

Place your bets
UK betting exchanges winning in the world of online gambling
page 14



Critical angle
What happens if our critical systems come under cyber attack?
page 26



Just the job
Fourteen pages of the top IT vacancies start on
page 38

21 April 2005 £2.75

Royal Mail reinforces its IT

Daniel Thomas

ROYAL Mail is to sign a major IT security contract to safeguard its systems across the UK.

The deal will involve the protection of 80,000 servers and 50,000 PCs at Royal Mail, the Post Office and Parcelforce against vulnerabilities such as viruses, intrusions and spyware.

David Lacey, director of information security at Royal Mail, told *Computing* the organisation is to start a phased rollout of the QualysGuard vulnerability management software, subject to a

Major security deal will help protect systems against viruses and spyware

financial review later this month.

Real-time alerts will notify IT staff of any hacking attempts on critical ecommerce and web-based systems, allowing the company to respond to security threats much faster.

'We need an automated solution to counter the automated attacks of hackers,' said Royal Mail IT security manager Martin Roe. 'By having a fully automated

vulnerability management process, we can cut the time taken for fixes and save a lot of effort.'

The Qualys system will automatically scan Royal Mail's IT systems and analyse and prioritise which security risks need to be fixed first, while IT security firm Qinetiq will be charged with overall management of the security programme.

'We can use the software to

send out real-time reports to Parcelforce and the Post Office, as well as different suppliers managing our applications and web addresses,' said Lacey. 'We are moving closer to the internet and web services and we need to have real-time security.'

Qualys and Qinetiq have already won an initial contract to scan for vulnerabilities on the Royal Mail's most information-sensitive ebusiness servers.

The software is also being used to generate reports, which are used by the group's IT outsourcer CSC to help patch those systems

deemed most at risk.

Initial trials, and other security initiatives by partners CSC, BT and Xansa, managed to reduce virus incidents by a factor of four last year. Increased security efforts also cut laptop thefts by two-thirds and the number of password resets by more than 11 per cent.

● Our IT security Special Report starts on page 25

Further reading

www.computing.co.uk/news/1157762

daniel_thomas@vnu.co.uk
www.computing.co.uk

Power boost for Antarctic research

James Watson

THE British Antarctic Survey (BAS) is to purchase a high-performance computing system to support a major five-year programme to analyse environmental changes.

Researchers will use the system to run a wide range of projects, including climate and ice

sheet modelling, predictions about the West Antarctic ice sheet, and DNA sequence analysis.

David Blake, head of technology and engineering at BAS, says the organisation needs additional computing power and functionality to continue its work.

'We've been doing research in some of these areas already, but we're also expanding into new areas,' he said.

'In particular, we've done climate modelling for some time, but people are now much more interested in global warming, so we're increasing the amount of effort we put into that area.'

BAS researchers in the Antarctic collect data, which is sent back to the UK for data processing and modelling, a function the new system will help to expand.

Blake says it will also support the processing and manipulation of large data sets where different science disciplines work together on major issues.

BAS has yet to decide on the



The British Antarctic Survey researches ice sheet and climate modelling

technology it will use, but says the system must be able to support a very high volume of processes.

Part of the UK's Natural Environment Research Council, the BAS has an annual budget of

about £40m to research global issues in an Antarctic context. It runs eight research programmes and operates five research stations, two ships and five aircraft in and around the South Pole.

Computer Aid web site gets big response

Mark Samuels



IT DIRECTORS have pledged almost 1,000 PCs through our new Computer Aid

appeal web site in its first week.

Working with specialist charity Computer Aid International, we're asking the UK's technology leaders to donate old PCs so they can have a second life in the developing world.

Launched last week, the site makes it easy to donate old computers.

Computing is hoping to top last year's response, when readers pledged more than 28,000 PCs.

Computer Aid International provides a free re-conditioning service to help companies dispose of unwanted kit effectively.

Go to: www.computing.co.uk/computeraid



Over a million IT Professionals* are getting ongoing security guidance.

Are you?

Millions of your peers are turning to the Security Guidance Centre for the latest in security. By visiting regularly, they get the tools, guidance, and training needed for better protection against viruses and other security threats. Visit microsoft.com/uk/security today and see for yourself the newest additions, including:

Microsoft® Windows® XP Service Pack 2 with Advanced Security Technologies Download it for free and evaluate the latest updates for increased system control and proactive protection against security threats.

Free Online Self Assessment for mid-sized organisations† This Web-based self-assessment helps you evaluate your organisation's security practices, and identify areas for improvement.

Free Updates and E-mail Alerts Stay on top of the latest security issues quickly and easily by signing up for free Microsoft Security Communications.

InfoSecurity Europe 2005 from April 26-28. Find out more about where to hear our experts, how to attend sessions at the Microsoft Academy and what else is on offer at our exhibit stand (630).

Go today to microsoft.com/uk/security

Microsoft®



How payment processing firm Voca teams up with the Bank of England to test systems' resilience
See page 26

inside

News

The man who gave us the famous Moore's Law for processing speeds revises his prediction
See page 6

Reuters withdraws instant messaging system to prevent the spread of an IM worm
See page 8

Enterprise

Lloyds TSB awards £170m contract for IT support to Fujitsu Services
See page 11

Images of national treasures will be available on the British Library's new online gallery
See page 12



Getting IT involved from the start helps hotel group manage the integration headaches
See page 16

Special Report

Our special report on internet security kicks off with a look at the problems of managing identities
See page 25

Are our national infrastructure systems up to the task of fighting off viruses and cyber attacks?
See page 26

How Royal Mail dealt with the security issue when outsourcing its IT systems
See page 28



Careers

Middlesex University upgrades its learning management system to cope with rise in student numbers
See page 52

Have your say

Opinion and readers' letters
See pages 18 and 21

online

Computing is now available on your PDA. The service includes the latest news, the Backbytes column and the best IT industry jobs. To add the channel to your handheld device, visit www.avantgo.com

vnu business publications

Bus data analysis is just the ticket

London transport body benefits from new reporting tool

Chris Green

TRANSPORT for London (TfL), the body responsible for public transport across the capital, is using query and reporting software to improve London's bus services.

TfL is responsible for 5.4 million bus journeys on 3,730km of bus routes every weekday, using a fleet of buses operated by various transport companies.

The organisation has recently started using version 8 of Hyperion Intelligence and its dashboard technology, which allows TfL to more effectively analyse data about bus journeys and alter services accordingly.

'TfL is using the software to analyse and produce reports on how accurately these 40-plus bus companies are meeting the timetables and maintaining service requirements, and take action where necessary,' said Olliver Robinson, client account manager for TfL's bus operations.

The transport organisation worked with business intelligence specialist Rosetta Stone to implement the software, which has simplified co-ordination of schedules between bus operators and reduced the number of



TfL can monitor the location and progress of buses more quickly

instances where several buses arrive at once.

TfL is also using the software to analyse data collected by its network of beacons situated along London's bus routes. The beacons monitor the location and progress of buses and query the live data more quickly.

Access to data is also being more strictly controlled and granted only to authorised users, improving security and simplifying the data displays.

Previously, all data relating to bus services was managed and queried by an Oracle database system. But this fragmented into numerous bespoke client applications, many developed without the knowledge or control of the IT department.

'The major problem we had before the deployment of the dashboards was fragmentation of data,' said Robinson.

'We were losing the very data integrity we were trying to protect with our previous Oracle-based database structure, not to mention having to absorb a great deal of cost for skilled staff to do Oracle Reports development'.

The Oracle platform remains at the centre of TfL's data structure, but the Hyperion technology offers a simplified, easier to modify and aggregated display of operational data.

Further reading
www.computing.co.uk/news/1160994

chris_green@vnu.co.uk
www.computing.co.uk

Supplier sought to handle border control IT system

Sarah Arnott

THE government is looking for suppliers to maintain and develop its main UK border control technology.

The Warnings Index (WI) system is used by front-line immigration staff at 110 sites in the UK, seven in western Europe, and 170 visa-issuing posts around the world. Names, organisations and lost or stolen documents can be checked against the database.

The Immigration & Nationality Directorate (IND), part of the Home Office, is starting the procurement process for an eight-year deal to maintain the existing system.

Hardware and software platforms are to be upgraded over the next two years, and the incoming supplier will be expected to support these systems and provide input on future developments.

The WI system consists of a central hub and network covering 439 immigration fixed controls, 215 back-office systems, 93 search engines, 190 printers, 1,023 portable systems and 50 data distributors.

'There will be potential to upgrade, reconfigure, refresh and expand the system, and to provide a range of support, maintenance and development services for its applications,' says the IND.

The deal is expected to be signed in 2006.

Further reading
www.computing.co.uk/news/1160795

sarah_arnott@vnu.co.uk
www.computing.co.uk

Bank attack used key-loggers costing just £20

Peter Warren

THE hacker attack on Sumitomo Mitsui bank last month involved the use of keyboard logging devices costing as little as £20 each, according to sources close to the investigation.

Computing has learned that the attempt to steal an estimated £220m from the London office of the Japanese bank relied on battery-sized hardware bugging devices plugged into PCs' USB ports. Users' keyboards were connected to these key-loggers, which recorded details of every-

thing typed into the system.

Sources claim that cleaning staff – or people posing as cleaners – were able to attach the devices to machines. When the plot was uncovered, bank investigators found some of the devices still attached to the back of PCs.

The bugging kits, known as hardware key-loggers, can be bought from spy shops for about £20. They are difficult to detect unless someone physically examines the back of the machine. The devices can then download passwords and other data used to gain access to the computer system.

'It is known that people have been using devices such as these because you can buy them from shops. It is highly likely that they have been used in other scenarios,' said Paul Docherty, technical director of consultancy Portcullis Computer Security.

Many banks are now believed to be permanently connecting keyboards and other devices into their computers to prevent similar attacks. Sources say some banks have also banned wireless keyboards in offices.

'This type of scam has been going on for a while. This is an

old, old issue, and people have been talking about it being a weakness for at least two years now,' said a source.

Sumitomo is now believed to have deployed sophisticated software that monitors the electrical current in computer systems and can tell if they are being tampered with. A spokesman for the bank declined to comment on the investigation.

Further reading
www.computing.co.uk/news/1162004

www.computing.co.uk

financial world

IBM has reported first-quarter income from continuing operations of \$1.41bn (£742m), up three per cent from a year ago. Revenue from continuing operations was \$22.9bn (£12bn), also up three per cent compared with the same quarter of 2004. Services revenue increased six per cent to \$11.7bn (£6.1bn), while hardware revenue growth was flat, with sales of \$6.7bn (£3.5bn). Software sales grew two per cent to \$3.6bn (£1.9bn), compared with the first quarter of 2004.



Sun Microsystems announced third-quarter revenue of \$2.6bn (£1.4bn), down one per cent on the same period last year. The company made a net loss for the quarter of \$9m (£4.7m), compared with a net loss of \$760m (£400m) last year. But the latest loss included the favourable impact of \$54m (£28.4m) in settlement income from Microsoft, plus \$92m (£48.4m) in benefits from other items.



Apple announced second-quarter net profit of \$290m (£152.7m), up from \$46m (£24.2m) in the same period last year. Revenue of \$3.24bn (£1.7bn) was up 70 per cent year-on-year. Apple shipped 1,070,000 Macintosh units and 5,311,000 iPods.



Sony Ericsson reported sales in the fourth quarter of €2bn (£1.37bn), a year-on-year increase of 40 per cent. Net income was €55m (£37.6m), up 28 per cent.



Unisys reported a first-quarter net loss of \$45.5m (£24m), compared with net income of \$28.9m (£15.2m) for the same



period last year. Revenue declined seven per cent to \$1.37bn (£721m).

BMC Software reported preliminary fourth-quarter revenues of \$388m (£204.3m) to \$400m (£210.6m), down from previous estimates of \$410m (£215.9m) to \$425m (£223.8m).



Small business software supplier **Sage Group** says revenue for the six months ending 31 March is due to be in line with market expectations at about £381m, up 17 per cent on the same period last year. Pre-tax profit is also forecast to meet expectations of about £101m, an increase of 16 per cent.



Chip maker **AMD** reported first-quarter sales of \$1.2bn (£632m), down one per cent from last year. A net loss of \$17m (£8.9m) compares with net income of \$45m (£23.7m) in the same period in 2004.



Indian IT services supplier **Infosys** announced fourth-quarter income of 19.8bn rupees (£239m), up 47 per cent year-on-year. Net income of 5.6bn rupees (£67.2m) was an increase of 66 per cent.



Networking company **Vanco** announced preliminary results for the year ended 31 January, with revenue up 35.4 per cent to £104m. Operating profits doubled to £11.1m.

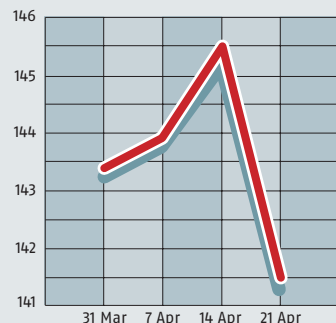


Reseller and services supplier **Morse** says sales for the third quarter were £96m, the same as achieved in this period last year. This compares with sales of £93m and £124m for the previous two quarters respectively.



The Computing 30 share index

IT services firm Morse reported disappointing third-quarter results last week, with group sales of £96m, level with the same period a year ago and down from £124m in the previous quarter. Chief executive Duncan McIntyre says the market has proved more difficult than anticipated, with a lack of stability making it difficult to predict sales. The stock market swiftly punished the firm, pushing its share price down from 108p last week to just below 90p, a 17 per cent drop.



Biggest movers

1: Morse	↓ 17.0%
2: Kingston Communications	↓ 10.0%
3: Surfcontrol	↓ 9.8%

For full listing details, visit www.computing.co.uk/index30

Developers to lobby government over traffic act guidelines

IT standards needed to plan roadworks

Daniel Thomas

IT developers are lobbying the government to include a set of common IT standards in its Traffic Management Act technology guidelines, due for publication later this year.

The EToN (electronic transfer of notice) Developers Group will meet with the Department for Transport (DfT) this month, to seek approval for a set of IT standards that it says are needed for consistent communications between government traffic managers and the local authorities and utilities firms undertaking roadworks.

Under the Traffic Management Act 2004, organisations that dig up or close parts of the road network in England and Wales will need to obtain a permit or notify a regional authority's Traffic Manager of planned activities, as part of an effort to reduce congestion (*Computing*, 27 January).

But without common IT standards, such as an XML schema, problems could arise when disparate road work management systems try to communicate with each other, says Peter Rogers, streetworks product manager at software developer Exor.

'When information is sent from one organisation to another it needs to mean the same thing,' said Rogers, also a member of the EToN Developers Group.



Organisations that dig up the road would need to obtain permits

'If we can't agree about how information is transported then it could become one big mess.'

The EToN Developers Group, which includes BT Syntegra, Southeast Water, Northamptonshire County Council and Severn Trent Water, will also outline requirements for a common data correction procedure and web services specifications when it meets the DfT.

When the Act is introduced, utility firms and local authorities will have to increase data storage capacity or face penalties for not complying with government guidelines, says Rogers.

The necessary changes to planning department IT systems, such as additional mapping details, information about site supervisors, materials used in

roadworks and even air temperature, could increase storage requirements by up to 40 per cent.

'Just by having to describe additional characteristics of a roadworks project we will see storage requirements go up by seven per cent,' he said. 'Certain systems could shift from requiring 500Mb of memory to 20Gb.'

The DfT's consultation period with 150 highways authorities, 200 utilities firms and 10 software firms will end this week.

The department will meet at the end of May to discuss industry needs, and will draw up guidelines before the end of the year.

Further reading

www.computing.co.uk/news/1160798

daniel_thomas@vnu.co.uk
www.computing.co.uk

New chief outlines plan for Siebel

Miya Knights in Barcelona

NEW Siebel Systems chief executive George Shaheen says he will look closely at the company's cost structure as a way of reviving its ailing fortunes.

Shaheen replaced former chief executive Mike Lawrie last Wednesday (13 April) following disappointing financial results.

'We have to look at what drives our costs and discover whether that expenditure is serving us the way we want it to,' Shaheen told delegates at the company's European customer conference in Barcelona this week.

'I would like to see margins improve with operating results. The infrastructure needs to be aligned with the business. My

methodology will involve looking at our cost drivers. But I'm not looking at slashing the company,' he said.

Under Lawrie's leadership, Siebel introduced a programme of internal change intended to prove it is putting customers first and moving away from the hard-selling image that critics say has damaged the firm's reputation.

Shaheen says deviation from this strategy is not in his plans, but suggested the company's \$2.2bn (£1.1bn) cash surplus could be used to fund acquisitions in support of research and development into new products and functionality. He has also not ruled out the possibility of Siebel being acquired.

'I work on behalf of sharehold-

ers. I have a fiduciary responsibility to do what's best for the shareholders,' he said.

'It is my aim to improve performance and, by improving our performance, we'll hopefully be improving the market capitalisation of this company.'

Denis Pombriant, managing principal of US-based analyst Beagle Research Group, said: 'It's important to bear in mind that Shaheen's tenure is only about a week old. He understands the company's direction and is prepared to continue with this fundamental direction.'

Further reading

www.computing.co.uk/news/1162471

miya_knights@vnu.co.uk
www.computing.co.uk

Ecommerce sites forced to adopt security standards

Credit card industry introduces rules to tackle theft of customer data

Daniel Thomas

ONLINE retailers will be forced to tighten security and improve their handling of customer data under new rules being introduced by the credit card industry to stop identity theft.

From 30 June, all ecommerce sites with internal systems that process, store or transmit cardholder information will have to comply with the Payment Card Industry (PCI) Data Security Standard or face significant fines.

In extreme cases, online merchants could be banned from processing transactions using payment cards.

Backed by MasterCard, Visa, American Express, Diners Club and JCB Cards, the standard requires internet retailers to carry out a 12-step security audit, which will be certified annually and checked every three months.

Introduction of the standard follows a series of security breaches that resulted in the theft of credit card details.

Last week, HSBC North America warned 180,000 customers who use its General Motors-branded MasterCard to cancel their cards, after faulty electronic sales systems at clothes retailer Polo Ralph Lauren accidentally stored their financial details instead of deleting them.

Data wholesaler Lexis Nexis has also reported security breaches of customer databases, after hackers gained access to its systems.

'If credit card information gets exposed there's a huge cost factor involved for the banks, because there are heavy overheads in terms of replacing them,' said

Gerhard Eschelbeck, chief technology officer at security software firm Qualys.

To combat the loss of payment card information to hackers, ecommerce sites will have to comply with 12 security requirements to achieve certification. These are:

- Installation and maintenance of a firewall
- Do not use vendor default passwords on IT products
- Strong protection of stored data
- Encryption of cardholder data transmitted over public networks
- Installation and regular updating of anti-virus software
- Development and maintenance of secure systems and applications
- Controls restricting access to data on a need-to-know basis
- Unique identity authentication assigned to each person accessing computer systems
- Restrictions on physical access to cardholder data
- Regular monitoring and tracking of network resources and cardholder data
- Frequent testing of security systems and processes
- Maintenance of an information security policy.

Stephen Orfei, senior vice president and head of the MasterCard Ecommerce Centre of Excellence, said: 'The standard reflects our commitment to helping customers and online merchants evaluate and improve the security of their web sites.'

The PCI Data Security Standard will also help converge the different security standards demanded by Visa, MasterCard and American Express, says Avivah



The Data Security Standard has been established to tackle identity theft

Litan, research director at analyst Gartner.

'This will simplify the compliance process, but achieving compliance with these standards can still be very costly for merchants and acquiring banks,' she said. 'The more the process can be streamlined and automated, the easier it will be for everyone.'

To help make the auditing and certification process less expensive for ecommerce firms, MasterCard is appointing a series of vulnerability assessment firms to carry out the approval process.

This week the card giant announced the appointment of security software firm Qualys as its first automated compliance tester for the MasterCard Site Data Protection scheme, which uses the standard.

Internet retailers will be able to use QualysGuard software to carry out quarterly network scans and annual assessments, and regularly detect and fix flaws.

'Larger firms may already have protected themselves as part of their vulnerability management processes,' said Eschelbeck. 'But you need to think about all of the small firms that don't have an IT security department.'

Small ecommerce firms will be able to buy the basic software for \$495 (£259), with a full service costing \$2,495 (£1,305).

The credit card industry hopes the tighter security demanded by the standard will lead to fewer stolen credit card numbers circulating on the internet.

MasterCard's Operation Stop-IT initiative, aimed at reducing phishing and identity theft, has already detected and removed 34,500 stolen credit card numbers being traded over the internet (*Computing*, 14 April).

Further reading
www.computing.co.uk/analysis/1162467

daniel_thomas@vnu.co.uk
www.computing.co.uk

Lloyds TSB backs industry security standard

LLYODS TSB has backed plans for a standard to physically authenticate internet customers.

The high-street bank is working with banking industry group the Association for Payment Clearing Services (Apacs) to develop the security standard, which will be available from next month (*Computing*, 14 April).

The bank's decision follows announcements from HSBC, The Royal Bank of Scotland and Barclaycard that they are looking at introducing physical security devices to combat phishing and other forms of identity

theft targeting internet banking customers.

'When key-logging software first appeared which tried to steal information we introduced new password procedures, and now two-factor authentication is something we're looking at,' said Matthew Timms, internet channel director at Lloyds TSB.

But the company stresses that any standards introduced must be compatible across internet banking and card-not-present transactions.

'One of the critical factors will be customer

adoption,' said Timms. 'We need to balance security with the fact that consumers might not want to use it if it's too much of a hassle.'

The industry also needs to do more to educate online banking customers about the potential risks when using the internet, says Timms.

