screen let alone put a picture of any description among a page of text.

Everything else – the icon-based desktop that made managing the system so easy, the publishing applications, the long road to working multimedia – everything followed from that one innovation.

Bailing out

So it's sad to see one of the pioneers of graphical computing on the Macintosh bailing out. VIDI, developer of Presenter – one of the best 3D modelling, rendering and animation systems on the Mac – is in the process of winding up operations (many of you will be ignorant of VIDI's status, but watch closely during the end-credits of Pixar/Disney's *A Bug's Life* and you'll spot VIDI Presenter among the effects tools used).

The company is, in part, blaming Apple for a lack of support for 3D on the Mac, and elsewhere Strata (another long-serving supporter in the field) has recently been acquired by C3D, a major player in the TV and film f/x business. Infini-D and RayDream were both acquired by MetaCreations, and Macromedia killed its 3D package, Extreme3D. So 3D on the Mac is a lost cause? Well, maybe – but it isn't quite that straightforward, and the causes are even less so.

For example, VIDI (by its own admission) left it too late to produce a cross-platform version of Presenter. Strata (by its own admission) prematurely launched the major version 2 upgrade to flagship application Studio Pro and suffered as a result.

But the bad news for these companies, and others, is good news for the Mac and those of us with an interest in high-end graphics: competition is actually increasing. While

the PC press and national media on both sides of the Atlantic have published an endless stream of rubbish about developers deserting the Mac, the truth is entirely the reverse.

For example, NewTek – whose Lightwave application is among the leading software used by the biggest film and television effects studios (*Titanic*, *Lost in Space*, *Starship Troopers*, *Star Trek*, *Babylon 5*) – brought its software to the Mac. German developer Maxon has produced a series of excellent 3D apps based on its Cinema4D package running on the Mac. Strata has recovered from its misstep with Studio Pro – and version 2.5 is a superb development suite for modelling, rendering and animation.

Newcomers make good

Less familiar names, although well-known in the specialized sphere of Hollywood production, such as Discreet are also offering Mac versions of their software.

So far, so good. But there are underlying problems for the Mac in this small but lucrative market. Not least is that the Mac is not sufficiently powerful to compete against high-end systems like Silicon Graphics workstations, nor does it offer the price-performance appeal of the newer Windows NT machines running on Pentium and Alpha processors.

But one of the biggest drawbacks remains the lack of a true multi-threaded, multitasking operating system for the Mac, and many studios have simply tired of waiting for Apple to fulfill its promises on this front.

Right foot forward

Apple has, however, taken two steps in the right direction: its new-found acceptance of OpenGL as a system-level graphics technology (even if that proves to be at the expense of its own QuickDraw3D), and its decision to ship the new G3 Macs with graphics acceleration hardware.

It may be a little too late, but it's good to see Apple striving to compete in 3D, animation and visualization – one of the most exciting areas of computing today. And wouldn't it be wonderful to see not just token Macs on screen in Hollywood blockbusters, but to know that, behind the scenes, Macs by the thousand were responsible for bringing those creative visions to life.

MMW