'Consumer awareness is still low, and there are people that still fall for phishing scams. We are also seeing more trojans trying to capture passwords,' he said. 'People need to know firewalls and anti-virus updates are critical.'

bulletin

Changes ahead for NHS IT deals

The government is in talks with suppliers to the £6bn NHS national IT programme to change the way the contracts are paid for. The deals were set up to pay suppliers only upon delivery of working systems. But there are now questions as to whether private sector companies can bear the significant investment and short-term losses in the early part of the 10-year deals. www.computing.co.uk/news/1162554

New role for former UKeU chief

The former boss of failed elearning organisation UKeU has been appointed chief executive of training organisation QA. John Beaumont, chief executive at UKeU until its closure in July 2004, will take up his post at the beginning of May. UKeU closed after spending £50m. The project's first courses were delayed until September 2003, and the project attracted just 900 students from its 5,600 target. www.computing.co.uk/analysis/1161614

BA upgrades communications

British Airways has appointed specialist technology supplier Sita to upgrade its communications infrastructure at more than 100 sites across three continents, improving links to remote locations and cutting about \$3m (£1.6m) in costs. www.computing.co.uk/news/1161631

Adobe acquires Macromedia

Adobe Systems is to acquire Macromedia in an all-stock transaction valued at about \$3.4bn (£1.8bn). Adobe makes the widely-used Acrobat PDF software, while Macromedia is best known for its Flash multimedia software. The combined firm will create products for creating, managing and delivering content across all major platforms. www.computing.co.uk/news/1162530

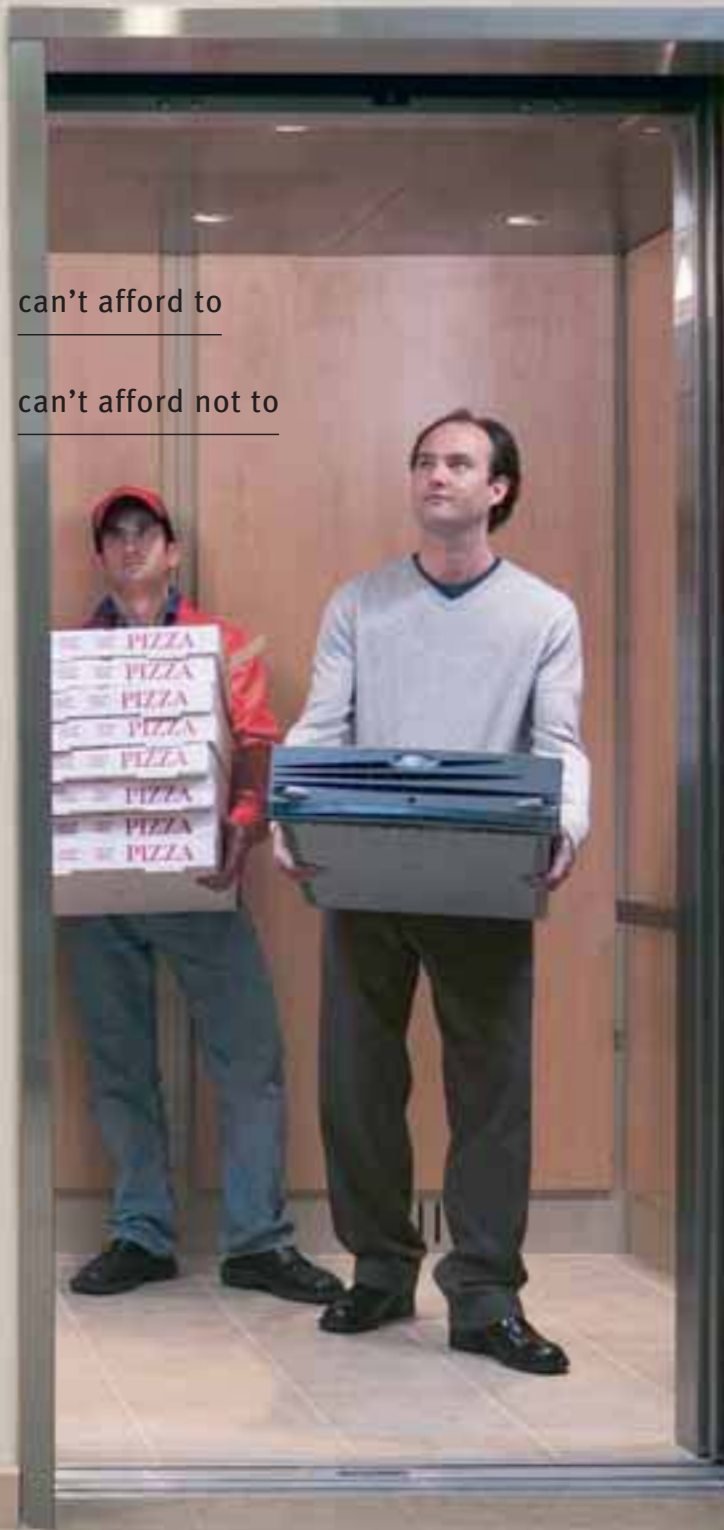
PC shipments on the rise

Worldwide PC shipments increased by 10 per cent in the first quarter of this year, with more than 50 million units shipped, up from 45 million in the same period last year. Dell's growth fell below 20 per cent for the first time in more than two years, but it retained the top spot, with 8.5 million PCs shipped. HP and IBM came in second and third. www.computing.co.uk/news/1161446

EMC²
where information lives

Before: can't afford to

After: can't afford not to



EMC CLARiiON[®] CHANGES THE WAY YOU THINK ABOUT STORAGE. Frugality is the mother of this invention. Introducing the new CLARiiON CX series. The storage solution that offers more performance at every level. More functionality. And more networking flexibility for SAN or NAS. So you can do more than you ever thought possible. At a price you thought was impossible. CLARiiON models start as small as £3,444 and grow with you. To learn more, visit www.emc.co.uk/CLARiiON. Or call 0800 376 9144.

Find an authorised EMC Velocity² Partner at www.emc.co.uk/velocity.

EMC², EMC, and where information lives are registered trademarks of EMC Corporation.
© 2005 EMC² Corporation. All rights reserved.



EMC FORUM - Return on Information
Wednesday 4th May, London
Register at www.emc.co.uk/emcforum

Finance firm opts for Linux

Markit says the switch has produced faster server performance

James Watson

FINANCIAL data provider Markit has replaced its high-end Sun Microsystems servers with Linux and Intel-based systems.

The company switched to the new HP environment earlier this month, and says performance has increased by between four and 10 times.

Markit collects more than a million items of finance data from 49 different sources every day, which it aggregates and resells to financial services firms across the globe, including hedge funds, insurance companies and the Bank of England.

Increasing system performance was Markit's main motivation for the deal, but the company has found the commodity-based environment is also faster, cheaper and scales more easily.

Chief technology officer Mike Bedford says he first noticed the potential of the systems in the firm's development environment, which led to further tests in a specialised stress testing lab working with integration partner Keltec.

'We discovered that it didn't take much effort to get a good performance of between four and 10 times faster than the Sun environment,' he said.

Markit's customers depend on accuracy and timely delivery of information to inform their decisions and dictate daily trading.

'With this new environment, we will be able to provide data more speedily to our customers,' said Bedford.



Markit's financial customers depend on accuracy and timely delivery of information

Coinciding with the switch to HP ProLiant servers running Linux, Bedford has also migrated data from Oracle 9i to 10g.

The move away from specialised high-end servers to a commodity-based IT environment is also being made at the London Stock Exchange (LSE).

The LSE is halfway through a four-year programme to switch to a platform based on Windows and Intel technology, with the aim of achieving about £8m in cost savings.

LSE chief information officer David Lester told *Computing* earlier this year he is on track to migrate the exchange's Sets trading platform by late 2006 (*Computing*, 24 February).

Further reading
www.computing.co.uk/news/1161472

james_watson@vnu.co.uk
www.computing.co.uk

Moore admits processor law will be obsolete in 20 years

Iain Thomson

INTEL co-founder Gordon Moore has predicted his famous processor law will become irrelevant in 10 to 20 years.

Forty years ago this week, Moore wrote an article in *Electronics Magazine* predicting that the number of components on a processor would double every year, with costs falling commensurately.

He revised the law in 1975 to state that processor complexity would double every two years, but has now admitted the law will only be applicable for the next 20 years at most.

'Something like this cannot continue forever,' he said. 'The dimensions are small enough now that we're approaching

the size of atoms and that's a fundamental block. I think the law has another 10 to 20 years before fundamental limits are reached.'

While Moore's Law will soon no longer be applicable, Moore says the industry will continue to evolve at a pace.

'Even then we'll be able to make bigger chips and there'll be a host of other innovations that will boost performance,' he said.

'Over the next 40 years, society has a lot of problems to overcome, but the technology that's possible is mind-blowing.'

Further reading
www.computing.co.uk/comment/1159184

www.computing.co.uk

Our BlackBerry upgrade software comes with an attachment.

Brian.

Or Mike. Or Petra. Or any one of our Technical Support Group. You see, the new BlackBerry® version 4 upgrade has to be installed on live servers and if it's not done right, users could lose their email service. That's why we don't just send you the CD like other networks do, we send you experts who'll do the installation for you. For help upgrading your BlackBerries, speak to your Vodafone Service Manager.



TEAM LING - LIVE, INFORMATIVE, NON-COST AND GENUINE!

Worm takes down Reuters IM

Gregg Keizer

NEWS agency Reuters was forced to take its instant messaging (IM) service offline for the best part of a day last week after it was hit by an IM worm.

The company withdrew the system – a closed service built on Microsoft's Messenger technology and used by 60,000 financial sector workers – at 10am on Thursday to stop the spread of the Kelvir worm, which targets Microsoft IM clients. Kelvir spread so rapidly that Reuters was

forced to withdraw the service until 7am the following morning.

'This action was taken to prevent further propagation of the virus that is attempting to spread by using the messaging service,' said Reuters in an alert published on the day.

The Kelvir worm propagates by sending copies of itself to everyone on the IM contact list of the infected client. A message reading 'Is it you?' is accompanied by a link to a web site. Users who click on the link are then infected with Spybot spyware

that watches for passwords and usernames.

Francis DeSouza, chief executive of IM security firm IMlogic, says the worm attacked only version 3.1 of the Reuters client and not version 4.0, meaning many of its large customers were unaffected.

'This is certainly a wake-up call,' he said. 'IM is just like any other communication media. The media needs to go hand in hand with security.'

© 2005 CMP Media LLC
www.informationweek.com

backbytes
back_bytes@vnu.co.uk

Sign language

From your emails it seems there are many pointless signs in the country, and we'd like to hear about all of them.

'The most pointless sign I ever encountered was in an open area of grassland, and it read: "Do not throw stones at this sign",' says Peter Lord, to kick us off.

John Stenhouse, at Ninewells Hospital, regularly sees a sign that tells him: 'WARNING: Hot water is very hot.'

Ashley Crompton, at the DVLA, spotted a sign taped to a fire extinguisher at work. 'It said: "This is not a door stop",' he tells us. 'I was tempted to pin a sign to my phone saying: "This is not a kettle", but quickly realised I'd be starting a trend that would be impossible to stop.'

Nevertheless, a colleague has taken up the baton by putting up a serious sign saying: 'End of office, proceed no further.' Which is certainly good advice if you want to avoid walking into walls.

Our final pointless sign this week: 'We have one saying "helpdesk",' says an anonymous cynic at the Borough Council of Kings Lynn & West Norfolk. More please.

Look at Leo

Backbytes' investigative journalism instincts were once again aroused by Google's home page last week.

Friday was Da Vinci Day – with the Mona Lisa's enigmatic smile beaming out from one of the Os, and various plans for hovercrafts and flying machines encircling the Google logo. Turns out it was celebrating Leonardo's birthday.

Naturally we researched this historical fact by Googling Leonardo Da Vinci.

The first page was not full of references to Dan Brown, thankfully, but pointed us to www.mos.org/leonardo/index.html.

Just move your cursor around the page, and delight to the Terry Gilliam-esque animation. It will keep you amused for hours... well, perhaps seconds.

Pain in the username

More on dodgy usernames.

'A while ago we had a user called Pete Iles,' says someone who signs himself 'Tino', at Acordis Services. Sadly for Pete, they used the first initial of the first name, followed by the surname.

We'd love to hear more, but remember, we are a family newspaper.

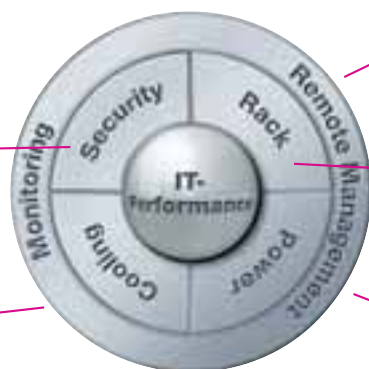


RIMATRIX5
DRIVING IT-PERFORMANCE

Security | physical rack and room security, from temperature sensors to room access control.

Cooling | Enhanced climatic concepts, configured to meet your demand, incorporating air and liquid cooling.

Rimatrix5 is a total data centre infrastructure solution. Optimisation and management of your key physical resources enhances your TCO, resulting in an increase in your IT performance and a decrease in your costs. For further information: Rittal Limited, Braithwell Way, Hellaby Industrial Estate, Rotherham, S Yorks S66 8QY Tel.: 01709 704000 – Email info@rittal.co.uk www.rimatrix5.co.uk



Monitoring + Remote Management | Supervising, measuring, controlling for maximum availability

Rack | Server and network enclosures with optimum space, flexibility and security.

Power | Plug and play power supply and distribution in both the rack and room

FRIEDHELM LOH GROUP



careers

jobs of the week

Information security officer

London

£24,500

p49

Senior systems engineers

Bristol, Peterborough, Warrington

£25,200 to £28,700

www.computing.co.uk/jobs

Create. Store. Backup. Go.

LACIE



LaCie USB or FireWire Hard Drives

- Portable & stackable - only 11.2 x 18.8 x 3.5cm
- Sleek, robust enclosure - design by F.A. Porsche
- Silent no-fan operation with metal base cooling
- 7200rpm ideal for DV Video or multitrack audio
- FireWire or USB2.0 versions - cables included
- Compatible with Windows® backup utility
- 2 years manufacturer's warranty as standard

Available Models:

FireWire - 80GB, 160GB, 200GB, 250GB
USB2.0 - 80GB, 160GB, 200GB, 250GB



LaCie Triple Interface, FireWire 800/400 & USB2.0 'd2' Hard Drives

- Sleek, aluminium heat dissipating robust case
- 7200rpm ideal for DV Video - silent operation
- Fast FireWire 800 'Extreme' up to 80MB/s sustained
- FW 400, USB2.0 & FW800 (all cables included)
- Compatible with Windows® backup utility
- 2 years manufacturer's warranty as standard

Available Models:

160GB, 200GB, 250GB, 320GB, 400GB, 500GB,
1000GB, 1600GB, 2000GB



LaCie Photon LCD Monitors

- DVI and VGA connectors
- Highest specification LCD monitors, IPS technology
- Photon 20 - resolution 1600x1200
- Photon 20 - response time 16ms
- Photon 20 - dot pitch 0.25
- Photon 20 - 176 degrees viewing angle (IPS)
- 3-year replacement warranty

Available Models:

Photon LCD/TFT 19"; Photon LCD/TFT 20.1"
NEW 300 Series - LCD/TFT 321 - 21.3"



LaCie USB/FireWire 2.5" MobileDrives

- Ultra-portable - only 7.6 x 12.9 x 1.7cm & 200g
- USB 2.0 and/or FireWire interface - cables included
- AC adapter-free, powered by USB or FireWire
- Ideal for notebook/laptop users as mobile storage
- Sleek, robust enclosure - design by F.A. Porsche
- Compatible with Windows® backup utility
- 2 years manufacturer's warranty as standard

Available Models:

USB2.0 - 40GB, 60GB, 80GB, 100GB
FireWire & USB2.0 - 40GB, 60GB, 80GB, 100GB



NEW! LaCie d2 'LightScribe' FireWire or USB2.0 16x DVD+/-RW's & CD-RW

- LightScribe direct disk labeling technology
- For professional looking created media
- Double Layer DVD up to 8.5GB capacity
- Dual format DVD+/-RW (and CD-RW)
- Super fast write and re-write speeds
- Bundles Include DVD authoring software
- 2 years manufacturer's warranty as standard

Available Models:

d2 DVD+/-RW 16x4x16x Double layer & CD-RW
Slim 8x DVD+/-RW Double layer & CD-RW
Mobile 24x24x24x CD-RW 8x DVD Combo



NEW! LaCie Serial ATA External 'd2' Hard Drives

- Revolutionary SATA interface transfers up to 150MB/s
- Alternative to costly SCSI and Fibre channel systems
- Increased performance, reliability and scalability
- Drives ship with SATA PCI card as standard
- Drive powered via PCI card - no need to use PSU
- Classic 'd2' design with no fan for silent operation
- Includes LaCie RAID 0/1 utilities for multiple drive configurations

Available Models:

160GB, 250GB, 400GB



NEW! LaCie 'Biggest Disk' FireWire 800 & USB2.0 RAID

- Up to 2000GB, RAID 0, 0+1, 5, 5+ hot spare
- Exceptionally high transfer rates of 80MB/s FW 800
- Sturdy aluminium enclosure & ultra quiet operation
- Compact - only 15.3 x 29.8 x 17.6 cm
- Affordable RAID starting at 1000GB, SRP £899+VAT
- Hot swappable hard disk; superior RAID security
- Automatic online rebuilding with RAID 5
- 2 years manufacturer's warranty as standard

Available Models:

1000GB, 1600GB, 2000GB



NEW! LaCie Silverscreen Portable TV Movie Playback Drive

- Playback your photo's and movies **directly** on any TV
- Plug into any PC via USB2.0 to copy your multimedia
- Acts as a portable datashuttle/back-up USB2.0 HDD
- Ultra-small, quiet, USB powered, 2.5" mobile drive
- Ships with remote control, power unit and all cables
- Store 20,000 MP3's, 15 MPEG-2 or 80 DivX movies, 1,000,000 photo's in VGA, or up to 80GB of data

Available Models:

USB2.0 - 40GB, 80GB



NEW! LaCie d2 'Ethernet Disk mini' Network Hard Drive (NAS) and USB2.0

- Share data across a network by unlimited users
- Easily administered via any web-browser
- Quick and simple installation - no drivers needed
- No Server required, NAS hard drive
- Fast ethernet connection or USB2.0 direct attach
- For Windows®, Mac OS® and Linux
- 2 years manufacturer's warranty as standard

Available Models:

'd2' mini NAS & USB2.0- 250GB, 400GB, 500GB
Ethernet Disk XP embedded- 800GB, 1000GB

For latest pricing please visit www.lacie.com/uk

E-mail: info.uk@lacie.com

E&OE Apr 05

TEAM LING - LIVE, informative, NON-COST and GENUINE!

A COMMON WARNING SIGN IS DENIAL OF THE PROBLEM ITSELF.

SOFTWARE DELIVERY OPTIMIZATION FROM BORLAND: THE CURE FOR APPLICATION DEVELOPMENT DYSFUNCTION.

Over 70% of development projects fail.* Denial isn't a solution. Software Delivery Optimization (SDO) from Borland promotes simplified and accelerated development through improved visibility, coordination and team communication.** Results are predictable and repeatable. Don't let Application Development Dysfunction impair your application lifecycle.

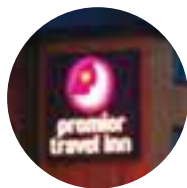
Borland®

ASK BORLAND IF SDO IS RIGHT FOR YOU. www.borland.co.uk/sdo



*The Standish Group 2004 Third Quarter Research Report. **Keep out of reach of competitors. May cause outbreaks of euphoria, increased margins and high fives.
© 2005 Borland Software Corporation. All rights reserved. All Borland brand names are trademarks or registered trademarks of Borland Software Corporation in the United States and other countries.

TEAM LING - LIVE, informative, Non-cost and genuine!



How involving IT from the start helped hotel group's integration and rebranding
See page 16

Record label opens online music service

James Mortleman

INDEPENDENT record label Mute has used open source technology to revamp its web site so that visitors can listen to its entire music catalogue.

A Flash-based media player allows potential customers to select individual tracks or entire playlists, which are streamed over the web on demand in a similar way to internet radio stations.

The company believes that allowing online access to its catalogue will encourage customers to buy more records.

'With the player, we give everybody the chance to listen to anything before they decide to buy it,' said Iain Forsyth, Mute's digital media manager.

'People can also create playlists and share them with friends. I think this is the kind of functionality most people are looking for when they buy music online.'

Visitors to the site can buy CDs or vinyl from Mute's online shop. The site does not offer electronic downloads, but Forsyth says this will follow shortly.

Mute chose independent open source specialist Runtime Collective to build the site.

'Runtime has an excellent technical understanding of software solutions, which is often lacking in more design-focused new media agencies,' said Forsyth.

Further reading
www.computing.co.uk/news/1162169



Bank outsources PCs in £170m deal

Lloyds TSB awards five-year contract to Fujitsu Services

James Watson

LLOYDS TSB has awarded a £170m, five-year contract to Fujitsu Services for desktop management and support for 70,000 users in nearly 2,000 offices.

The high-street bank says the deal will help to cut costs and save time for staff.

Control of more than 80,000 PCs, laptops and servers across the business will be handed to Fujitsu, allowing Lloyds TSB to simplify its IT operations.

John Lynch, a project director at Lloyds TSB, says the deal is part of a programme to offer value-for-money services.

'We aim to save millions of pounds through this deal, while delivering improved customer service,' he said.

Under the terms of the contract, Fujitsu will provide all IT support and maintenance, and take responsibility for hardware supply, configuration and installation.

'Fujitsu's approach to managing our distributed computing environment allows us to work more closely with them and use their skills to develop and continue to grow our business,' said the bank's director of group IT, Igor Andronov.

Some 300 staff from Lloyds TSB's existing operational teams



Lloyds TSB hopes the deal will allow it to simplify its IT operations

and their incumbent suppliers will move to Fujitsu under the Transfer of Undertakings (Protection of Employment) Regulations (TUPE).

This is the second multimillion-pound IT contract the bank has awarded recently: last December it signed a £500m, seven-year deal with IBM to overhaul and converge its voice and data network.

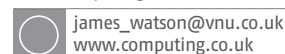
In February this year rival Barclays also signed a networking deal, awarding BT a £500m contract for a secure IP-based

voice and data network across its UK operations.

Both banks plan to use their new networks as a foundation for rolling out next-generation services, as well as cutting costs across the organisation.

'We obviously think there is convergence between voice and data, and that it is most beneficial to the group,' said Andronov.

Further reading
www.computing.co.uk/news/1159958



Bargain store updates merchandising system

Miya Knights

RETAILER Poundland is nearing completion of a major three-year IT upgrade project.

The company, which claims to sell everything for £1, has installed a merchandising, replenishment and warehousing software system that will play a central role in plans to increase the number of shops from 121 to 150 by the end of the year.

Poundland's simple pricing structure initially allowed it to use basic bespoke IT support and resources. But since a management buyout in 2002 the firm has adopted an aggressive growth

Revamp for supply chain software as Poundland aims to grow store chain

strategy, and needed to modernise back-office and store-based technology.

'All of our software was home-grown,' said George Oldridge, Poundland IT director.

'To grow the number of stores at the time of the buyout, which was about 70 or 80, we had to look at our supply chain solution, because it wouldn't support multiple warehouse distribution centres.'

The retailer's old merchandise and warehouse management

system had no merchandise planning facilities, and the company only had electronic tills in about half of its stores.

'The software served us very well until that point in our evolution where we needed to move to the next level,' said Oldridge.

Merchandising software from supplier JDA was in place by September 2004.

Poundland has now embarked on the final phase of the upgrade, introducing a new management

component from JDA to cope with an increase in the number of warehouses.

'For the first time Poundland has accurate and complete information on which to base tactical and strategic buying and promotional decisions,' said Oldridge.

The system provides visibility and tracking functions, from the raising of supplier orders through to the shipping process and on to store delivery and automated product replenishment.

Further reading
www.computing.co.uk/news/1160950



Inside enterprise

The British Library embarks on an online revamp
Page 12

Universities use storage to rival Oxbridge capabilities
Page 12

Online gambling firms bet on success
Page 14

Premier Travel Inn integrates systems following merger
Page 16

bulletin

Unisys wins £50m BPO extension

Insurer Swiss Life has awarded a £50m, 10-year business process outsourcing (BPO) contract extension to Unisys Insurance Services. Unisys will process and administer an additional 750,000 life pensions policies for Swiss Life, whose closed life and pensions book was recently acquired by the Resolution Life Group.

www.computing.co.uk/analysis/1153978

Hotspot for cold spot

Two Intel employees on an Arctic expedition have deployed what is thought to be the world's most northerly WiFi hotspot. The 802.11b/g wireless access point has been installed on the Barneo ice camp, 80 miles from the North Pole. Intel also has provided three Centrino notebooks for camp staff to use.

www.computing.co.uk/news/1162493

Scientists shorten WiFi roaming

The time it takes to roam between WiFi networks can be dramatically shortened using software developed by two computer scientists at the University of California, San Diego. Professor Stefan Savage and graduate student Ishwar Ramani have a patent pending on the basic invention behind a technology known as SyncScan. They believe this can overcome a major obstacle in WiFi roaming, by allowing fast movement between 802.11 infrastructure networks. Their study will be published in the proceedings of the IEEE InfoCom 2005.

www.computing.co.uk/news/1162492

bulletin

Blogs an easy target for hackers
Blogging sites that fail to check software stored by users are proving useful to hackers, according to online monitoring firm Websense. The company says it has identified hundreds of cases of hackers using blogs to store Trojan software and other malicious code, because blogging firms seldom check to see what code they are hosting. 'Blogs allow you to anonymously and freely gather and create accounts,' says Dan Hubbard, senior director of security and technology research at Websense.
www.computing.co.uk/news/1162513

Cisco adds to utility offering
Cisco Systems is to acquire Topspin Communications, a privately-held provider of programmable infrastructure technology for grid and utility computing, clustered enterprise applications and server virtualisation. Topspin's server fabric switches are designed to connect servers into a grid, and provide network and storage connectivity to that server grid. Cisco says the Topspin product line will extend its data centre switching portfolio to include InfiniBand-based server switching technology.
www.computing.co.uk/news/1162509

Microsoft to support Red Cross
Microsoft is providing free software, training and support to the International Federation of Red Cross and Red Crescent Societies. The deal offers software licences to local members of the societies in developing countries, along with training in how to use the code and long-term support from Microsoft volunteers. The agreement was signed at the societies' headquarters in Geneva.
www.computing.co.uk/news/1162514

Emirates traffic deal for IBM
IBM has signed a \$125m (£66m) four-year telematics deal with the United Arab Emirates (UAE) to overhaul the country's road traffic system. IBM claims the deal is the largest telematics contract ever signed. The supplier will design a device that will be installed in cars to monitor dangerous driving patterns. The UAE has one of the world's worst traffic safety levels and says the device will reduce fatalities by 80 per cent by 2010.
www.computing.co.uk/features/1155755

British Library to raise web profile

Content management software to boost online services

James Mortleman

THE British Library is overhauling its online services by introducing new content management software.

Using Percussion Software's Rhythmyx system will allow the library to integrate disparate web sites and manage content more effectively.

'We need to consolidate our different sites and provide a more integrated platform,' said Adrian Arthur, the library's head of web services.

'We want to benefit from all the advantages a content management system can offer – separating content from design, more effective control over the editorial process, and so on.'

Among the sites that will be migrated onto the new platform is an online gallery of some of the more famous items in the British Library's collection.

'It will be comparable to the experience of visiting the galleries in our St Pancras building. The public can see images of national treasures such as the Magna Carta and Lindisfarne Gospels, and virtually turn the pages of books online,' said Arthur.

The library is also planning to offer online audio clips from the British Library Sound Archive, the largest collection of its kind in the world.

The Rhythmyx system will allow the organisation to repackage



Images of treasures such as the Lindisfarne Gospels can be viewed online

the material to suit different audiences without duplication.

'Clips could be accompanied by text content written specifically for schools on one part of the site, or with more detailed references for scholars on an academic part of the site,' said Arthur.

He says the library is also aiming to digitise much more of its printed collection in future.

'The possibilities are endless. Over the next couple of years, we're focusing on providing a searchable online archive of 19th century newspapers.

'In that case, the site is quite

large and will be outsourced, but that's an indication of the kind of digitisation ahead.'

More than three million people accessed the British Library's web site last year, a figure that is expected to top 3.6 million by the end of this year.

The first part of the Rhythmyx implementation, a learning web site, goes live in August, with the entire rollout due for completion early next year.

Further reading
www.computing.co.uk/news/1159511

 www.computing.co.uk

Co-op finance group boosts search facility

Miya Knights

THE Co-operative Group's financial division is adding natural language technology to its web site search facilities to improve customer service.

The technology, to be in place by the summer, will allow visitors to the company's various financial services sites to ask questions that can be answered more accurately, directing them to a relevant page instead of searching through thousands of pages for single words or phrases.

The technology is being implemented following the bank's decision to bring web site management back in-house.

Dave Rafferty, Co-op Financial Services (CFS) supplier management programme manager, says the firm is looking to make more improvements. 'It wasn't just the expense of the third-party out-sourcers, it was difficult to make content changes because of lengthy sign-off processes,' he said.

'We brought the sites in-house and now marketing can make changes to the sites directly themselves, be more nimble, get things done quicker and eliminate mistakes.'

CFS was formed in April 2002, combining Co-operative Bank, Co-operative Insurance Society (CIS) and online bank Smile.

Management of Smile's web site was brought in-house two years ago and gave CFS the impetus to follow suit with the rest of its online activity.

Further reading
www.computing.co.uk/news/1155958

 miya_knights@vnu.co.uk
www.computing.co.uk

University installs content storage system

James Mortleman

THE University of Leeds wants to achieve top honours in online research using new storage systems to improve information management.

Leeds is installing Centra content addressed storage systems from EMC to support the grid storage infrastructure it shares with the Universities of Sheffield and York, as part of the White Rose University Consortium. The group hopes the technology will put the consortium on a par with Oxford and Cambridge in terms of computerised research power.

Consortium's research power will be on a par with Oxford and Cambridge

'The system will offer rapid access to archived reference data, with the added security of remote data copies located at a fellow White Rose University,' said Steve Chidlow, ISS service manager at Leeds.

The system will also make full use of the recently-upgraded Yorkshire and Humberside metropolitan area network, which serves higher and further education establishments in the area.

The technology will help acade-

mic research, by speeding up access to information.

'Previously much information had to be accessed from a tape-based archival file system,' said Chidlow.

The system will allow Leeds to manage massive amounts of information at a lower cost. It has also been designed to withstand the ever-increasing demand for storage, which is growing at 30 per cent a year and set to expand further as the use of high-volume

multimedia content grows.

'We intend to keep up with demand by having an information architecture that can scale. It allows us to add components without the need to start from scratch each time,' said Chidlow.

The research and archiving facilities will initially be offered to academic staff, but are likely to be extended to students. Some preliminary services will be available from May, with a phased rollout programme to follow.

Further reading
www.computing.co.uk/news/1159938

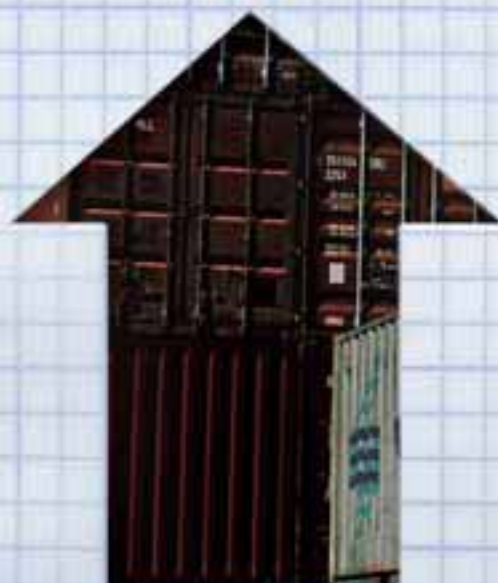
 www.computing.co.uk



When business changes, your servers will understand.

Presenting HP's Integrity servers, designed to keep your business agile during changing times. Strong and stable, HP Integrity servers powered by reliable Intel® Itanium® 2 Processors are built for your most critical business needs. Increased power and advanced management capabilities allow you to optimise, consolidate and integrate as your business grows. So you'll always be prepared for change, whether it's big, small or unexpected.

change + hp



Q2

Q3

Q4



HP Integrity servers

Solutions for the **adaptive enterprise**.



For more information on managing complex multi-OS environments with HP Integrity servers, visit hp.com/uk/integrity

TEAM LING - LIVE, informative, Non-cost and genuine!

99% OF COMPANIES HAVE
FIREWALLS OR
ANTIVIRUS SOFTWARE.

So how come
78% still
get hit?*



Odds are, you have first-hand experience with the vulnerabilities of existing security measures. So here's another statistic: Websense provides a proactive software solution that protects nearly 20 million employees worldwide from web-based security threats. [Close the security gap. Download your free evaluation today.](#)
www.websense.com/virusuk



© 2005 Websense. All rights reserved.
*2004 CSU/FBI Computer Crime and Security Survey

The world of online gambling is proving a big winner for betting exchanges

Betting on success

James Watson

ICONIC US dot coms such as Google and eBay may grab the headlines across the world, but the UK's obsession with betting is paving the way for some exciting hi-tech players of our own.

In the next month, spread-betting firm IG Group will re-list on the stock exchange, and speculation is rife about a possible £700m float for online betting exchange Betfair.

The listings come on the back of a huge rise in the popularity of online gambling, which allows punters to place bets on the outcome of anything from England's Ashes series this summer to the movement of the pound against the dollar, as well as to play games such as high-stakes poker.

According to Nielsen//NetRatings, more than 16 per cent of Britons visit a gambling site each month, and the market has grown 566 per cent since 2003, making the UK the fourth largest gambling nation in the world.

Entertainment industry analyst Christiansen Capital Advisors estimates that online gaming will expand from a \$5.7bn (£3bn) global industry in 2003 to nearly \$17bn (£9bn) by 2009.

This summer, World Poker Exchange, an Antigua-based online poker site, will host its first London Open, with a guaranteed minimum prize pot of £1m, as it seeks to capitalise on the local popularity of the game (see box).

Behind the scenes, technology plays a key role in the growth of the market, with powerful but relatively inexpensive IT systems allowing smaller firms to build robust exchanges able to handle thousands of transactions every minute.

David Yu, chief technology officer at Betfair, says technology is being used in increasingly innovative ways across the market.



The chips are up: online gambling has grown by 566 per cent since 2003

'People are really surprised when they realise the kind of transactions and volumes we have to handle, which are more in line with the big boys such as a stock exchange or an airline reservation system,' he said.

Betfair's exchange betting system uses the internet to allow punters to bet at odds set by other gamblers rather than by a bookmaker.

At the Cheltenham Festival last month the exchange experienced its highest ever demand, with more than a million page requests in a five-minute period.

Betfair, which has already invested more than £30m in technology, recently launched a simplified person-to-person betting exchange on Yahoo's UK portal, with the aim of making its system accessible to a mass-market audience.

'This will extend the brand much further and will appeal to customers who are perhaps less experienced or sophisticated bettors, so it's based on traditional odds, but feeds into our system,' said Yu.

One of the primary challenges is simply coping with demand.

'We've found that if we double our capacity it's immediately snapped up, because the users get a better experience and they eat into it very quickly,' said Yu.

'Not long ago we were serving 10Mbit/s, now it's over 100Mbit/s. Our bandwidth is probably quadrupling every year, as are our page impressions.

'Latest figures show that on peak days we're getting well over three million bets placed over a 24-hour period, which is equivalent to orders placed on a stock exchange.'

The real pressure point is the database, which has to match these millions of daily bets – which equates to 12,000 a minute – from more than 300,000 registered customers.

'Unlike other databases, our usage patterns are very unevenly distributed as people jump from one race to another rather than betting evenly over a range of events,' said Yu. 'Oracle says we're one of the most active single database sites it has in the world.'

Just as the site relies on matching individual betters against each other – in the same way

that eBay provides an open market for people to find buyers for their goods – much of the firm's technology innovation relies on people.

The company has copied some of the HR innovations popularised in Silicon Valley startups, notably by giving its engineers time to develop their own ideas.

'It's a gaming company, but it's also a technology business. Getting engineers to be really innovative and come up with product ideas is a big thing,' said Yu.

To encourage such developments, the firm allows its engineers to spend up to 25 per cent of their working time on engineering innovation and testing out new technologies.

Just as Google's staff put together the search engine's news aggregation service in the free time they're given each week to develop their own ideas, Betfair's programmers have also come up with some useful applications.

'We've built a lightweight version of the site that runs on any HTML browser and a Betfair toolbar for Internet Explorer, both of which were done by engineers in their spare time,' said Yu. 'We're very lucky about that. We have very low attrition and that attests to the environment, which is relaxed and entrepreneurial.'

The primary challenge is finding the right people.

'We've traditionally doubled our technology group size every year,' said Yu. 'We started 2004 with about 60 people, and ended with about 120. But there's a limit on how fast we can absorb new people.'

To help cope with this growth, the company has launched a graduate recruitment programme, visiting universities to sign up promising young developers. Two people were signed up last year, and Yu hopes to bring in four or five more this year.

'A couple of years ago people were not thinking of Betfair; they would look at the banks and Yahoo and so on as the places to work,' he said.

'But when we tell them about what we do, they say that they had no idea how core technology is to the business and how challenging it is.'

The stakes are high

THIS August the London Open poker tournament takes place, hosted by dot com firm World Poker Exchange. The stakes are high: punters will have to put down \$10,000 (£5,300) to get a place in the tournament and play for the £1m prize.

The event highlights the massive increase in the popularity of online poker in the UK, with Nielsen//NetRatings estimating there are four million regular internet gamblers in the UK today.

One advantage of the online game over the traditional felt-covered table is the ability to get

through more hands faster, thereby raising the amount of money someone can win (or lose) over a period of time.

'In normal poker, you can get through about 25 hands per hour, while online you can play up to 100 hands per hour,' said World Poker Exchange chief executive Haden Ware.

Perhaps the only unfortunate future legacy of the online game will be the end of the timeless gravestone epitaph: 'Played five aces, now playing a harp'.

Further reading
www.computing.co.uk/features/1157217

 james_watson@vnu.co.uk
www.computing.co.uk

Knowing

your assets are secure.

Knowing is more than processing information, it's being able to grasp it with clarity and certainty, and put it to work. The complexity of today's enterprises, the multiplicity of sources and the constant changes in hardware, software and regulations makes knowing — critical.

NetIQ Security Management is the only way to secure assets, assure compliance and manage risk.

Our knowledge-based software solutions are intelligent and simple to use. Only NetIQ, a leader in systems and security management, gives you the assurance of knowing that no critical system is unprotected, that your enterprise is secure, available and performing.



www.netiq.com/solutions/security

Knowing is everything.™

Download your FREE eBook: 'The Practical Guide™
to Securing Assets' from NetIQ & realtimerepublishers.com®
at www.netiq.com/go/secureassets/uk

Getting IT involved from the start helped hotel chain achieve major rebranding and integration

Premier Travel Inn benefits by planning ahead

Miya Knights

IN JULY last year Whitbread finalised the £505m acquisition of no-frills hotel group Premier Lodge, with the intention of merging the company with its own budget chain Travel Inn.

So began the complicated process of integrating the two businesses and their IT systems to create Premier Travel Inn.

The new organisation worked with Whitbread to establish a six-month programme to rebrand all 457 hotels in the combined 28,000-room estate, and merge Premier Lodge staff into the company.

New computer systems were installed in the Premier Lodge hotels, and thousands of transferring staff were retrained on how to use them.

The company has recently completed

the integration of the 141 Premier Lodge hotels and says it has already increased hotel occupancy rates, improved efficiency, and lowered IT costs.

Susan Thomas, IT director at Premier Travel Inn, says the most significant factor contributing to the success of the merger was the IT department being involved from the outset.

'From the very early days IT was seen to be a critical part of the acquisition team,' Thomas told *Computing*.

That meant Thomas was well-placed to advise the board and plan the migration around her team's existing workload.

'Significant planning before the deal was finalised enabled us to move quickly once we had the go-ahead,' she said.

'The initial plans were so detailed we had a date for each hotel conversion, a risk



Premier Travel Inn says it has increased hotel occupancy rates and lowered IT costs

assessment on all assumptions and contingency plans developed.'

This level of detail in the planning process allowed the company to be 'ruthless in supplier selection', according to Thomas, approaching prospective vendors well in advance of completing the acquisition to gauge levels of responsiveness and resources.

Some incumbent suppliers lost their existing contracts as a result.

'If a supplier was unable to meet the demands of the project, they were replaced immediately. This enabled the integration team to be in place the day after the deal was completed,' said Thomas.

Premier Lodge had been running ageing IT systems and it was decided a complete refresh was necessary.

'We had to replace all of Premier Lodge's technology,' said Thomas. 'Prioritisation of activity was therefore very important. At board level, we decided what was critical for us, what ongoing projects we had to complete and what else could we stop, identifying what were the key business activities.'

Thomas was well-placed to advise the board and plan the migration around her team's existing workload

Whitbread uses Oracle enterprise resource planning software to run its group-wide human resource (HR), payroll, finance and purchasing systems, which had to be installed in the new hotels.

Other projects, such as the implementation of a speech recognition platform to automate the telephone reservation booking system, were put on a slow burner.

'We have the speech recognition project in pilot and we've redesigned our web site with the new Premier Travel Inn brand,' said Thomas.

'But there were business activities we had to postpone as they would have had a technical impact, such as investing in revenue management software to improve our occupancy rates.'

Her team's main task was to separate the back-of-house and reservation systems of Premier Lodge from those of its parent company, The Spirit Group.

This took three months and involved implementation of a separate wide area network to allow back-office system connectivity with Whitbread's central IT infrastructure.

The team also had to ally new supply chain and procurement processes with accounting and administration systems for the former Premier Lodge hotels.

And some 3,500 Premier Lodge staff were transferred to the corporate HR systems of Whitbread.

'To minimise disruption, we made the decision to deploy Oracle for the Premier Lodge sites, but not to ask the units to enter the data. Central administration teams receive paper timesheets, which they enter onto the system,' said Thomas.

New electronic till equipment and systems also had to be installed in any former Premier Lodge sites with a restaurant.

Rebranding of all customer communications, including internal and external signage and the company's web site and directories, meant that the transfer of all front-of-house systems, including reservations, had to be complete by the end of Premier Travel Inn's financial year at the beginning of March.

At its peak, the project was converting 50 hotels a week to the new brand, as well as integrating the IT systems.

Despite such an ambitious and disruptive transformation programme, Thomas says reservations made through the combined company's newly-branded web site were up 'significantly' within a few days of transferring the reservations systems to Premier Travel Inn.

And Whitbread's most recent trading update last month revealed Premier Travel Inn's like-for-like sales increased by 6.7 per cent, excluding the Premier Lodge acquisition. 'We fundamentally believe our systems drive great competitive advantage,' said Thomas.

Further reading
www.computing.co.uk/news/1160628

 miya_knights@vnu.co.uk
www.computing.co.uk

 **BCS**

**It's about being recognised
as a true IT professional
in just four letters
...MBCS**

**Discover why over 11,000 new members
have joined The British Computer Society
in the last ten months**

To find out more
visit www.bcs.org/gofurther
call free 0800 056 4322
email: gofurther@hq.bcs.org.uk



going further **together**

Business



Class



NOKIA 9300

The Nokia 9300 smartphone

Created for a new generation of leader.

Stylish and compact on the outside, exceedingly smart within. The Nokia 9300 enhances your workstyle while complementing your lifestyle.

Find out more at

www.nokia.com/9300

- New compact size
- Email with attachments
- HTML web browsing
- Office applications
- Full PDA functionality with calendar, contacts and PC Sync
- High speed data transfer via EDGE (EGPRS)
- Widescreen viewing and full keyboard
- Handsfree speakerphone
- Mobile fax



Club NOKIA

Join and enjoy the benefits!

On the Web at www.nokia.com/clubnokia

NOKIA

CONNECTING PEOPLE

Ignore tales of IT doom and gloom

comment

THIS week sees the latest quarterly financial results from many of the leading IT vendors, and so far it's been an opportunity for Wall Street to give the tech sector a bit of a kicking.

Following IBM's release of what were perceived to be disappointing figures, showing just three per cent year-on-year growth in sales and profits, the Nasdaq stock exchange – viewed as a barometer of the industry – dropped to the same level as pre-dot com era 1998.

Sun Microsystems lost money, as did Unisys and AMD. Siebel removed its chief executive less than a year after he took over, following a profit warning. Apple was the bright spot, but this was as much down to the consumer success of the iPod as for any growth in business sales.

So anyone in the IT community knows what's coming next: everybody else assumes that the sector is back in a slump, and that the cautious optimism of recent months was unfounded, a blip.

But the real danger for the industry is the short-term attitude of the financial markets. IT is not going away; companies are not going to stop spending on technology; the internet will not stop revolutionising the way we live and work.

For IT directors, the challenge is to be a champion for technology in their organisation. They must counter the threat of decision-makers outside IT thinking that if the sector is slumping it's best to cut budgets again.

The truth is that IT buyers are negotiating better deals than ever. Supplier revenue might be down, but sales volumes are up: Gartner says European PC shipments grew nearly 15 per cent in the first three months of this year.

The business papers may be full of tech sector woes, but IT directors need to promote the real story.

Companies are getting more for less, opening up opportunities for strategic IT projects to change and improve operations.

Now is the time to convince the board that the IT department is on the up, even if some of its suppliers find that the going gets tough.

How quickly you can respond to customer expectations is key to your organisation's future, writes Bob Evans

Why you need speed for business success

IF YOU had to benchmark your company against your competitors on speed and agility, how would you rate? If a customer requests a standard product or service, can you get it into their hands as quickly as your competitor? When one of your designers or product developers conceives a new product, how much time goes by before that idea earns revenue? If your best customer requires a customised order in a ridiculously short amount of time, will you be able to meet that demand, or will that great customer go to someone else who can respond more quickly?

It's hard to imagine any part of our lives not yet touched by this incessant trend towards faster turnarounds and expectations of near-instantaneous response.

And this isn't the sort of thing that runs in cycles; so, if your company didn't fare too well in the questions above, you probably shouldn't try to convince the chief executive to wait until the second half of this year because all this rush-rush stuff will be long forgotten by then. This very real-time phenomenon is here for the long haul. And it has enormous implications for us all.

If your competitors can move faster than you, be more responsive than you, and innovate more quickly than you, what sort of future do you expect to have? Your value proposition can't be: 'Sure, I'm slow today, but you can also bank on the fact that I'll still be slow tomorrow'.

Another way of thinking about it is this: is what you're creating today a perfect match for what customers want today – right here and now – or is it merely a reflection of what they wanted in the past, and what you hope they still want today?

And if, upon further reflection, you find that you're probably not operating as rapidly as you need to be, then what's the cause of that? Is it that you're using the



Survival of the quickest: how well do you rate against your competitors?

same processes we used five years ago and 10 years ago and 25 years ago, despite the fact that your customers' requirements have changed dramatically in the past few years? What's the source of the latency in your operations: Slow people, slow processes, slow technology, or all three rolled into one?

Here's an example from a recent story (*Computing*, 17 March): 'If you're in the business of making a few million pairs of blue jeans a year, not much is more important than getting "blue" exactly right. It's why a jeans designer at clothing company VF Corporation will express-mail swatches dipped in dye back and forth with factories around the world as many times as necessary to make sure designers and manufacturers agree on just the right shade. And it's part of the reason it takes as long as nine months to design a new pair of jeans and get them on the shelves.'

Well, doesn't VF deserve some slack? It's the largest apparel maker in the world, with brands such as Lee jeans, Vanity Fair lingerie, and North Face outerwear, and therefore the problem is complex.

And the story says that another clothing company, J. Jill Group, 'takes up to a year to get a

product from concept to shelves' in its 150 stores.

Nine months, 12 months – what's the big deal?

If we have learned anything in this topsy-turvy business world, it is that speed kills. Having it can kill competitors, and not having it can turn you to roadkill.

But a clothing company that is able to chop that concept-to-cash cycle from about a year to about a month could change the game for everyone. That story found such a company, and it's not some obscure little company: it operates factories, design centres, and more than 700 retail outlets globally.

'An exception is designer and retailer Zara, which has built its business model on being able to get new products designed and into stores in just two weeks.

In many of its 724 stores throughout the world, Zara clerks send feedback directly to designers via wireless PDAs, and designers can make adjustments and send them electronically to factories in northern Spain.'

No industries will be isolated from this sort of upheaval. And it will surely happen – or, more likely, is already happening – in yours. Are you ready?

Published weekly by VNU Business Publications Ltd Registered in England no 1513633
Computing is printed by St Ives Peterborough Ltd © copyright VNU Business Publications Ltd
Average qualified circulation: 115,641 BPA (January-July 2004) available at
www.computing-media.co.uk
ISSN: 1361-2972



Subscribe online at www.vnuservices.co.uk/computing
Delivery or circulation issues Email us at help@vnuservices.co.uk
or call our helpline on (01858) 435344

Reprints Computing offers a commercial reprint service. Call Alex Watson on (020) 7316 9206
Licensing Computing is available for international licensing. Contact: joanna_mitchell@vnu.co.uk
Computing contains articles under licence from CMP Media LLC which are reprinted with permission of Information Week. © Copyright 2005 CMP Media LLC. All rights reserved.
Computing supports The Prince's Trust Technology Leadership Group, raising money for technology-related startup businesses. Call (020) 7543 7331

© 2005 CMP Media LLC
www.informationweek.com

What do you think? If you have an opinion about issues raised in *Computing*, email us at feedback@computing.co.uk. Please keep to a maximum of 250 words and include your job title and postal address

Middleware is Everywhere.

Can you see it?

2

5

4

3

1



WebSphere

Key

- 1. Guest checked in wirelessly.
- 2. Staff queries guest preferences.
- 3. Vendor services integrate seamlessly.
- 4. Guest preferences fulfilled.
- 5. Repeat customers increase profits.

MIDDLEWARE IS IBM SOFTWARE. Powerful WebSphere software. It's the integration capability that can unite your business, vendors, partners and customers. A dynamic link designed to make your entire organisation more efficient. More responsive. More flexible. On demand. WebSphere connects processes, with open standards. And it's easy to manage too. So all involved get a better night's sleep.

Middleware for the on demand world. Learn more at ibm.com/middleware/integration/uk **ON DEMAND BUSINESS**

IBM, the IBM logo, WebSphere and the ON DEMAND BUSINESS logo are registered trademarks or trademarks of International Business Machines Corporation in the United States and/or other countries. ©2004 IBM Corporation. All rights reserved.

TEAM LING - LIVE, informative, Non-cost and genuine!



Jimmy had a fantastic holiday. Unfortunately, his laptop picked up a tropical disease.

No problem!

Introducing the world's first driver-centric desktop firewall with central control

You know the story – Jimmy's working in an unprotected network environment. Maybe a hot-spot at a café or airport. He checks his e-mail. He does a little recreational surfing. And his laptop is open to attack. But, hey, the risk is minimal...right?

Now, you don't need to worry. The NetOp Desktop Firewall provides the most powerful, centrally manageable, features to shield your laptops. Not only does NetOp prevent unwanted or dangerous data from entering or leaving your laptops – wherever they happen to be – our centrally managed process control ensures that **only authorized programs and services can run on your system**. In short, NetOp expects the unexpected!

But we wouldn't want you to take any risks. So try it yourself, absolutely free! You'll find full details at **www.netopuk.com**

- Dynamic packet-filtering architecture
- Application whitelisting
- Individual security profiles and automatic network detection
- A necessary supplement to perimeter firewalls

FREE!

Download a full-function trial copy at **www.netopuk.com**



If you have an opinion, write to the editor at **32-34 Broadwick Street, London W1A 2HG**
email us at **feedback@computing.co.uk** or call the hotline on **(020) 7316 9744**

Why experience will triumph over hope

Letter of the week

JAMIE Brown is making an increasingly common error (Letters, 7 April). He thinks that candidates should not be rejected because of their lack of experience for a role, interpreting this as ageism. This error is also present in the government's intended legislation, due to become effective in 2006.

The inexperienced have always been rejected where experience is a necessary attribute for a job, and it will always be the same. It is natural and totally appropriate.

This has nothing whatsoever to do with ageism. It is not possible to argue that the inexperienced be treated as if they were experienced.

Albert Einstein is credited with having said that the only source of knowledge is experience. Ageism is solely discrimination against a candidate who has the experience and all other required attributes, but is of an age that is above the perceived, subjective maximum.

R D Feltham
By email

Skills are not enough

Jamie Brown condemns as ageist adverts that specify a minimum 10 years' experience (Letters, 7 April). Surely what employers are really asking is whether the candidate is a safe pair of hands.

IT practitioners need knowledge and skill to do their jobs: in some cases this might be acquired quickly. They also need to have had experience of success and failure, to gain the judgement required to recognise a situation for what it really is and apply the appropriate knowledge and skill. This takes time to develop.

The BCS and other engineering bodies recognise this in their qualifications. Research backs it up. For example, did you know that in a large international sample of project managers, the ones who were consistently successful in multiple domains had more than eight years of experience?

Knowledge and skills alone are not enough. Yes, challenge age requirements; ask why the experience requirement is there, and have the prerequisite assessed another way if it is inappropriate. But do not assume that demanding experience in a job advert is simple ageism.

Carol Long
By email

Central authentication

So banks are looking at physical devices to verify identities online (Banks set to confirm UK security standard, 14 April).

How about some joined-up thinking here? I cannot imagine that any of us wants or needs one such device for each bank we use.

You report that the banks are looking at two-factor authentication, and cite the example of Coutts giving online customers passcode generators that create one-off numbers to foil identity theft. It is two-factor because it consists of a PIN you know and the variable code from the token you have.

Since such devices already exist – the RSA SecureID used by Coutts is just one example – how about a central



Security standard: Computing, 14 April

authentication service to which online services can subscribe, and where users can register their own personal device for use on multiple sites?

This might even spell the end of having to remember umpteen passwords.

David Mitchell
By email

In-flight outgoing only

Ivor Connell is probably correct in his assertion that once airlines can provide a phone service on aeroplanes and charge for it, they will (Letters, 14 April).

If a mobile phone does not detect a cell in close proximity, it increases the signal it emits until it does find one. This is one of the reasons the battery on a mobile runs down really quickly in a poor signal area.

It is this high amplitude signal that can conceivably cause a problem with aircraft systems, especially in older models.

I would also have thought that the airline, or at least its telecoms provider, would be able to provide a one-way service where someone can make a call but not receive one mid-flight – or actually insist that everyone puts their phone into vibrate-only mode.

In the meantime, technology has been developed for aeroplanes that responds to a mobile phone's request for service but does not actually provide one. This causes it to not increase its emissions, with the upside that the mobile's battery will not be dead by the end of your long-haul flight.

Andrew Maddison
By email

Sources for courses

The issue of whether Linux is more or less secure than Windows is irrelevant unless you look at how the system is being used (Letters, 31 March, 14 April).

For connecting systems to the internet I prefer Linux, because I only install what I need. My typical install is IPtables, SSH

and Samba – firewalled, of course – with other applications for email and the like.

I do not need anything else, and I do not have to spend hours figuring out if I have licences for the operating system, plus I know it is secure.

On the other hand, Windows works best in an already secure environment. It is fast and familiar to many, so I use it when it is appropriate. However, to lock Windows down is more complicated than putting what I want on a Linux box.

Use what you know and what works. If you can save money, all the better. Mind you, feeding Microsoft's heavyweight marketing budget more cash does make me feel uneasy, so I try to avoid it.

Peter Howell
By email

The cost to the employee

In the recent correspondence about training (Letters, 24 March, 7 April) there is an assumption that it is the employer that pays. Sure, the employer usually writes the cheque, but it is very often the employee that really pays.

Training and useful experience are part of the rewards of a job, and prospective employees will often accept jobs with lower pay in pursuit of better training prospects. I have even done this as a contractor. A couple of months at a lower rate while I got up to speed with a particular chunk of technology were well worth the price.

It follows that Jon Fair (Letters, 24 March) needs to increase the pay of his staff once they have improved their skills. He may find they do not then leave.

Chris Mason
By email

Elements of risk

I too have concerns about e-auctions (E-auctions prove their worth to public sector, 7 April, Letters, 14 April). They are certainly effective at driving down prices for well-defined goods, where the products and supply terms can be clearly defined and the associated contracts are unambiguous.

While auctions may well encourage prospective suppliers to cut prices, they must be able to make enough of a margin to meet contractual commitments such as continued supply and support.

In the worst case a supplier might even be forced out of business as a result of a mistake during the cut and thrust of an e-auction, with even greater potential for disruption and cost for the customer.

Anyone considering e-auctions for complex products and services should think twice, especially where public money is involved. Customers and suppliers have a duty to ensure value for money. Avoid saving thousands now at the expense of millions in the long term.

Bryan Hay
By email

Talking point

On benchmarking
(Prudential sets the benchmark for outsourcing plans, 31 March)

I was delighted to read that the Prudential is benchmarking its outsourcing deal. What frustrates me is that many of these moves are made without robust data to back up the decision. An ideal sourcing contract would run for four to five years with a benchmark at 18 months to two years. This exercise should be embarked upon jointly and openly. So the Prudential contract with Capgemini is certainly of an optimum duration, but I am surprised that the benchmarking exercise had not been conducted a year earlier.

Ian Leask
Compass Management Consulting

On SP2
(Microsoft ends SP2 download block feature, 7 April)

SP2 contains better security protection against hackers, viruses and worms, so it is largely positive that systems with Automatic Update enabled will now interactively download it via Windows Update. But SP2's new security features can block certain components from talking to others, causing an application to break. Another possibility is that an application may not run well with XP's new firewall defaults. Many organisations have had this experience, and the complexities of the migration are now well documented.

Lori Wizdo
IdentifySoftware

On closing the digital divide
(Action plan confirms IT as the key to UK's future, 7 April)

People are becoming more accustomed to dealing with computers both at home and at work. There is always the prospect of credit card abuse and identity fraud, which are probably the main threats to confidence in technology as a tool. As more security becomes available, fewer people will get burned and confidence will grow. Add the increasing use of IT by a younger generation and you have to wonder about the need for a government strategy.

John Mowatt
By email

On radio tags
(Tesco may extend its scanning technology, 24 March)

Radio frequency identification (RFID) is a hot technology. But despite a handful of household names using RFID, the technology is far from widespread. For most small or medium-sized companies in the logistics or retail industry, RFID is just not cheap enough yet. Also, most RFID readers are not accurate enough to pick out one case from a pallet. The challenge is to harness technology at the right time – too soon is as bad as too late.

David Stanhope
VoiteQ

Virus alert level



ALERT STATUS is 2: (1 to 5 where 5 is most serious). There is serious worm/virus activity without a public exploit code

Network Box
network-box.co.uk/

Most active viruses this week...



- 1 Zafi d 32%
- 2 Netsky q 26%
- 3 Netsky d 7%
- 4 Others 35%

QUOTE of the WEEK

'Co-operation is just like two pagodas, one hardware and one software. Combined, we can take the leadership position in the world'

Chinese prime minister
Wen Jiabao,
talking about
partnerships with India

the **Week** Get your daily news at **computing.co.uk**

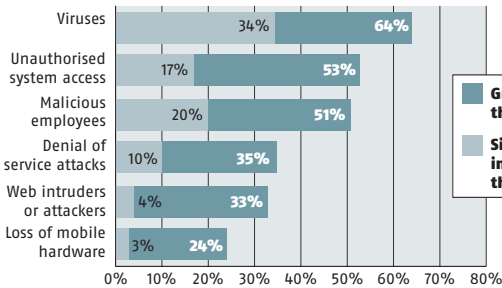
Contact us at
(020) 7316 9000
or 7316 and
extensions as
listed on the right

Critical stats

Security priorities Source: Computing and Unisys

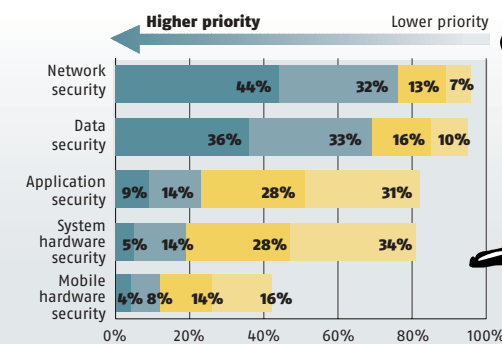
What are the greatest threats to IT security?

Percentage of respondents



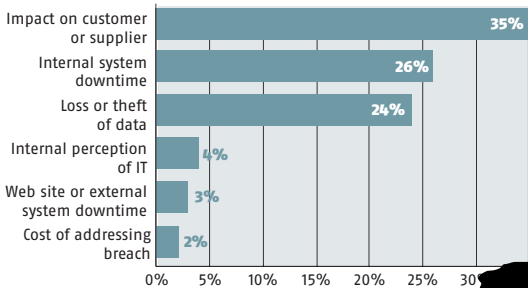
What are the highest priority?

Percentage of respondents

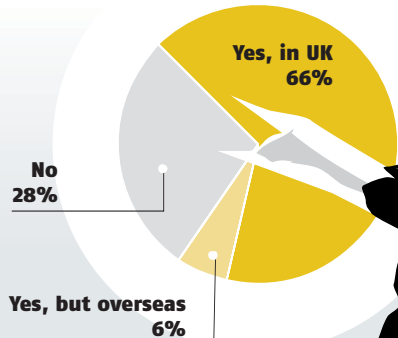


Biggest business impacts of security breaches

Percentage of respondents



Does your business have an IT security manager?



News from Asia/Pacific

Singapore is pressing ahead with a smartcard project that will see citizens applying for biometric passports from October, reports *Information Week*. The country's Immigration & Checkpoints Authority has begun development work alongside supplier Gemplus.

News from Asia/Pacific

Australia has improved its public expenditure on research and development compared with other nations, but business is falling behind on innovation spending, according to a government report published in *The Australian*. The paper reports that the country improved in most fields, including investment in venture capital, scientific and technical articles and internet use, but went backwards in patents and investment and IT.

News from the US

A court in Virginia has jailed one of the world's most prolific spammers for nine years. Jeremy Jaynes, 30, was estimated to be earning \$750,000 (£396,000) a month and sending up to 10 million emails a day.

News from Africa

South Africa will finalise plans to distribute five million free mobile phone SIM cards by the end of May, according to *ITWeb*. The initiative was first announced two years ago, when Department of Communications director general Andile Ngcaba told Parliament that mobile operators Vodacom and MTN would make the SIM cards available.

News from Asia/Pacific

Chinese prime minister Wen Jiabao wants India and China to work together to dominate the global technology industry. During a visit to Bangalore last week, Wen said India's strength in software can combine with China's hardware manufacturing capability. 'When the particular day comes, it will signify the coming of the Asian century of the IT industry,' he said.

Hot links

- Computing jobs**
www2.computing.co.uk/
computing/careers.jsp
- Computing media information**
www.computing-media.co.uk/
- Computing Directories**
directories.computing.co.uk
- Contractor life**
www.computercontractor.co.uk
- Public sector employee**
www.computing.co.uk/
publicsector

Subscriptions

Subscribe online:
**www.vnuservices.co.uk/
computing**
Problems with circulation?
Call our helpline on
(01858) 435344
or email us at:
help@vnuservices.co.uk

- Toby Wolpe** Editor-in-Chief
toby_wolpe@vnu.co.uk 9132
- Mike Wright** Managing editor
michael_wright@vnu.co.uk 9153
- Bryan Glick** Managing editor
bryan_glick@vnu.co.uk 9149
- Emma Nash** News editor
emma_nash@vnu.co.uk 9146
- Mark Samuels**
Senior reporter 9412
- Sarah Arnott**
Senior reporter 9629
- James Watson**
Senior reporter 9644
- Daniel Thomas**
Reporter 9235
- Miya Knights**
Reporter 9588
- Chris Green**
Technical editor 9627
- Sophy Dale**
Sub-editor 9157
- Richard Brighouse**
Picture editor 9143
- Matt Buck**
Graphics artist

- VNU Business Publications
London
- Brin Bucknor** Managing director
- John Barnes** Publishing director
- Catrina Attard** Publishing
administrator
catrina_attard@vnu.co.uk 9158
- Marieke Visser**
Marketing manager 9306
- Joanne Hurst**
Production director 9227

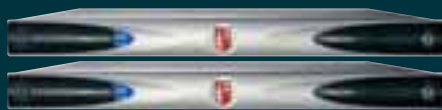
- Sales**
www.computing-media.co.uk
- Kumaran Ramanathan**
Sales director 9209
- Mark Burton**
Sales manager 9351
- Daniel Shaw**
Major client manager 9594
- Recruitment:
Matt Bush
Sales manager 9121

- VNU Business Information Europe
Ruud Bakker
Chief executive
US representation Global Media
USA, LLC, 565 Commercial Street,
4th Floor, San Francisco, CA
94111-3031, USA
Tel: 415 249 1620
Fax: 415 249 1630
www.globalreps.com
European/Asian/Middle East
representation Global Media
Europe,
Sarah Speake
Tel (44) 207 316 9749
Fax (44) 207 316 9774,
sarah_speake@vnu.co.uk

Visit us at InfoSecurity Europe -
stand number 561.
26th - 28th April 2005
Grand Hall, Olympia, London



CyberGuard's Total Stream Protection™ 'blended protection architecture' combines firewall, VPN, content security and application layer gateways that can be centrally managed with ease via the CyberGuard Global Command Center.



CyberGuard's WW1000 series of Content Security Management (CSM) Appliances ensure that content entering and leaving an organization complies with enterprise security and privacy policies, delivering a CyberGuard secure CG-Linux Operating Environment, Advanced Content Protection, Multi-Protocol Proactive Filtering™ and Zero-Day Protection. Optional Features include URL Filter, Anti-Virus, and Anti-Spam.

The result is a security appliance that delivers the Blended Protection™ you need to protect against malicious content and unwanted email.

www.cyberguard.com/ww-family



With up to 3.25Gbps throughput CyberGuard's Total Stream Protection™ family of firewall/VPN appliances is designed to protect the information assets of mid-sized businesses that need uncompromising security in a practical, high performance package, to large enterprises that require unparalleled performance and maximum port density for the most demanding network environments.

www.cyberguard.com/tsp-family



CyberGuard's SG family of firewall/VPN appliances offers a range of more than 8 models. From the SG635 - a cost-effective firewall/VPN/IDS solution packaged on a PCI card, to the SG710 - the flagship of CyberGuard's SG Series of firewall/VPN appliances, offering multi-megabit throughput and ICASA-certified stateful inspection technology: CyberGuard's SG range addresses the needs of all users, from remote workers to branch offices of mid-sized enterprises.

www.cyberguard.com/sg-family



Common Criteria
EAL4+ CERTIFIED

Call +44 (0)1344 382550 today
and ask to speak to a
CyberGuard Sales Professional

TEAM LING - LIVE, informative, Non-cost and genuine!

CYBERGUARD
WORLDWIDE

www.cyberguard.com

14ft thick granite & steel walls

12 ton bomb-proof door

70 cameras

3 backup generators

6 fibre entry points

24/7/365 onsite engineers

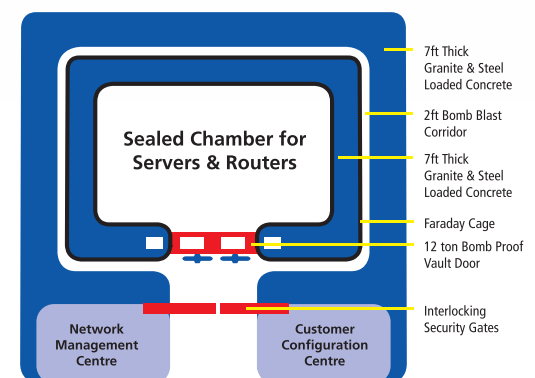
Well, you can't be too
careful these days.



In the heart of Manchester you'll find probably the UK's most secure data centre, ServerBank™. Behind 14ft thick walls and bomb-proof doors which once protected the Bank of England's bullion, PIPEX is now securing many of the UK's major transactional servers. In addition to the highest levels of physical security and system monitoring, ServerBank™ connects into the PIPEX backbone providing unsurpassed reliability and connection speeds.

When there is absolutely no compromise with your online presence take it to the ServerBank™.

ServerBank™ Data Centre Manchester



Data Centres also in London and Leeds

ACCESS | HOSTING | SECURITY | VOICE | ORACLE

www.pipex.net 0800 031 7701



TEAM LING - LIVE, informative, Non-cost and genuine!

Businesses at risk from cases of taken identity

Special report

A HACKER group's recent attempts to steal £220m from the London offices of Japan's Sumitomo Mitsui bank

set alarm bells ringing in many boardrooms and IT departments.

Key-logging devices and email scams – traditionally targeted at stealing usernames and passwords from internet banking customers – are now being used to try to rob businesses of vital information, such as customer databases, financial passwords and intellectual property.

Research by the National Hi-Tech Crime Unit (NHTCU) reveals that theft of information and data cost UK businesses at least £33.3m last year, with other computer-based financial crimes costing firms more than £500m.

Online banks are warning customers about security threats, but many firms neglect to educate staff about the dangers of identity theft, or put sufficient identity management systems in place.

'Instead of guns and knives the new toolkit of criminals is likely to contain spyware, trojans and phishing sites,' says Tim Morris, vice president and regional head of security and risk management at MasterCard, Asia-Pacific.

Computing's special report on internet security kicks off with a look at the challenges of managing identities. Daniel Thomas reports

'As external consumer defences are strengthened, the opportunity for internal compromises will grow. I see this as an increasing threat for the future.'

To combat this threat, organisations need to assess risks and gauge the security of their assets, to put processes in place to prevent breaches, says Stuart Okin, associate partner at Accenture's technology practice.

He also suggests a review of password and access management policies. 'If staff have too many passwords they will start to write them down,' he says.

Jay Heiser, research director at Gartner, says firms need to build on traditional security systems, such as anti-virus, firewall and intrusion detection, by installing anti-spyware software.

'Phishing has been a distraction for firms and has polluted their understanding of identity theft, as they're now thinking of it purely as a consumer threat,' he says.

'But longer-term, it's going to be

companies that are at a greater risk from password-slurping malware. As hostile code becomes more sophisticated it will present more of a threat for a firm's own employees.'

As staff demand for remote access to corporate networks increases, IT departments will also need to introduce stronger ways of authenticating users accessing systems externally, and put firewalls and security software on laptops, he says.

But this needs to go hand-in-hand with training employees about their role in tightening security.

'General education of employees about security is important,' says Okin. 'If a worker goes into an internet cafe, how do they know there aren't key-loggers on the machine trying to steal passwords and information?'

The NHTCU says 68 per cent of identity theft is committed by staff or third parties inside the organisation.

'The most common threat in terms of

identity theft is someone else sitting down at your PC and pretending to be you,' says Heiser.

Token-based, two-factor authentication products, which generate one-off, unique numbers to verify users, can help alleviate the risk as part of a centralised password management policy.

'If machines are shared and you allow another colleague access to your password then there's no way of preventing identity theft,' says Heiser. 'But with two-factor authentication you're less likely to give your token to someone else.'

Directory tools, which centrally manage

'The most common threat in terms of identity theft is someone else sitting down at your PC and pretending to be you'

employee access rights and profiles, dictating what systems they can and cannot use, will also tighten security, he says.

This is particularly important for preventing ex-employees logging in after they leave the company. According to a survey by supplier Citrix, 23 per cent of companies leave their networks exposed to former staff, failing to revoke their IT access rights for weeks, months and in some cases years after they leave.

Directory management software helps by linking different departments, such as IT and human resources, so that changes in staff profiles and status can be shared.

'It's rare for someone to leave the organisation and not get their last pay cheque, but often they still have access to the firm's computer systems long after they have left,' says Heiser.

'The most important applications might get disabled but there are peripheral applications that could still be accessible and create vulnerabilities.'

As businesses become ever more internet-reliant – with remote working and joint ventures breaking down the 'walled fortress' mentality to company security – firms need to look at new ways of protecting their key assets, factoring in people, processes and technology.

'The challenge is for IT departments to holistically manage both physical and electronic security, and stop things from falling between the cracks,' says Heiser. 'As security gets stronger it will be the cracks that criminals will try to exploit.'

Case study HSBC

Bank puts the focus on educating users about security risks

HSBC is getting tough on cyber criminals after witnessing a growth in phishing attempts aimed at stealing customers' online identities.

The bank, which has 18.9 million internet banking customers in 39 countries, has stepped up its efforts after seeing an increase in scams that use fake emails, claiming to be from the bank, to trick customers into giving away usernames and passwords.

During its worst day last year HSBC's staff and servers were also bombarded by more than 100,000 virus attacks, including information-stealing spyware and key-logging software.

'We have assets of \$1.17tn (£620bn) and that's the amount that is at risk, because most of it is held as information on computer disks,' says Alan Jebson, group chief operating officer at HSBC Holdings.

Fearing a growth in phishing and theft of customer identities and finances, HSBC embarked on a campaign to educate users about security risks and how to protect themselves, advising them to install firewalls, anti-virus and spyware software on their PCs.

'It wasn't so long ago that criminals targeted single high-street banks,' says Jebson. 'These days they are people with PhDs using the internet to try to steal millions in seconds. They know that home computer users are the weakest link in the bank's security



On one day last year HSBC was bombarded by more than 100,000 virus attacks

and we need to encourage our customers to secure their systems.'

The bank is also working with the National Hi-Tech Crime Unit (NHTCU), the Association for Payment Clearing Services, and competitors such as Citibank to share information on new scams and identity theft methods being developed.

'We're in contact with the NHTCU on a daily basis and work with them to shut down phishing sites. We are also working with similar law enforcement agencies in other countries,' he says.

HSBC is building behavioural analysis systems to identify phishing patterns so it can track down perpetrators.

'Increasing sophistication from fraudsters needs to be tackled by increasing sophistication from the bank,' says Jebson.

Further reading
www.computing.co.uk/news/1162025

daniel_thomas@vnu.co.uk
www.computing.co.uk

Are our critical systems s

Organisations and home computer users alike are at increasing risk from viruses, hackers and even terrorist cyber attacks. **Daniel Thomas** reports on the threats to the nation's IT systems

Special report

LAST year, hundreds of organisations ground to a halt after the Sasser worm spread rapidly around the world.

The worm severely disrupted UK coastguard stations; delayed 21 British Airways flights; infected IT systems in Hong Kong hospitals and halted trains in Australia after affecting drivers' radio systems.

Created by an 18-year old German student, Sasser has so far caused an estimated \$3.5bn (£1.8bn) in damage, according to analyst Computer Economics, and highlights just how much society relies on the internet and IT systems.

'We don't hear about all the risks affecting companies, because they are concerned about their reputation'

Most industries are heavily dependent on computers and electronic devices to carry out day-to-day activities and, as a result, are increasingly at risk from electronic attacks, be they viruses or deliberately orchestrated hacks.

In the UK, about 80 per cent of organisations that are deemed critical to the continuity of everyday life are privately-owned and mainly unregulated in terms of security, so most breaches have not been publicised. But, if evidence

of attacks on publicly-owned systems in other countries is anything to go by (*see box, below left*), unless greater steps are taken to improve security, the UK's critical national infrastructure (CNI) could be the next to fall victim to malicious code, hackers and, in extreme circumstances, terrorism.

'If there was an explosion you would hear about it in the press,' says Judy Baker, deputy director of the government's National Infrastructure Security Co-ordination Centre (NISCC), which works to minimise electronic attacks in the UK. 'But we don't hear about all the risks affecting companies, because they are concerned about their reputation or how it might affect shareholder confidence.'

Cyber attacks on the UK's CNI – including government, emergency services, banks and transportation – is on the increase, says NISCC, although most come from viruses rather than terrorists.

'There's an increasing number of co-ordinated and sophisticated attacks, and they are targeting government, companies and individuals,' says Baker.

'The unpleasant bottom line is that it may be impossible to totally mitigate the risks unless we stop the use of the technologies that many of our staff say they really need.'

But that option is impractical, so NISCC is calling for businesses and home PC users to do more to safeguard their systems.

Firms maintaining services such as power stations, dams and trains need to



Experts warn that the industries that make up the critical national infrastructure, such as energy, co

be extra vigilant, as there is increasing evidence that terrorists are turning to hacking to create fear. Although terrorist organisations are only using IT for communications, fundraising and propaganda at the moment, denial of service (DoS) attacks and hacking could become more common, says Baker.

'There is not a current need to over-hype the risk of electronic attacks, but in the future it will be increasingly possible,' she says. 'Physical attacks will probably be the favoured method, but electronic attacks are an option.'

One of the biggest threats faced by multinational firms in charge of parts of the CNI is hackers taking control of supervisory control and data acquisition (Scada) systems, placed throughout energy plants, train networks and sewage treatment sites to automate operational processes.

There has been a tenfold increase in the number of successful attacks on Scada systems since 2000, according to research by PA Consulting and the British Columbia Institute of Technology, which also predicts that between 100 and 500

Case study Hackers wreak havoc

SO far the UK is believed to have avoided major attacks on its critical national infrastructure, but other countries have been less fortunate.

In 2003 the Slammer worm infected the computer network of Ohio's Davis-Besse nuclear power station, disabling safety monitoring systems for nearly five hours.

The worm is believed to have entered the power plant after penetrating a contractor's unsecured system and travelling through a bridging connection into the Davis-Besse network, bypassing the plant's firewalls.

'A hacker or terrorist would never have been able to find this route into a nuclear power plant, but a worm can eventually find things that are connected to the internet even through the most obscure route,' says Mikko Hypponen, director of anti-virus research at internet security firm F-Secure.

In April 2000 Vitek Boden, a 49-year-old disgruntled

ex-contractor, was arrested after hacking into an Australian waste water control system at least 46 times.

Boden used a stolen computer and radio transmitters to take control of Queensland's Maroochy Shire sewage treatment centre, and dumped 250 million tonnes of sludge into the area's rivers and parks, killing wildlife and plants.

By taking control of 300 supervisory control and data acquisition systems that automated many of the plant's operational processes, Boden was able to take complete control of treatment of the region's sewage and drinking water.

Between January and April 2000 he hacked into the system regularly, also causing major damage to the grounds of the nearby Hyatt Regency hotel.

In 1999 Russian hackers seized control of one of the country's major natural gas pipelines. The criminals kept control of pipeline owner Gazprom's systems for more than 24 hours.

Case study Protecting the UK economy

PAYMENT processing firm Voca (formerly Bacs) has a critical role supporting the UK economy.

Last year, the company processed £3tn of financial transactions, including 70 per cent of household bills through direct debit and more than 90 per cent of staff salaries.

By the end of this year it will also process 80 per cent of benefits and pensions paid by the Department for Work and Pensions.

'If we didn't exist, or if there was a problem, there probably wouldn't enough cash in existence,' says Voca director David Sear.

'Our concern is protecting our service from every kind of disruption that might be, and making sure we continue processing payments. In the last 36 years we haven't had a single failure.'

As part of the critical national infrastructure, Voca considers IT security a priority, says Sear. Industrial-strength firewalls, anti-virus software and intrusion detection systems are just the basics.

A sophisticated 'demilitarized zone' – a small network which acts as a neutral zone between Voca's private network and the external public network – is also used, to stop hackers and other security breaches.

The firm has set up separate IT systems in three different locations in

safe from cyber attack?



ould soon be targets for cyber attacks

Many of the networked Scada systems in industrial plants are out of date and insecure, he adds.

'If an IT department let an employee connect to their systems using an unprotected laptop they would be considered a fool,' he says.

'But there are thousands of processors out there that don't have any anti-virus or firewalls, and they are controlling machinery that moves and manages critical industrial processes.'

In extreme circumstances this could lead to hackers taking over parts of the CNI and holding them to ransom. Processing errors or acts of industrial espionage could also lead to food contamination, if control systems were used to change ingredients, adds PA consultant Peter Clay.

'You just need to look at the Sudan 1 food problem earlier this year to see the kind of damage that can happen,' says Clay. 'It's nasty and a lot more subtle than targeting stock-ordering systems to take stock off the shelves at supermarkets.'

But firms should also be looking closer to home for stepping up security.

'Companies are finding many reasons to outsource or offshore parts of their business, but this adds many new risks for firms to manage,' says Baker.

This is apparent from a case this month, in which 16 Indian call centre workers at Citibank's outsourcing firm Mphasis were arrested for allegedly stealing \$400,000 (£211,235) from customer bank accounts.

Organisations critical to the CNI should look closely at their outsourcing partners and carry out audits to ensure they are secure enough to manage systems, says Baker.

But while internal security is crucial, the CNI is also in danger from poor security practices by home PC users.

To combat this, the Home Office and NISCC has launched ITsafe, an initiative to alert home users and small businesses

unreported industrial cyber attacks occur each year.

'For years managers have asked for standardised processes, easy-to-use operating systems and off-the-shelf applications,' says Bernie Robertson, a member of PA Consulting's management group. 'They are also asking for real-time information about production cycles, so they can integrate into enterprise resource planning systems.'

'This means that if you're a hacker or virus writer it's easier to attack their systems.'

the UK, so if its principal payment processing systems are attacked business can be transferred to another site in seconds.

'People focus on the internet and technology issues but often neglect the physical threats,' says Sear. 'But any business continuity or IT security programme must look at people, processes and technology; one can't be neglected to the detriment of the other.'

Voca also works with the Bank of England, the Treasury and the Financial Services Authority to conduct external virtual contingency exercises to test the resilience of systems' reliability.

'By carrying out regular fallback exercises to check processing systems, and how our people would cope, we are confident that if we were attacked then we could handle it,' says Chris Dunne, commercial business development manager at Voca.

The payment processing firm is urging 40,000 corporate customers to switch to broadband providers that offer service level agreements, to ensure they have resilient payment systems.

'As we saw during the 11 September attacks the internet and many sites ground to a halt, because everyone was going online to see what was happening. This also affected other internet-reliant services,' says Sear.



Voca works with the Bank of England to test payment systems

What is critical national infrastructure?

THE critical national infrastructure (CNI) comprises the key industries and systems which ensure the continuity of UK society.

It includes the assets, services and systems that support economic, social and political life in the UK.

Entire or partial loss of this infrastructure caused by terrorist attacks, natural disasters or human error could lead to large-scale loss of life, have a major impact on the economy and detrimental effect on society, and undermine the state of government.

The 10 industries that the UK government deems to be part of the CNI are:

- Communications
- Emergency services
- Energy

- Finance
- Food
- Government and public service
- Health
- Public safety
- Transport
- Water

All these industry sectors use computers and internet-based technologies to carry out everyday tasks and, unless properly secured, can be exposed to electronic attacks, ranging from viruses through to politically motivated hacking attempts.

In the UK more than 80 per cent of the CNI is run by privately-owned firms, which work with the government's National Infrastructure Security Co-ordination Centre to protect against attacks.

www.niscc.gov.uk

to the dangers of viruses and computer crime (*Computing*, 24 February).

By protecting themselves properly, home users can help prevent the spread of damaging computer worms such as Sasser, and stop criminals from taking over their PCs to launch DoS attacks on company IT systems.

'We all need to play a part in securing cyberspace,' says Howard Schmidt, former cyber security adviser to the White House.

'Simple things such as personal firewalls, anti-virus, email spam filters and anti-spyware can all help.'

'If we did this the police could focus on more important things, such as putting terrorists in jail.'

International legislation also needs to be improved, to overcome the problem of criminals hacking into systems in one country while living in another region where it is not recognised as a crime, says Simon Perry, security strategist at Computer Associates.

'The fact that we have uneven legislation across countries plays into the hands of criminals. It's like trying to squeeze jelly in your hand; it just moves somewhere else,' he says.

Perry, a member of the EU's European Network and Information Security Agency's (Enisa) permanent stakeholder

'Simple things such as personal firewalls, anti-virus, email spam filters and anti-spyware can all help'

group, says all countries need to be persuaded to come up to the same level for policing the internet.

'It's not Enisa's role to say industries should be regulated for security, or that they should establish an equivalent to NISCC,' says Perry. 'But it is about encouraging them to make security high on their agenda.'

IT manufacturers also need to design out security flaws before launching products, he says. NISCC's Baker says this will be increasingly important as the CNI adopts new technologies such as 3G mobile and wireless.

'Mobile phone trojans have so far been more of an inconvenience, but with the growing sophistication of technologies there will be more opportunities for exploitation,' she says.

'Electronic attacks haven't been serious so far, they have mainly been focused on web site defacement. But it's a reasonable assessment that we will see more terrorists using technology skills in the future.'

Further reading
www.computing.co.uk/news/1158726

 daniel_thomas@vnu.co.uk
www.computing.co.uk

Secure your IT outsourcing

Don't neglect security considerations when negotiating deals with services suppliers, reports **Daniel Thomas**

Special report

IT outsourcing will grow by 7.2 per cent in the next three years, creating a £134bn market for suppliers,

according to analyst Gartner.

In recent months, the Ministry of Defence, Reuters and Renault have awarded contracts worth a combined total of £6bn to IT services firms.

But only 57 per cent of companies review and approve the security controls put in place by their outsourcer, according to Meta Group, raising questions how firms can best protect IT systems and corporate information when choosing an outsourcing supplier.

In May 2003, Royal Mail announced its decision to outsource the running of much of its day-to-day IT systems, signing a £1.5bn, 10-year contract with the Prism Alliance, comprising CSC, BT and Xansa.

As part of the deal, the postal firm outsourced data centres, networks and more than 600 business applications.

Security considerations were high on its agenda. Before the agreement was struck, Royal Mail's director of information security, David Lacey, worked behind the scenes to ensure that IT security precautions remained tight when the transfer of duties began.

'It's up to the security department to understand what's going on with outsourcing negotiations,' says Lacey. 'As soon as you hear about it you should get yourself involved, because sometimes the commercial people who design the contracts don't consult everyone.'

The IT security team used its negotiations with Prism to make security a top priority, with more than 45 procedures, policies and processes included in the final contract.

'We went right through the BS7799 security code of practice and used it as a checklist to identify all the things we



Security was a high priority for David Lacey (right) when outsourcing Royal Mail's IT

needed to ensure happened,' says Lacey.

But IT security staff should not try to use the review and negotiations as a way to drive through new programmes.

'You need to think about how all the processes will operate after the outsourcing contract has been agreed, and it's an opportunity to formalise everything, but it's not a way to upgrade all your security,' says Lacey. 'The instinct would be to raise the bar as high as possible, but if you move the goalposts it will affect the price of the contract.'

'You need to think about how all the processes will operate after the outsourcing contract has been agreed'

'That's not to say that you can't tighten up security practices.'

With 1,735 Royal Mail IT employees transferring to CSC, Xansa and BT, Lacey needed to change security processes governing entry into the Royal Mail's buildings, as well as computer networks.

'We had to change all their passwords and permission rights,' he says. 'There were also differences in vetting policies,

and employees needed to understand that they were under different management, with different codes of conduct.'

To make sure the same high security standards remained after outsourcing, Royal Mail insisted that the three contractors running the systems were certified to BS7799 standard, which promotes best practice in security management.

Most of Royal Mail's IT security team were already trained to the equivalent of postgraduate level, and through training courses run by Royal Holloway University's computer science department, new contractors joining the team needed to be of the same calibre.

'We don't want people learning the job on our account,' says Lacey. 'Otherwise how are they going to get trained? Are they going to be self-taught or are they going to do an apprenticeship while protecting our security? I don't think enough firms demand that people are trained in security.'

Lacey's in-house security team also works with suppliers, holding regular risk management workshops to show contractors the threats the company faces and how the contract works in practice.

'We are also interested in what they are

doing in terms of their own business continuity, because what happens to them has repercussions on us,' he says.

A core IT security team remains at Royal Mail to advise internal departments on their IT security needs, and assess the performance of contractors.

Monthly incident reports – including details of laptop thefts, Data Protection Act requests, virus incidents and power outages – were requested, says Lacey.

'By doing this we can look at patterns and see if incidents are going up or down, or if there's any problems in any of these areas. It's good to measure improvement,' he says.

The firm also works with security consultancy Qinetiq and penetration

testing firm Qualys, to independently scan for security vulnerabilities and alert its IT outsourcers.

For patching software vulnerabilities, Royal Mail has invested thousands of pounds researching risks and prioritising what should be fixed first, based on the threat, cost and financial impact on key parts of the business.

'We can't let the outsourcer decide on their own what systems they need to patch, we need to give them guidance,' says Lacey. 'They are not authorised to take out platforms using their own judgement.'

Royal Mail has also built an annual security improvement programme into the contract, to ensure that modifications are made to systems each year.

'If you don't put anything about improvements into the contract it may stay the same and never improve,' says Lacey. 'Meanwhile, security threats evolve.'

Part of this involves developing risk profiles and response strategies for its top 60 business applications.

'By doing this we can apply tighter security for the most critical parts of our business,' he says.

Nearly two years on from the contract signing, has it been a success?

'It's not an easy thing to manage and requires a lot of effort by both parties,' says Lacey. 'They are trying to make money out of us and we are trying to keep costs down.'

Last year, Royal Mail and Prism Alliance saved several hundred thousand pounds by reducing the number of virus incidents by a factor of four, cut laptop thefts by two-thirds and lowered the number of password resets by more than 11 per cent.

'We have had a lot of successes; the financial benefits have been very good and we have achieved our business objectives,' says Lacey. 'It's also made us formalise processes across the organisation and future-proof security.'

Further reading
www.computing.co.uk/news/1160955

daniel_thomas@vnu.co.uk
www.computing.co.uk

IT security considerations when outsourcing

- Use IT outsourcing as an opportunity to formalise security requirements and processes
- Ensure IT security is considered from the outset and is a major part of negotiations
- Identify all risks associated with outsourcing and ensure bidders are capable of meeting standards
- The ISO 17799 (formerly BS7799) security code of practice can provide a good checklist when defining security requirements
- Unless pre-agreed, do not invent new requirements, as this can affect the price of the final contract
- Retain an in-house IT expert or team capable of monitoring the performance of contractors
- Demand reporting mechanisms from outsourcers, outlining intrusion attempts, virus incidents and security breaches
- Carry out independent vulnerability management assessments to ensure that systems remain safe
- Ensure passwords and permission rights are changed if staff are made redundant or transferred during the outsourcing contract
- Educate contractors about business requirements, threats and priorities, and demand high levels of training and professionalism
- Specify which IT security procedures and systems can and cannot be adapted without approval
- Make sure future security improvement programmes are factored into contract agreements



26-28 April 2005
London, United Kingdom
www.infosec.co.uk



Small Business solutions

Check out our new Safe@Wireless™ access point



STAND 512



Internal Security/IPS End Point Security

Watch a live Interspect™ demo stopping the
spread of worms



STAND 692



Web SSL Connectivity Eventia - Security Event Management

Watch a live Connectra™ demo - the most secure
SSL VPN gateway on the market



STAND 320

World Class Security wherever you stand.

Watch both live demo's - receive a complimentary gift and enter our daily draw
for a luxury weekend away for two!

Register your interest in Safe@wireless at InfoSec - receive a complimentary gift.

Come and listen to Nick Lowe - Check Point Regional Director for Northern Europe - presenting "Securing
against the unknown" on Day 1 & 3. To register go to www.checkpoint.com/corporate/events/emea

Security expert Neil Barrett examines the role of information security in compliance

Simple steps to ensure trust in your business

Special
report

INFORMATION security is about trust, and commerce is about trust. There should be a huge overlap between the two,

rather than the reluctant, suspicious attitude where information security is seen as a drag on business; a bottom-line cost that needs constant justification.

In business, we trust that prices will be visible, that negotiations will be held in good faith, and that contracts will be complied with – or that legal mechanisms exist to ensure that compliance will be effective. That trust is built on centuries of experience in trade. We are a nation of shopkeepers, as much on the internet now as on the high street.

But IT security does not have that heritage. Technically, we know that an electronic signature can be made more reliable than a handwritten one, but it is so much more confidence-building seeing someone sign their name, regardless of whether it is actually less secure or not.

There is a question of trust in information security measures, which has two dimensions to it.

The first is that the things an organisation says it implements are appropriate – and we need some external standard whereby that appropriateness can be established. Few ordinary online shoppers or business partners are likely to appreciate the difference between 40-bit and 128-bit encryption. An external standard provides a reliable baseline, from which levels of security can be measured.

So the first dimension is to establish a security baseline, covering areas such as encryption standards, through authentication protocols, operating system segmentation, design, build and rollout security.

The second dimension is to assure that organisations are meeting the targets they have set; that they comply with their own established standards. That when they say 'all users shall have strong passwords',

that is the case; that when they say 'systems will be backed up daily', the back-up is operating effectively.

This is the role of compliance – an aspect of business and IT security that has become increasingly evident and important over recent years. Compliance and compliance-testing is becoming mandatory, not just for a well-managed business, but for every business. Sarbanes-Oxley, Basel II and the Cadbury reports have all touched on the requirement to ensure that IT systems are well-managed and reliable.

There are also legal requirements. The Data Protection Act provides legal protection for data subjects – the people referred to in customer databases held by almost every business. Failure to comply with these principles can result in the company or directors being fined. The Act requires companies to enact appropriate 'technical and organisational measures' to protect personal data.

But what constitutes 'appropriate'? The answer, according to the former Data Registrar, Elizabeth France, is compliance with BS7799. Now a more complete standard, BS7799 Part 2 (ISO17799), provides a range of baselines and procedures which serve every company, from the largest multinational to the smallest business (see box).

The second reason why there is a requirement for information security – and why it is being encouraged in the context of business management rather than data management – is purely practical. Managers have to make reports to directors; directors have to report to the board; the board has to report to shareholders.

Those reports are based on information in computer systems. If those systems have been compromised – if the confidentiality, integrity and availability of the data cannot be assured – then the reports become unreliable. Directors must know how reliable IT security measures are before they can make trustable reports based on that data.

Establishing baselines for security, and ensuring those baselines are complied



Barrett: ensure systems are as secure as they can be

with, becomes an important aspect of every business.

So what should IT directors do to ensure that these requirements are met?

The obvious task is to work with ISO17799, not necessarily to achieve certification but to achieve compliance. This standard makes requirements for the introduction of information security policies, a management organisation to look after the measures, a compliance regime, and so on. It ensures the basic framework is established.

The second task is to apply the best practice and appropriate hardening for the range of systems in place. Hardening ensures systems are as secure as they can be; and best practice measures indicate the frequency with which updates and patches might be applied.

And the third task is to audit systems to ensure they comply with requirements, and test periodically whether that compliance is sufficient to deter, prevent or detect attempts to subvert security, for example through an annual penetration testing exercise.

The result of these measures will be a company able to comply with the regulatory and legal requirements placed on it – but, more importantly, a company that can be trusted.

Neil Barrett is an independent security expert and author of the book *Traces of Guilt*

Further reading
www.computing.co.uk/news/1162116

 www.computing.co.uk

 BCS

sshhh!

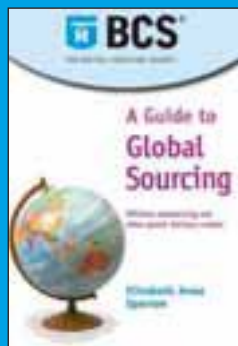
(It's a secret)

→ Your competitors are gaining experience in offshore outsourcing – good and bad.

But they aren't sharing it.

Until now.

→ *A Guide to Global Sourcing* – the latest book from The British Computer Society.

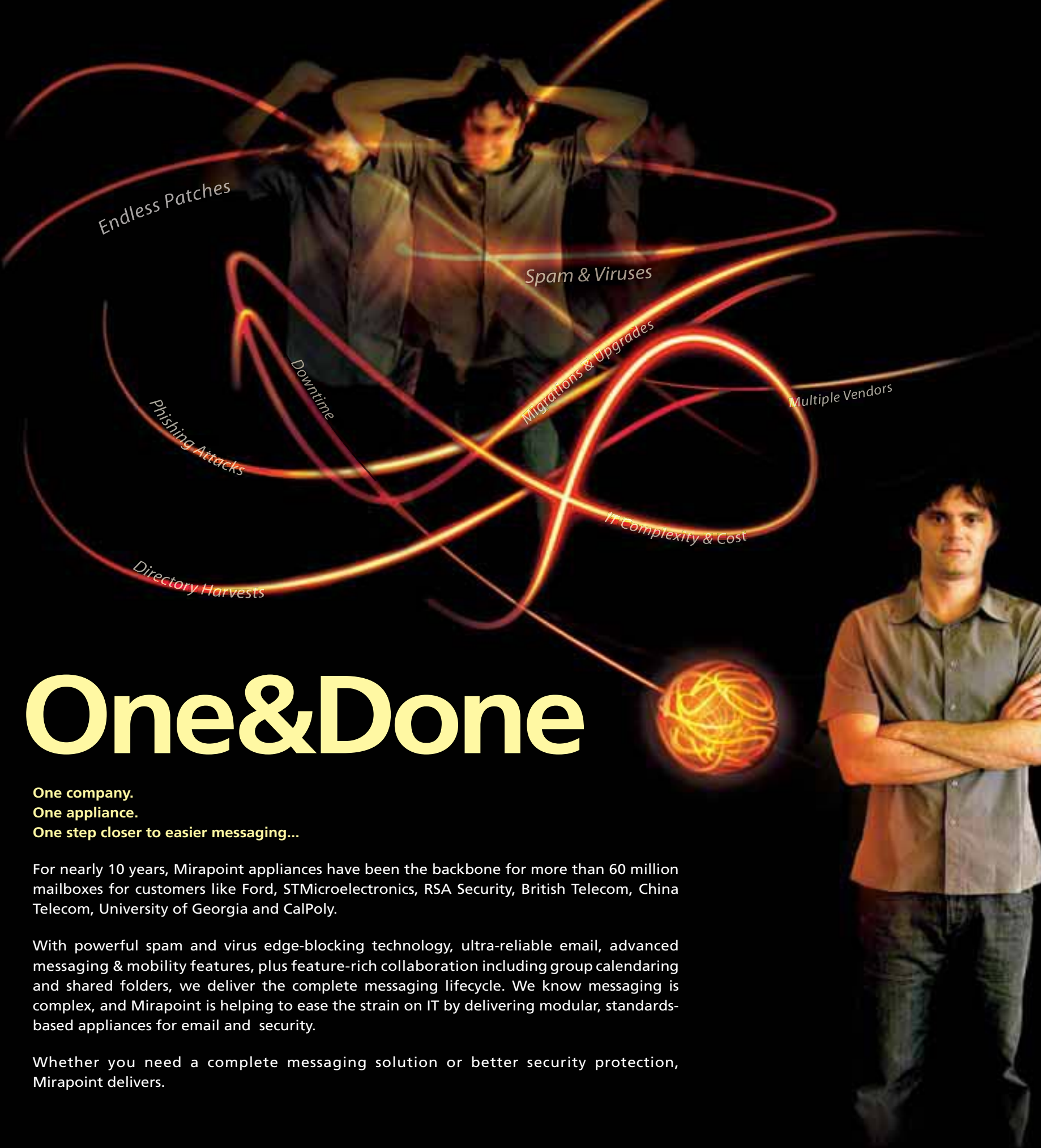


www.bcs.org/books/globalsourcing

• A Guide to Global Sourcing – Offshore Outsourcing and Other Global Delivery Models
• Elizabeth Sparrow • Cover Price £25 • 20% Discount for BCS members • ISBN 1-902505-61-1
• Book orders to: orders@yps-publishing.co.uk • Tel 01904 431218 • Fax 01904 430868

How to achieve ISO17799 accreditation

- **Plan:** Business risk analysis. What risks does your business face; what is the worst thing that could happen?
 - **Do:** Internal controls put in place to manage these risks. These can be technology, physical security, processes and procedures, employee culture.
 - **Check:** You need regular and robust management reviews to assess the continued effectiveness of security measures.
 - **Act:** Take the necessary action to refine your systems and processes according to what is discovered by the review process.
- See www.xisec.com



Endless Patches

Spam & Viruses

Migrations & Upgrades

Multiple Vendors

IT Complexity & Cost

Directory Harvests

Phishing Attacks

Downtime

One&Done

One company.
One appliance.
One step closer to easier messaging...

For nearly 10 years, Mirapoint appliances have been the backbone for more than 60 million mailboxes for customers like Ford, STMicroelectronics, RSA Security, British Telecom, China Telecom, University of Georgia and CalPoly.

With powerful spam and virus edge-blocking technology, ultra-reliable email, advanced messaging & mobility features, plus feature-rich collaboration including group calendaring and shared folders, we deliver the complete messaging lifecycle. We know messaging is complex, and Mirapoint is helping to ease the strain on IT by delivering modular, standards-based appliances for email and security.

Whether you need a complete messaging solution or better security protection, Mirapoint delivers.



mirapoint.com/done

Professionalism key to information security



John Colley

CYBER crime knows no borders. We have moved on from the days when security was like a village – everyone knew everyone and knowing who to trust was easy.

Globally, information security staff in corporations and governments are expected to be risk managers, business continuity planners and business enablers. The field is changing and the risks are increasing.

Today, the scope, volume and diversity of work tackled by security professionals means you need international measures of competence and currency, instead of knowledge of individuals. A key component of securing business and public systems in a networked world is that people charged with developing, implementing and maintaining security policies are highly-qualified professionals with validated knowledge and experience.

Information security practitioners need a common benchmark – they must be able to understand each other and have confidence in each other's base level of knowledge and those of their international suppliers. Recognising information security

as a profession will really make a difference.

About 15 per cent of a nation's critical national infrastructure is owned by its government; the rest is privately owned.

The responsibility on corporations to protect these assets is a weighty one, as breaches of any magnitude can quickly affect consumer confidence, stock price and economic stability.

Yet the irony is that information security professionals do not receive much in the way of corporate attention. Our success is silence, and our managers measure our success by our invisibility.

But according to the 2004 *Global Information Security Workforce Study* by (ISC)² and IDC, the number of information security professionals is expected to increase from 1.3 million to 2.1 million by 2008. The study also indicates that for 93 per cent of security recruiters, accreditations are important when making hiring decisions. They afford the employer some degree of comfort or a guarantee as to an individual's competency/knowledge level, and can be critical in terms of legal liability or corporate due diligence.

Accreditation offers the professional a public recognition of ability, and their employer the peace of mind that the holder has made a commitment to maintaining competency and adhering to a strict code of ethics.

Security practice is at the heart of a well-governed organisation, but how do we define it? How do we govern it? How do we ensure its validity?

Mastery of access control, cryptography, telecoms security, internet and operations security are just the beginning. The diversity of knowledge and skill required makes it tough to establish common ground without a good degree of professionalisation.

Although a professional information security body does not exist in the same

**Our success is silence,
and our managers
measure our success
by our invisibility**

sense as for doctors and lawyers, there are many publicly-recognised forms of competence available.

The opportunities are diverse – from undergraduate programmes, to Masters, to job-based professional qualifications. For example, the Certified Information Systems Security Professional accreditation from (ISC)² is ideally suited for experienced information security professionals seeking a long-term management career spanning a broad area of security disciplines. Others are more suited to highly technical roles.

The ultimate sign of a sector that is professionalised is that its people are interchangeable. A company can hire an accountant and expect him to take over the work of another accountant.

Imagine if accountants were not governed by a professional body (and hence subject to professional standards). The businesses they represent would have difficulty attracting investors, and investors would not know how to compare one corporation with another. Similarly, in a few years, businesses without a security policy that is quantifiable and recognisable to outside investors may not form a viable basis for investment.

I recommend that security professionals do the following three things:

- Take responsibility for your own professional behaviour and development
- Stay current – undergo continuous development and training
- Embrace risk – business risk management is increasingly the skill of currency.

Information security professionalisation is a key foundation block in society, and it is only through mentoring, community outreach and understanding what 'professionalisation' entails that we will find a meaningful way forward.

John Colley is chairman of security accreditation body (ISC)². See: www.isc2.org



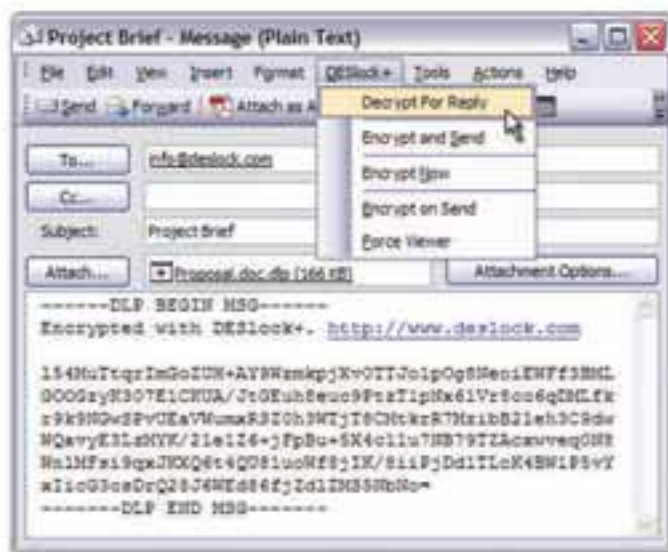
SC Magazine's best
Data Encryption
Product 2004

DESlock⁺

protect your data.

DESlock⁺ provides strong security without the usual complications. With fast, automatic encryption and fuss-free operation, protecting your data couldn't be easier.

With a free licence for personal users and a 60-day free trial to everyone else, now is a good time to protect your data.



**FREE
personal
licence**

**Hardware or
Software keys**
- this new version
of DESlock+ works
with either a
licenced software
key-file or a DESkey
USB Token.



To download a free trial go to www.deslock.com

For more information or to buy direct, call Freephone 0808 100 1233



For Reseller enquiries please visit www.sigmasd.com



26-28 April 2005
London, United Kingdom
www.infosec-eu.org

Visit us at Stand 672



“HASP...was the only solution we would consider...incredibly strong security, so easy to use...what else do you want?”

⊕ TLC Industries is the company behind FlexArcade™, the revolutionary game platform. PowerBall Billiards™, TLC's pool simulation, is quickly becoming an arcade favorite. When software is this hot, it has to be protected by the best. To enable safe, secure delivery to customers, TLC chose HASP, the world's #1 hardware-based software security solution*.

As TLC's Maloka and Liu know, the **HASP Envelope** offers more layers of protection than any software security solution, making it the strongest file wrapping technology available. And the user-friendly interface makes the solution virtually **plug-and-play**. This means TLC can concentrate on developing great games—and leave the security to the security experts.

*IDC Bulletin #31432, 2004.

Visit Aladdin.com/hasp to view HASP white papers, an online demo, or to request a Developer Evaluation Kit.

For information about TLC or PowerBall Billiards, visit tlcind.com.



Pierre Maloka DIRECTOR OF GAME DEVELOPMENT
Mel Liu SOFTWARE TECHNICIAN

Enter our survey and win a powerboat trip

Advantage programme

COMPUTING is offering readers the chance to win a complementary day on an H-25 class powerboat. Take part in our survey with CyberGuard Corporation and you will be entered into a draw for the chance to zoom down the Thames in an H-25 class powerboat, sponsored by VNU and CyberGuard.

CyberGuard Corporation is a global provider of security solutions that protect the business-critical information assets of Global 2000 and government organisations.

The corporation, which has deployed more than 250,000 products worldwide, is conducting the survey ahead of Infosecurity Europe 2005, to investigate some of the hottest security issues facing IT departments, including:

- Is security hampering your end users?
- What is the single most critical information security issue you are looking at today?
- What is the most critical technology used to protect your organisation?
- Is your biggest threat internal or external?

To take part in the survey and enter the draw visit www.infosec.co.uk/cgsurvey.



Diary

IDC Convergence in the Enterprise Network

12 May

Radisson SAS Portman Hotel, London

More and more companies are exploring the benefits of deploying voice, video and data over a single network. Converged networks offer a more cost-effective streamlined communications system as well as benefits such as the ability to enable new applications. This event will give a comprehensive resource to help make informed purchase decisions, with presentations from leading IDC experts and end-user case studies. www.idc.com

IT Works 2005

8-9 June

St James's Park, Newcastle

The north of England's major IT event is expected to attract a record number of visitors this year. Stands will cover accounting, manufacturing and finance software, ecommerce, IT security and network solutions. There will also be a careers sector and a business startup section. www.itworks2005.co.uk

CEO Summit - Leadership secrets of exceptional chief executives

22 June

Chelsea Football Club, London

The CEO Leadership Summit explains what the world's most visionary leaders do differently, how they organise their companies to succeed, and which management practices truly produce exceptional results. Speakers include Intel, ARM, Sage, IBM, Oracle, Microsoft, 3i and ICON Corporate Finance. www.intellectuk.org/databases/calendar/EventDetails.asp?ID=1024

Softworld HR and Payroll

12-13 October

NEC, Birmingham

Europe's leading software event for the HR and payroll community brings together more than 40 suppliers under one roof, offering free vendor case studies. Delegates can learn about key business issues, share knowledge and network with industry peers. www.softworld.co.uk/hrp

Softworld Accounting and Finance

12-13 October

NEC, Birmingham

Europe's leading software event for the accounting and finance profession brings together more than 70 leading software providers. Delegates can attend free vendor case studies and learn about the key business challenges facing industry in the independent

masterclass and briefing sessions. www.softworld.co.uk/af

Forrester Research Financial Services Forum Europe 2005

13-14 October

Queen Elizabeth II Conference Centre, London

Forrester analysts will present up-to-the-minute research on the financial services sector, and European industry executives will share their companies' best practices. Whether you are looking for advice on business, marketing, or IT management challenges, this event will provide the answers to issues facing financial services firms in Europe. www.gigaweb.com/Events

Computing Awards for Excellence

16 November

Battersea Park Arena, London

The Oscars of the IT industry, the Computing Awards is the leading, largest and most prestigious event for IT business leaders. Attended by more than 1,000 of the industry's most influential people, the 13th annual awards ceremony is a superb opportunity to entertain VIPs, business partners and important clients. Book your table or enter online at: www.computing.co.uk/awards

EMERGENCY DATA RECOVERY NO DATA NO CHARGE

Specialists in RAID & Disk Arrays

Any Media,
Any Operating System,
Anytime

On-Site Consultation
Class 100 Clean Room



0800 028 2069
www.cbltech.co.uk

CBL DATA RECOVERY TECHNOLOGIES LIMITED
+44 (0) 207 255 2069 / help@cbltech.co.uk

CREATE YOUR OWN APPLICATIONS FOR POCKET PC New version 3.0 supports Win Mobile 2003 2nd Edition!

Pendulum software enables non-programmers to create sophisticated mobile applications quickly and easily for Pocket PC-powered devices, from PDAs to rugged industrial units. Use Pendulum to develop affordable solutions wherever you need to mobilise key processes and increase productivity and profits. Call: 0870 750 4034

PPC 2000
PPC 2002
WM 2003
CE .NET*



Use Pendulum for:

- ◆ market research
- ◆ fleet management
- ◆ time/expense recording
- ◆ field engineers
- ◆ asset tracking
- ◆ stock control
- ◆ van sales

DOWNLOAD HERE

2 mobile solutions

www.i2mobilesolutions.com/9



THE UK'S FASTEST GROWING IT SUPPORT PARTNER

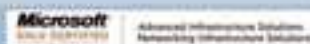
APPROXIMATELY OVER 300 HIGHLY QUALIFIED ENGINEERS IN THE UK
ACCREDITATIONS FROM ALL MAJOR IT COMPANIES INCLUDING DELL, HP,
MICROSOFT. FROM HARDWARE MAINTENANCE TO FULLSCALE IT PROJECTS
WE CAN HELP YOU!!

CALL

020 8353 4616

FOR A CHAT WITH ONE OF OUR FRIENDLY MEMBERS OF STAFF

WE'RE MOVING FORWARD...
LET US TAKE YOU WITH US



The Services Service

Selling IT services and products? Need to get maximum value from a small budget?

Advertise in the *Computing Services* Section. Tailor-made, flexible advertising packages to suit all budgets.

Call John O'Grady on (020) 7316 9373 or email john_o'grady@vnu.co.uk

computing

www.computing.co.uk

Public Sector Tender Invitation?

Call now for special discounts

Hotline (020) 7316 9122 or email classified_services@vnu.co.uk

www.computing.co.uk

computing



Comms/Systems

COMMS & COMPUTERS
bought & sold
also SYSTEMS, PERIPHERALS etc

CISCO
WDP.co. email: wdpco@aol.com
020 8464 9011

Training

SCOLL Methods Ltd
Training & Consultancy

The Best in Business Analysis

Programme & Project Management

Call Euse 0208 421 8960

www.scoll.co.uk

IT Hardware

"Cutting the cost of cutting edge technologies"

DSI
DISTRIBUTOR SYSTEMS INTERNATIONAL LIMITED

SUN HP IBM Apple

New Used Rent Lease

Call 01322 407890
Email cm@dsiweb.co.uk
Web www.dsiweb.co.uk

Sales & Marketing

IT SALES JOBS

Also telecoms & software sales
For the latest roles in sales and sales management

Go to:
www.isopps.com
Simple, quick, effective



Health

vasectomy

the most reliable contraception

- We provide a safe simple service with no fuss
- No GP referral needed
- One visit only

For a free info pack or appointment call

0845 300 0212
www.vasectomy.org.uk



MARIE STOPES INTERNATIONAL

Web Filtering Solutions

It's not this simple to spot illegal surfing

See us at InfoSec Stand 190

It is however, simple to stop

For cost effective, reliable web security. There's no better solution. Just plug in our self contained appliance, and off you go. There's no additional hardware. No additional software. No user licences. No nonsense. It really is that simple.

For more information visit our website: www.blox.com

BLOXX

© 1999-2004 Prodec Dynamics Ltd. Gable House, Kettlewell, Leeds, LS19 4AG. t: 0113 258 6433. e: info@bloxx.com. www.blox.com

IT Recycling

WE BUY-BACK:
SERVERS, PC's, ROUTERS, SWITCHES, LAPTOPS & HUBS

CISCO, DELL, IBM, COMPAQ, 3COM, HP, SUN, MADGE, TOSHIBA

DISCOVERY COMPUTER SERVICES LTD

CALL US ON: 01621 786860

Our services include:

- We assess & collect at no cost to you
- We profit share any residual value with you
- We dispose of, to European standards
- We data wipe for your security

IT HARDWARE RECYCLING SPECIALISTS WITH 11 YEARS EXPERIENCE

Logon to www.BUY-IT-BACK.com for a **FREE** valuation

What's it like in your data centre?



Redundant equipment isn't just a nuisance, it's a hazard. To free valuable space and raise cash, call 0118 903 7905 or visit www.sml-recycling.co.uk

- Asset recovery
- Demanufacturing
- Market valuation
- Secure wiping
- Global remarketing
- Compliant recycling



IT Recycling

UNIX4LESS

DISCOUNTED SUN EQUIPMENT

New and Used Systems, Spares and upgrades at Trade Prices

We buy and sell all major brands of Server, Workstation, Networking and Storage Equipment

Search for Parts online
WWW.UNIX4LESS.COM
Plus find out how you can win an i-Pod

The Unix4Less Group
0114 258 6433

CISCO Equipment

PRODEC

www.prodec.co.uk

WE BUY AND SELL ONLY

CISCO EQUIPMENT

CALL OUR UK OFFICE ON +44 1344 867 777 or email: ctg@prodec.co.uk

If you have surplus Cisco kit or need pricing, contact us now.
Guaranteed overnight delivery
All kit is fully tested and comes with 12 months warranty

Secondary Support

BITESUPPORT

FOR SECONDARY TECHNICAL AND NETWORK SUPPORT

www.bite.ac.uk/bitesupport

020 8552 3071

BCS North Staffordshire Branch

26 April. 8pm. 'Internet filtering.' Medical Institute, Stoke. Visit: www.nstaffs.bcs.org/

BCS East Anglia Branch

26 April. 7.30pm. 'Using leading-edge computer technology for storm watching and forecasting.' St John's Innovation Centre, Cowley Road, Cambridge. Visit: www.bcs.org.uk/branches/eastanglia/

BCS Formal Aspects of Computing Specialist Group

27 April. 2.30pm. Annual meeting. Davidson Building, 5 Southampton Street, London. Visit: www.bcs-facs.org/

BCS Newcastle Branch

27 April. 'Computer haptics.' Visit: www.newcastle.bcs.org/events.htm

BCS Hertfordshire Branch

27 April. 8pm. 'RFID (Radio Frequency Identification).' Steria, Three Cherry Trees Lane, Hemel Hempstead. Visit: www.herts.bcs.org/future.htm

BCS Sussex Branch

27 April. 7pm. 'eSPACE: A Novel Interaction Workspace to Support Sales Transactions.' School of Engineering and IT, University of Sussex, ENGG Stage 1, Falmer, Brighton. Visit: www.pavilion.co.uk/bcs/

BCS Guildford Branch

28 April. 'Electronic Voting.' University of Surrey. Visit: www.bcs.guildford.freemove.co.uk/index.htm

BCS Hampshire Branch

28 April. 6.30pm. 'Professionalism in a Changing Health Environment.' Southampton Institute Room HC024. Visit: www.bcs.org.uk/branches/hampshire/

BCS Upper Canada

4 May. Annual meeting. Visit: <http://bcs-uc.e2bis.net/app/Home.php>

BCS Health Informatics (Northern) Specialist Group

5 May. 'Engaging clinicians in IT.' Weston Conference Centre, UMIST. Visit: <http://www.bcs-nmsg.org.uk/>

BCS Hampshire Branch

5 May. 6.30pm. 'AI Past, Present and Future.' Southampton University (TBC). www.bcs.org.uk/branches/hampshire/

BCS Glasgow Branch

9 May. 6.30pm. 'Freedom of Information Law and its Impact on System Design.' Lord Todd Conference Room, Strathclyde University. Visit: www.bcs.org.uk/branches/glasgow/

BCS Belfast Branch

10 May. 7.30pm. Annual meeting and chairman's lecture. Wellington Park Hotel. Visit: www.infj.ulst.ac.uk/~bcs/index.html

BCS South West Branch

10 May. Annual meeting. 'Broadband in the south west.' Venue TBA. Visit: www.bcssouthwest.org.uk/

BCS West London Branch

10 May. 7.20pm for 7.45pm. 'Working in a War Zone' plus annual meeting. Bridge Hotel, Greenford. Visit: www.bcs.org.uk/branches/wlondon/

BCS supported event

11 May. 'IT enhanced dispute resolution conference.' Leeds University Business School. Visit: www.lgt-seminars.com

BCS Manchester Branch

11 May. 6.15pm. Annual meeting and

'Migrating to Automotive Group Systems - the Bentley Way.' Renold Building, UMIST. Visit: www.bcsmanchester.org.uk

BCS Edinburgh Branch

11 May. 6.15pm. Annual meeting. Royal Pharmaceutical Society, 36 York Place, Edinburgh. Visit: www.edinburgh.bcs.org

BCS Edinburgh Branch

11 May. 6.30pm. 'Mathematics of Search Engines.' The Royal Pharmaceutical Society, 36 York Place, Edinburgh. Visit: www.edinburgh.bcs.org/meets.htm

BCS Wolverhampton Branch

11 May. '@ home with IT.' MC Building, University of Wolverhampton (South Campus). Visit: <http://bcs.scit.wlv.ac.uk/>

BCS supported event

12 May. 'UK China dispute resolution workshop.' DLA Piper Rudnick Gray Cary, Leeds. Visit: www.lgt-seminars.com

Computer Conservation Society

12 May. 2pm. Annual meeting, followed by 'Computing before Computers.' Fellows' Library at the Science Museum. Visit: www.bcs.org.uk/sg/ccs

BCS Advanced Programming Specialist Group

12 May. 6pm. 'Jackson Problem Frames and Software Composition Concerns.' The Davidson Building, 5 Southampton Street, London. Visit: www.bcs.org.uk/siggroup/advprog

BCS Jersey Section

12 May. 6pm. 'Question Time with Senator Frank Walker on government reform. Are we handling change in the best way - what are the alternatives?' Turner Building, Highlands College. Followed

by annual meeting. Visit: www.jersey.bcs.org/currentevents.asp

BCS Leicester Branch

12 May. 6.30pm. Short annual meeting followed by 'Testing Drive-by-wire Applications using a Novel Hardware-in-the-Loop Testbed.' Queens Building, De Montfort University. Visit: www.bcs.org.uk/branches/leicester/

BCS Nottingham & Derby Branch

16 May. Annual meeting. Visit: www.bcs.org.uk/branches/nottmderby/index.htm

BCS Information Risk Management and Audit Specialist Group

17 May. 4pm. 'Computer Audit Basics 3.' London. Visit: www.bcs-irma.org/

BCS Computer Arts Society

17 May. 7pm. 'Progress of the CACHE Project.' System Simulation, Bedford Chambers, The Piazza, Covent Garden, London. Visit: www.computer-arts-society.org/

BCS Kingston and Croydon Branch

17 May. Annual meeting followed by 'A Presentation on IT Law'. Room 102, Town House, Kingston University, Penrhyn Road, Kingston. Visit: www.bcs.org.uk/branches/kingston/index.htm

BCS South Essex Branch

17 May. 8pm. Annual meeting followed by 'Bus Telematics'. Express Holiday Inn, Rayleigh. Visit: <http://bcsseb.tanzarine.net/>

BCS Sussex Branch

18 May. 7pm. 'BCS Information Evening and annual meeting.' School of Engineering and IT, University of Sussex, ENGG Stage 1, Falmer, Brighton. Visit:

www.pavilion.co.uk/bcs/

BCS Berkshire Branch

18 May. 7.30pm. 'Enigma and Colossus.' Palmer Building, University of Reading. Visit: <http://berkshire.bcs.org.uk/>

BCS Coventry Branch

18 May. Annual meeting. AS324 at Coventry University. Visit: <http://coventry.bcs.org/index.htm>

BCS Cheltenham and Gloucester Branch

18 May. 7.30pm. Distinguished Guest Lecture: 'Towards the Verifying Compiler'. University of Gloucestershire. Visit: www.bcs.org.uk/chelt/

BCS Chester and North Wales Branch

18 May. 7pm. Annual meeting followed by 'Food technologies'. Beaufort Palace Hotel, Mold. Visit: www.bcs.org/BCS/Groups/BCSBranches/AtoD/chesternorthwales.htm

BCS Financial Services Specialist Group

18 May. 6.30pm. 'Grid computing for financial services.' Nabarro Nathanson, Lacon House, 84 Theobalds Road, Holborn, London. Visit: www.bcsfinsig.org/

BCS Kingston and Croydon Branch

19 May. 7pm. Topic to be announced. BT Delta Point, 35 Wellesley Road, West Croydon. Visit: www.bcs.org.uk/branches/kingston/index.htm

BCS London Central Branch

19 May. 6pm. Annual meeting and 'The Wireless City'. Visit: www.londoncentral.bcs.org

BCS Oxfordshire Branch

19 May. 7.30pm. 'Mandatory Professional

CELTIS



Delivery Focused Solutions

Business Intelligence - Your most valuable corporate asset !

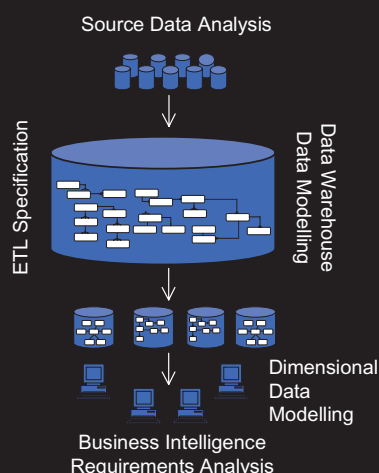
It does not appear on the balance sheet but today's most competitive companies are experiencing its worth in increasing their market share, reducing costs and mitigating risks.

With our **Business Intelligence Solutions**, we package our know-how from project experiences with industry best practice to equip you with the skills to capitalize on Business Intelligence.

Our consultants and partners are leading experts in data warehousing and relational database technologies. They work hands-on in large projects while staying abreast of new technologies. They will train your team and work alongside them to deliver your Business Intelligence solutions.

Invest with us and release the power of your most valuable asset.

Find out more and book our training courses on-line at www.celtis.ch



UK & Ireland: Edinburgh Tel: + 44 131 247 67 77
Europe: Zug, Switzerland Tel: + 41 41 710 34 04
Email: info@celtis.ch
Website: www.celtis.ch

Ensure your training programme reaches key IT professionals

Advertise in Computing's Training section

- Reach 115,641 IT professionals
- Dedicated training section
- Appear weekly for rapid response
- Tailor-made, flexible advertising packages to suit all budgets

Why Computing?

Computing (BPA Total Average Qualified Circulation 115,641) is read each week by IT professionals across all industry sectors.

Which industry?

Whichever industry your training package is suited to, the Computing Training section can help you reach the people you need.

Who will I reach?

The Computing Training section is a well-used area of the magazine, which attracts a high number of readers. 26,051 readers are personally responsible for the purchase of training courses for their company; the Training section ensures you can reach these important potential clients.

For further information on the type of IT professionals you can reach through the Computing Training section, or to discuss your advertising needs, contact:

John O'Grady (020) 7316 9373
 or email John_O'Grady@vnu.co.uk

computing 

www.computing.co.uk

Recognition in the IT Industry – Future or Fiction? Computing Laboratory, Wolfson Building, Parks Road, Oxford. Visit: www.oxon.bcs.org

BCS South Yorkshire Branch

19 May. 'Oracle on Databases' plus annual meeting. Visit: www.shef.ac.uk/~bcs/

BCS Hertfordshire Branch

23 May. Annual meeting and 'Renewable Energy'. Steria, Hemel Hempstead. Visit: www.herts.bcs.org

BCS Birmingham Branch

23 May. 6pm for 6.30pm. Annual meeting and 'Motivation from the Inside Out'. Tally Ho Sports & Conference Centre, Pershore Road, Birmingham. Email: pcrcouch@bcs.org.uk or visit: <http://birmingham.bcs.org/agm.htm>

BCS Cheltenham and Gloucester Branch

24 May. 7pm. Annual meeting followed by 'Engine Control in FI Cars'. University of Gloucestershire. Visit: www.bcs.org.uk/chelt/

BCS Project Management Specialist Group

24 May. Annual meeting followed by 'Web Services as a Business Enabler'. Reading University. Visit: www.proms-g.bcs.org

BCS Dorset Branch

24 May. 7pm. Annual meeting followed by 'Microsoft .Net'. Quality Hotel, 47 Gervis Road, Bournemouth. Visit: www.bcs.org/branches/dorset

The full BCS diary is available at www.bcs.org.uk/events. It is advisable to confirm venue and date with the organisers before attending an event. Diary Editor: Brian Runciman (01793) 417474, brunciman@hq.bcs.org.uk

Information for the courses page should follow our usual format – course category, title of course, venue, date, price, organising company/body, telephone number. Unless the information is presented in this way, we regret that it cannot be included. For details on how your courses can be included, contact John O'Grady on (020) 7316 9373

Software Testing

ISEB Foundation Certificate in Software Testing in London on 25–27 April, price £800, organised by QBIT (01702) 290558 www.qbit.co.uk

ISEB Foundation Certificate in Software Testing in Manchester on 18–20 May, price £800, organised by QBIT (01702) 290558 www.qbit.co.uk

ISEB Foundation Certificate in Software Testing in Southampton on 20–22 June, price £800, organised by QBIT (01702) 290558 www.qbit.co.uk

ISEB Foundation Certificate in Software Testing in Bristol on 22–24 June, price £800, organised by QBIT (01702) 290558 www.qbit.co.uk

ISEB Foundation Certificate in Software Testing in Birmingham on 5–7 September, price £800, organised by QBIT (01702) 290558 www.qbit.co.uk

ISEB Foundation Certificate in Software Testing, various dates and venues available, discounted price £760, organised by e-testing (020) 8387 1701 www.etesting.com

Security

Information Security, Computers & the Law in Surrey on 18–20 May, price £1,295, organised by Insight Consulting (01932) 236894 www.insight.co.uk/training

Developing a Successful Security Awareness Programme in Surrey on 24–25 May, price £995, organised by Insight Consulting (01932) 236894 www.insight.co.uk/training

Ethical Hacking Workshop in Surrey on 8–10 June, price £1,295, organised by Insight Consulting (01932) 236894 www.insight.co.uk/training

Security Risk Management Using CRAMM in Surrey on 15–17 June, price £1,195, organised by Insight Consulting (01932) 236894 www.insight.co.uk/training

ISEB Certificate in Information Security Management Principles in Surrey on 20–24 June, five-day course with exam, price £1,750, organised by Insight Consulting (01932) 236894 www.insight.co.uk/training

Securing Switches and Routers in Surrey on 27–29 June, price £1,295, organised by Insight Consulting (01932) 236894 www.insight.co.uk/training

Fundamentals of Cryptography and Key Management Trust in Gloucestershire, various dates available, price from £600, organised by Kryptosec (01453) 860537

Fundamentals of Data Security and Electronic Trust in Gloucestershire, various dates available, price from £600. Organised by Kryptosec (01453) 860537

Physical Security, Terrorism, BS7799, BCM, PAS56, Risk, M_o_R, DPA, FoI and IT Courses at your office, you choose the date. Fees from £600 per course/team for 10 staff. To book contact Assetz Training training@assetz.com (0845) 230 0313. Visit: www.assetz.net

Support

Implementing and Supporting Microsoft Windows XP Professional (MS2272), various dates and locations available, price £1,395 (special offer £995), organised by C2U Solutions (08456) 442266 pr@c2usolutions.co.uk

Managing and Maintaining a Microsoft Windows Server 2003 Environment (MS2273), various dates and locations available, price £1,395 (special offer £995), organised by C2U Solutions (08456) 442266 pr@c2usolutions.co.uk

Implementing, Managing and Maintaining Windows Server 2003 Network Infrastructure (MS2277), various dates and locations available, price £1,399 (special offer £995), organised by C2U Solutions (08456) 442266 pr@c2usolutions.co.uk

Microsoft MCSA, four-week course covering any Microsoft + CompTIA training. Various dates available, price £4,495 (special offer £3,495), organised by C2U Solutions (08456) 442266 pr@c2usolutions.co.uk

Networking

Cisco CCNA Weekend Bootcamp in Milton Keynes on 14–15 May. Gain hands-on experience configuring Cisco routers and switches. Price £297 + VAT, including all materials and post-course

support, organised by Networks Incorporated (01908) 263335. Visit: www.networksinc.co.uk to access your free How to Pass Your CCNA ebook

DP Manager

PRINCE2 Practitioner in London on 9–12/13 May and 6–9/10 June, four-day course with optional exam on fifth day, price £995 + VAT, organised by Inspirandum (01305) 822799 info@inspirandum.com

Database Design

Oracle 9i Database in Surrey on 5 September, price £500, organised by Nescot College (020) 8394 3051

Author Training

Author Training for Software Developers in Sheffield on 7 June, price £345, organised by TechScribe (0114) 266 6933 www.techscribe.co.uk/techw/author-training.htm

Audit/Asset management

Centennial Discovery in Hampshire on 19 May. One-day course for Centennial Discovery Standard and Web Edition, price £200 + VAT. Course covers upgrade, deployment, report generation, licence reconciliation and configuration. Contact training@ensignuk.com (01264) 336336 or visit: www.ensignuk.com

Inventory (previously LANauditor) in Hampshire. One-day course for inventory, various dates available, price £200 + VAT. Course covers upgrade, deployment, report generation, licence reconciliation and configuration. Contact: training@ensignuk.com (01264) 336336 or visit: www.ensignuk.com



ARE YOU IN THE PICTURE?

Develop your skills with our **Free PHP Seminar**
20 April 2005 6pm - 8pm

More Practical Bootcamps available:

C Programming	4 - 8 April (Full Day)
MCSA/MCSE	4 - 8 April (Full Day)
CW PERL	6 - 8 April (Evening Classes)
PHP Programming	11 - 15 April (Full Day)
CCNP - CCDP BOMEN	11 - 15 April (Full Day)
C++	18 - 22 April (Full Day)
MCSA/MCSE	18 - 22 April (Full Day)
CCNA/CCDA	25 - 29 April (Full Day)
ADVANCED C	25 - 29 April (Full Day)
MCSE UPGRADE	25 - 29 April (Full Day)

Further your skills - BOOK NOW
The EXMPT Business School
Call us: (+44) 0207 456 9067
Or visit: www.exmpt.com
E-mail us: bookcamp@exmpt.com
Visit us: 17-19 Pudding Lane, London E1 1BQ

How to write a user guide

Learn techniques for producing effective user documentation on our one-day course. See www.techscribe.co.uk/techw/author-training.htm

TechScribe, 24 Spooner Road, Sheffield S10 5BN
0114 266 6933



UNIVERSITY OF WESTMINSTER

Computing Short Courses in Central London - 2005
Quality Tutor-led Instruction, Training and Hands-on practical exercises for:

- The PC (for beginners)
- Microsoft Office applications
- Operating Systems (Windows, Unix) and Peripheral Devices (PC building and maintenance)
- Web Design and Interactive Multimedia (Shockwave, Dreamweaver, Flash, Illustrator, Photoshop)
- Introduction to Programming (C for beginners)
- Advanced C
- C++
- Java Technologies
- The .Net framework (VB.net, C#.net, ASP.net)
- Systems Analysis and Database Design (Access, Oracle)
- Networking (Server 2000/2003, Novell Netware, Cisco Routers)
- 2D and 3D Design Visualisation
- Computer Games and Graphics Programming

Summer School 2005: 1 June - 15 July

For more details please contact
Admissions and Marketing Office, University of Westminster,
115 New Cavendish Street, London W1W 6UW
Tel: +44 (0)20 7911 5883 Email: cav-admissions@wmin.ac.uk
www.wmin.ac.uk/cavsc

Educating for professional life

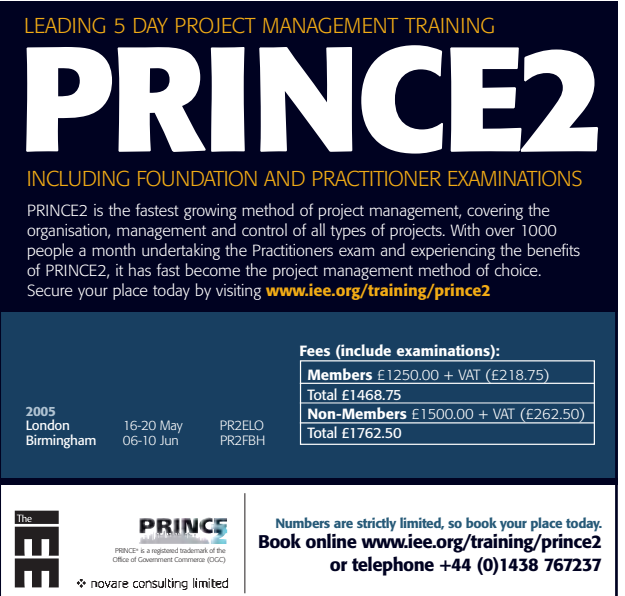


ISEB FOUNDATION
CERTIFICATE IN SOFTWARE TESTING

0208 387 1773
www.etesting.com

Bookings >>

- Courses across the UK
- 90% Pass Rate
- Free Re-Sit if required
- **£760** per delegate



LEADING 5 DAY PROJECT MANAGEMENT TRAINING

PRINCE2

INCLUDING FOUNDATION AND PRACTITIONER EXAMINATIONS

PRINCE2 is the fastest growing method of project management, covering the organisation, management and control of all types of projects. With over 1000 people a month undertaking the Practitioners exam and experiencing the benefits of PRINCE2, it has fast become the project management method of choice. Secure your place today by visiting www.iee.org/training/prince2

Fees (include examinations):

Members	£1250.00 + VAT (£218.75)
Total	£1468.75
Non-Members	£1500.00 + VAT (£262.50)
Total	£1762.50

2005 London Birmingham 16-20 May 06-10 Jun PR2ELO PR2FBH

The PRINCE2
PRINCE2 is a registered trademark of the Office of Government Commerce (OGC)

Numbers are strictly limited, so book your place today.
Book online www.iee.org/training/prince2 or telephone +44 (0)1438 767237

novare consulting limited



ISEB Practitioner Certificate in Software Testing with the UK's leaders

QBIT LIMITED

25,000+ testers trained
www.qbit.co.uk

- 4 modules can be taken in any order and over any time period
- superb learning, revision and practice materials
- expert exam coaching
- built on QBIT's experience



Smart trainers

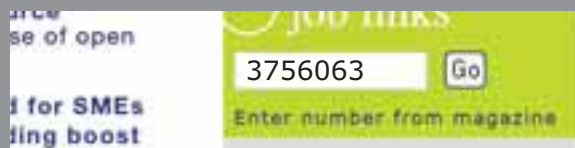
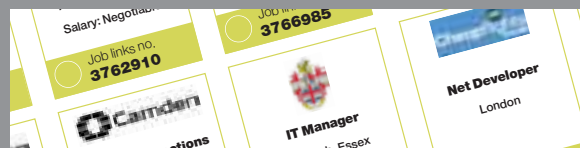
Selling an IT or management skills training package? Advertise in the *Computing Training* Section. Tailor-made, flexible advertising packages to suit all budgets.

For more details call **John O'Grady** on (020) 7316 9373 or email john_o'grady@vnu.co.uk www.computing.co.uk

computing



Job links: How it works



1 Choose the opportunities you are interested in below and note the job links number

2 Go to computing.co.uk, enter the job links number in the job links box and click 'Go'

3 View the details of the position and then upload your CV



Software Developer

Herts
£20 - £30

job links no.
1404001



Product Configuration

Herts
£15 - £20k

job links no.
1404002



Technical Consultants

Herts
£25 - £35k

job links no.
1404003



Senior Developer

Cheshire
£Highly Competitive

job links no.
1404004



Applications Engineers

Basingstoke
££25 - £50 k

job links no.
1404005



Applications Analyst

Basingstoke
£25 - £50k

job links no.
1404006



Application Owners

Basingstoke

job links no.
1404007



Hosting Contracts Manager

Basingstoke
£35 - £55k

job links no.
1404008



Hosting Contracts Manager

Basingstoke
£65 - £80k

job links no.
1404009



Service Governance Manager

Basingstoke
£65 - £80k

job links no.
1404010



Architecture Teams Developer

Basingstoke
£25 - £40k

job links no.
1404011



Applications Manager

Basingstoke
Up to £65k

job links no.
1404012



Service Level Manager

Basingstoke
£45 - £55k

job links no.
1404013



Architecture Development Team Leader

Basingstoke
£40 - £45k

job links no.
1404014



Training Services Manager

Basingstoke
Up to £55k

job links no.
1404015



Infrastructure Programme Manager

Basingstoke
Up to £70k

job links no.
1404016



Hosting and Data Services Manager

Basingstoke
£55 - £75k

job links no.
1404017



Systems Analyst/Software Developer

London
£32,686 - £38,206 pa

job links no.
1404018



Website Developer

£Excellent

job links no.
1404019



Systems and Web Integration Developer

Chorley
£22,512 - £24,000

job links no.
1404020

We're outstanding. Are you?



GE imagination at work

Yes it's a bold statement, but then we're a bold company. With the Financial Times awarding us the accolade of "The Worlds Most Respected Company" for six years in a row it would appear to be a claim with some substance.

Challenge is a way of life here. Stimulating, demanding and rewarding in equal measure. You will find yourself amongst a highly impressive peer group and if you think you're good, and you know you want to get better, this might be just the place for you.

All the following roles are based within the IS function of our Commercial Financial business; one of our fastest growing and most profitable divisions. All roles will involve a significant degree of European travel.

Project/Programme Managers – Ref: IT11083C

Circa £70,000-£100,000 + excellent benefits

Bristol or London

The Opportunity

- Variety of ongoing projects and programmes ranging from 5M-30M Euros in size.
- All projects European in scope.
- Considerable short term travel involved in all roles.
- Will be expected to manage third party and in-house teams to achieve objectives.
- Involved at all stages from development through to in-country implementations and local customisations.

The Credentials

- Outstanding and demonstrable record of success in achieving project objectives.
- Experience of pan European implementations.
- Comfortable working with in-house and third party resource.
- Able to effectively manage multiple stakeholders.
- Either experience of ERP systems (preferably Oracle) or Web based technologies.
- Ambition. Keen to use success in this role as a career stepping stone within GE.

Head of European Service Support – Ref: IT11051C

Circa £80,000-£100,000 + excellent benefits

Flexible locations within UK & Continental Europe

The Opportunity

- Enabling the transition to a global technology services capability with centralised infrastructure and outsourced service provision.
- Service support for a user base of c.6000 across 17 Europe countries, embracing 1st/2nd line support, networking and server environments.
- Standardising service levels and formalising customer delivery under ITIL framework.
- Management and selection of outsourced partners and their integration into the global technology organisation.

The Credentials

- Proven track record of delivering IS services in large, multinational organisations – ideally within a centralised delivery capability.
- Experience of managing outsourced service provision and negotiating with top tier IT Service organisations.
- Relentless drive for service improvement with sound experience of working to industry best practice – ITIL exposure is essential.
- Highly credible and persuasive with boundless energy and enthusiasm and ability to thrive in an ambitious, results orientated environment.

European Network Services Manager – Ref: IT11050C

Circa £60,000-£70,000 + excellent benefits

Flexible locations within UK & Continental Europe

The Opportunity

- Key position in new centralised technology service capability, accountable for delivery of all Voice & Data services to 17 European countries.
- Ownership of 24/7 operations for all network devices & communications that include WAN, LAN, PABX and Mobile.
- Evolving organisational processes and service levels to meet business objectives, achieving high levels of customer satisfaction.
- Managing and negotiating with external suppliers, ensuring the seamless integration of internal and external service lines.

The Credentials

- Track record of delivering international Voice & Data services in large, multinational organisations – ideally within a centralised delivery capability.
- Experience of helping to select and manage outsourced service providers.
- Sound exposure to negotiating SLA's and experience of working to industry best practice – ITIL exposure is desirable.
- Bright and enthusiastic with strong customer orientation and endless drive for cost effective service improvement.

Oracle Application Consultants – Ref: IT11084C

Circa £50,000 + excellent benefits

Bristol or London

The Opportunity

- Play a key role in the European rollout of a business critical project.
- Responsible for analysing business requirements and working with technical design teams to develop appropriate solutions.
- Working alongside users at testing and acceptance and helping to ensure functionality is understood and utilisation is maximised.
- Initially based in Bristol with subsequent extensive European travel.

The Credentials

- Strong client engagement skills. Able to effectively bridge business and technology through demonstrating empathy and understanding. Good cultural sensitivity.
- Deep knowledge of Oracle applications.
- Sound business analysis experience.
- Strong team player. Project oriented and results focused.

To apply please visit www.harveynash.com, email itexecutive@harveynash.com or write to Harvey Nash plc, 13 Bruton Street, London W1J 6QA, quoting the appropriate reference number. A current CV and salary details should be included. For more information please call Sam Gordon on +44 (0)20 7333 0033. Harvey Nash is a global recruitment consultancy.

**HARVEY
NASH**



We help to stop the Netherlands from flooding.
What have you been up to?



Our software systems help to keep the Dutch countryside dry. At the same time, we have software in orbit around Saturn, bring 21st century technology to the British legal system and enable the transmission of \$3 trillion round the planet every day. We get the best challenges because we have the best IT brains providing brilliant solutions. If you get that sinking feeling in your current IT job but know you're capable of better, visit our recruitment website.

For IT jobs that really matter go to www.logicacmg.com/uk/careers

LogicaCMG is a major international force in IT services and wireless telecoms. It provides management and IT consultancy, systems integration and outsourcing services to clients across diverse markets including telecoms, financial services, energy and utilities, industry, distribution and transport and the public sector.

SOLUTIONS THAT MATTER

TEAM LING - LIVE, informative, Non-cost and genuine!



When you're a global leader you don't need to shout.

Technical Architects

The facts speak for themselves. We've been helping clients across the globe to profit from change in the IT market for nearly half a century. We're currently working on some of the world's largest IT projects; in fact, four of them are in excess of \$1billion. We know serious talent when we see it, and we're not afraid to put up serious rewards in return.

To apply, please forward your CV to csc2c@alexmann.com or telephone Katy Harrison on 0870 3513834.





“13TH FASTEST GROWING COMPANY” FORTUNE MAGAZINE

WEB SECURITY CAREERS AT WEBSense

Websense, Inc. (NASDAQ: WBSN), a global leader in web filtering and a premier provider of web security software, enabling organisations to optimise employee use of computing resources and mitigate new threats related to internet use including instant messaging, peer-to-peer, and spyware. Websense products enhance productivity and security, optimise the use of IT resources and mitigates legal liability for our customers. Preferred by Fortune 500 companies, Websense serves more than 23,600 customers worldwide, representing 18.5 million seats.

In addition to being named the 13th Fastest Growing Company by FORTUNE Magazine, Websense was recently awarded PC Magazine's Editors' Choice, listed on Forbes Magazine's 2004 Top 25 Technology Companies and awarded 2004 Market Leader in Global Web Filtering by Frost & Sullivan.

We currently have the following job opportunities based in our Chertsey, Surrey office:

SALES

- **Inside Sales** (Entry Level)
- **Inside Sales** (New Business)
- **Inside Sales** (Bi-Lingual)
- **Account Manager** (New Business)
- **Territory Manager, Eastern Europe**

TECHNICAL

- **Technical Support Consultant** (Bi-Lingual)
- **Pre Sales Engineer**
- **Field Sales Engineer**

MARKETING

- **Marketing Manager, EMEA**
- **Sr. Marketing Specialist, Northern Europe**

For more information and to see a complete list of our openings, visit www.websense.com. Please email your CV to internationaljobs@websense.com, quoting CW 005 followed by the job position you would like to be considered for.

In return for your skill and commitment, we offer excellent prospects, competitive salary and a comprehensive benefits package. Websense is committed to being an equal opportunities employer.



www.websense.com

ARCHITECTS

Make a notable difference to some of the most challenging green-field projects currently available ...

Infrastructure Architects

Choice of base location ~ £45k to £65k + car + bonus

This is an excellent opportunity for Technical Architects with particular expertise in infrastructure design to gain true recognition for their expertise.

Projects are large and complex and will see you working on strategy through conceptual designs to logical and physical design. You will be working closely with clients to capture requirements, conduct design reviews and approve design deliverables.

Your remit will include product selection and responsibility for ensuring integration with existing technology. Successful candidates will have an in-depth knowledge of network architectures, communications protocols, storage and security. There is massive scope to develop your career either technically or into management - the choice is yours!

These roles are not for the faint-hearted, we seek individuals who are already recognised and respected by their peers as 'experts' in their field - technically excellent but proactive and pragmatic too.

The motivation to move will simply be challenge - you will find yourself working on bigger and better programmes with huge scope for personal development and with the support from senior management to ensure it happens.

To hear more, please call Anna Lewis on 01923 224481.

Alternatively, please Email your CV to her at anna_l@informatiq.co.uk and she will contact you at a time convenient to you.

Lead Solution Architects

Positions UK Wide ~ to £six figure package & benefits

These are truly exceptional opportunities – the expression 'industry leading' genuinely describes these roles.

You will join an elite group of professionals within my client's Technology Integration team who focus 100% on the design and delivery of 'overall solution architectures' for some of the most challenging, complex and high profile systems integration engagements in the UK.

These roles are for individuals who are highly respected by both clients and their peer group and have spent at least the last 3 years defining, designing and implementing enterprise wide solution architectures on programmes in excess of £10m – although engagements are likely to be in the many £10's of millions

A deep understanding of Application and Data Architectures, with a knowledge of platform integration technologies (J2EE & .NET), form the basis for your innovative design and delivery.

These are not 'infrastructure' or 'single package' solution roles but ones that will see you take ownership of every aspect for the design of a highly complex, multi component, distributed n-tier environment.

For an informal discussion, please call Dan McCarthy on 01923 224481.

Alternatively, please Email him your CV to dan_m@informatiq.co.uk and he will contact you at a time convenient to you.

Informatiq Consulting Ltd., Gresham House,
53 Clarendon Road, Watford, WD17 1FT.
Tel: (01923) 224481 Fax: (01923) 224493
Email: permanent@informatiq.co.uk
Web: www.informatiq.co.uk

Informatiq
CONSULTING LTD

**LET'S ASSUME
THIS IS THE
FAST MOVING
WORLD OF
TELECOMS**

**AND THIS
IS THE
LEADING
COMPANY
WITHIN IT**

**NOTICE
THERE'S
SPACE
HERE FOR
YOU?**

Think you know Ericsson? You've only seen the surface.

We're the world's leading supplier of telecommunications systems. Our customers include the planet's ten largest mobile operators, in fact 40% of all mobile calls use our technology. We manage networks serving 35 million subscribers worldwide. We design, integrate and manage service layer solutions for more than 350 operators in 110 countries.

The world's known our technology for over a century. They will see us for our people. People whose expertise, intelligence and credibility will take our customers – and us – forward. We're now investing massively in two critical talent areas across the UK and Ireland: Network and Technology Consulting and Systems Integration. These businesses solve problems for the longest-established fixed operators through to newly licensed mobile operators. You will be helping to create some of the most powerful communications companies on the planet.

Network and Technology Consulting

As part of the team, you'll be providing advisory services that focus on business growth, processes and competence development.

Senior Core Network Consultants (Circuit Switch, IP and Data Backbone)
Senior Strategy Consultants • Senior Radio Network Consultants
Senior Transport Consultants

Systems Integration

Join this section, and you'll be working across and beyond the technology, creating and implementing true end-to-end solutions. Why just look at a small part when the true customer need is so much more.

Customer Programme Managers • Customer Project Managers
Solution Architects (Service Layer, OSS and IP Networks)
Configuration Managers • Infrastructure Managers
Solution Integrators (Service Layer and OSS) • Test Project Leaders

For more information visit www.joinericsson.co.uk

ERICSSON 
TAKING YOU FORWARD



Start a new career...

...as a Network Specialist or a Software Developer.

No Biztalk or .NET Experience Necessary.

Up to £26,000p.a.

Due to the demand from our recruitment division, 27 urgent MS.NET and Biztalk 2004 Networking/Development positions are now available. No Biztalk or .NET experience necessary.

With fluent English and with around 6 months' commercial/ internship experience, these are excellent junior and first time opportunities to enter the IT industry at up to £26,000p.a.

Clients include city and major software companies, with Networking/Development positions open until mid May. Around 6 months' experience is required through our working internship program, or else an equivalent commercial background.

Places are strictly by selection, and internships partially sponsored. Candidates with no industry experience will be considered for junior positions only. Industry experience may be required for senior positions.

These unique, limited positions are available in LONDON, CROYDON, FAREHAM, BRISTOL AND BIRMINGHAM.

No agencies please. Before mid May 2005.

Delivering IT Services for 27 years.

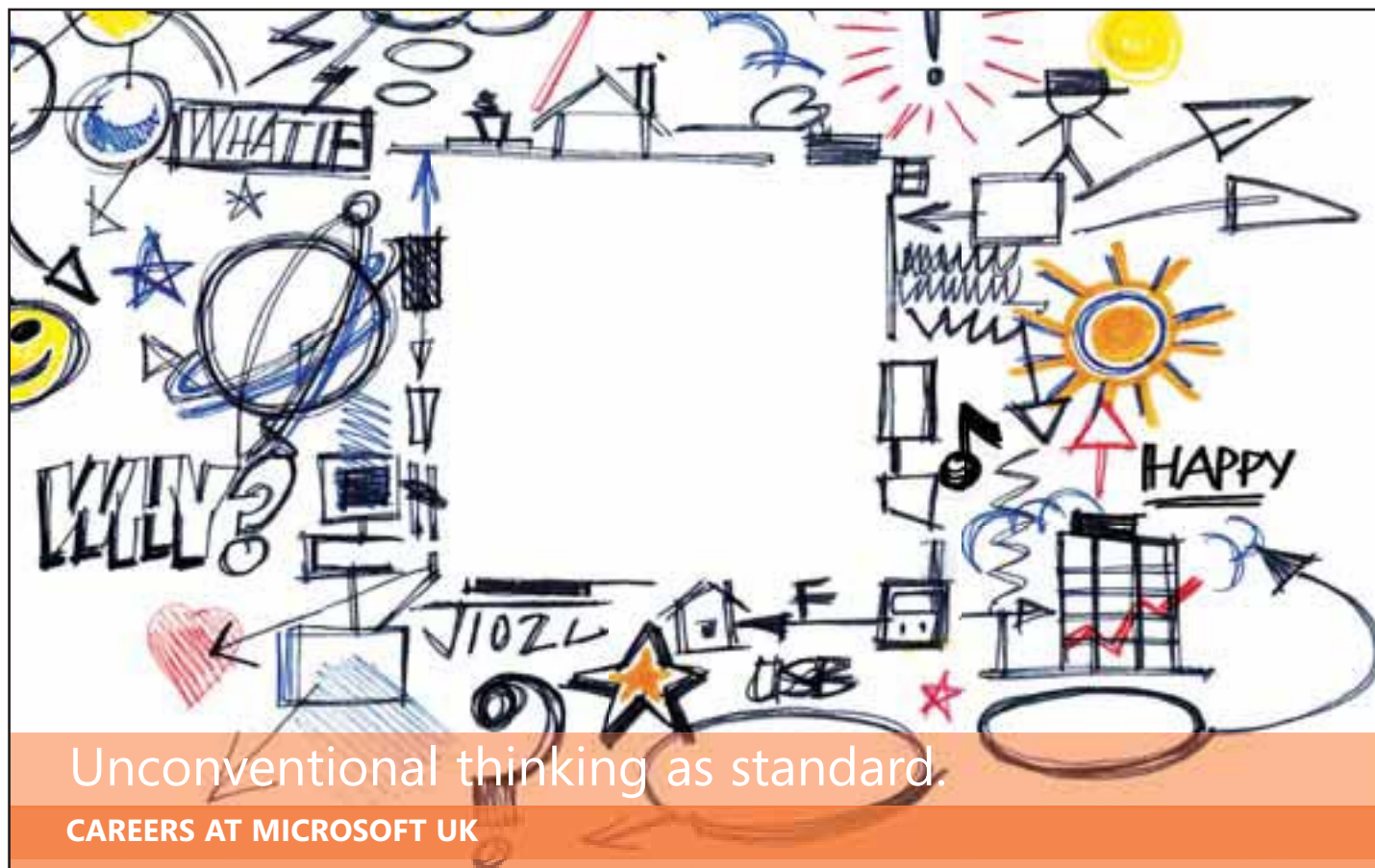


ICS (LONDON) LTD

For more information please contact us at:
www.icslondon.com
0845 408 2508

Calls charged at local rate.
Ref: C2A





Microsoft
Your potential. Our passion.™

Unconventional thinking as standard.

CAREERS AT MICROSOFT UK

We're all familiar with the phrase 'thinking outside the box'. But how many of us really get the opportunity to do it? Fortunately you can change that by joining Microsoft. We believe in ideas, free thinking and challenging the status quo. It creates greater opportunities for our employees and our customers and has shaped a culture that encourages our people to be the best they can be. So whether you're a technology, sales or marketing specialist, there's no need to feel boxed in. Find out more at www.microsoft.com/uk/careers If you see a match and want to apply, please quote ref: 711123G1.

©2004 Microsoft Corporation. All rights reserved. Microsoft, the Microsoft logo and 'Your Potential. Our Passion' are registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

There's a place here for you

**Technology consulting opportunities.
Competitive Salary + Bonus + Benefits. UK Wide.**

Diagonal Consulting, part of the Morse Group, is a leading business and technology consultancy, helping clients to solve complex business and IT problems. We design, build, deliver and support business-critical solutions that help clients improve performance. We have offices in the UK, Asia, USA, Ireland, France, Germany, Spain and South Africa.

Over the last 20 years, we have worked with some of the world's leading organisations across many different sectors and continents. Our track record in delivering resilient and pragmatic solutions is unrivalled thanks to the quality of our consultants who understand both technology and the business change environment.

The industry awards we win year after year are an indication of the high level of service we provide. To maintain this level of quality we need proven consultants who can deliver and support SAP solutions to ensure the continued growth of our core SAP team.



SAP Application Consultants

Requirements

- Experience of Finance & Controlling, Materials Management, Warehouse Management, Production Planning or HR/Payroll
- Minimum 3 years of SAP implementation experience
- Minimum 2 full life cycle implementations

SAP Support Consultants

Requirements

- At least 3 years SAP configuration experience in FI-CO, SD, HR, PP, PM or APO
- Knowledge in other specialist areas relating to SAP (ABAP, EDI, MM, PS) will be a distinct advantage
- UK locations in Surrey and Yorkshire

SAP BASIS Support Consultants

Requirements

- SAP Certified Technical Consultant with at least 3 years experience as a SAP BASIS administrator
- Knowledge of UNIX, Windows NT/2000, Oracle and SQL Server essential
- Experience in mySAP installations, upgrades and support packages

If you want to take your place in an exceptional team please submit your CV stating whether you're seeking a support or delivery position to recruitment@diagonal-consulting.com by Friday 27th May 2005.

All enquiries will be dealt with by Strand Recruitment – NO AGENCIES PLEASE (only short listed candidates will be notified)

The Morse Group
A global Consulting, Technology and Support organisation
enabling change, delivering success and founded on trust.
www.morse.com

DIAGONAL

Clear Thinkers



Clear Technology was founded on a single minded purpose, "to help our clients significantly improve their financial performance, by enabling computers to do tasks that still consume the efforts of large numbers of valuable people".

This work has led us to a unique understanding of the complex nature of people intensive back office operations. We have people with deep experience in complex work automation, a tried & tested, rapid delivery methodology & our recently patented, breakthrough software, all working together to deliver radical improvements to the quality of our clients' business processes.

We reduce the risk of this business change by building systems that actually model the existing best practices of our clients' best staff. This unique, low risk approach unlocks large & sustainable benefits from increased productivity, zero process errors, reduced training time, while delivering enhanced customer satisfaction & retention.

Clear Technology offers a fast paced & challenging environment. This is an opportunity to develop your career & positively impact the success of major accounts, while working with a very exciting product .



**Sales Executives
Presales Consultants
Solution Architects
Business & Process Analysts
Integration Architects**

We are looking for additional, clear thinking team members in the United Kingdom to work with our new and existing blue-chip accounts. We provide a range of training & a competitive package with excellent benefits.

Please review the job descriptions posted at www.clear-technology.co.uk then contact Jean Kilner on 0207 025 8080 or email your CV to UKcareers@clear-technology.com.

NEW HORIZONS IN JERSEY, CHANNEL ISLANDS FOR .NET DEVELOPERS

We are one of the first offshore banks to offer Internet banking to clients worldwide, and are expanding our leadership role in technology and e-commerce. We require a number of highly motivated I.T. specialists to join our expanding team to work on a variety of exciting projects, on the island of Jersey, on a permanent basis.

Our SOA infrastructure incorporates technologies such as the .NET Framework, Web Services, Websphere, J2EE, SQL Server, BizTalk etc.

Candidates should have at least 4+ years development experience with at least 2+ years working on .NET projects using C#. Extensive experience with SQL Server is essential.

Exposure to Microsoft platforms such as Biztalk would be an advantage.

Essential to this position are excellent interpersonal skills together with excellent communication skills (written and verbal), as is the ability to confidently engage with senior business and I.T. personnel within our organisation.

The role will involve the following:

- Running requirement gathering workshops, obtaining approvals, finalising design
- Designing, developing and supporting .NET solutions
- Technical project management

Applications will be considered from the following individuals who:

- Are eligible to work in Jersey
- Are from member states of the European Union
- Have indefinite leave to remain in the U.K.

An excellent career path with a competitive salary and full range of benefits will be offered to applicants who match the above skills criteria. If you are interested in joining a professional and friendly environment that supports your personal development, please apply directly via email to:-

Claire Small, HR Consultant

Royal Bank of Canada (Channel Islands) Limited
PO Box 194, 19 – 21 Broad Street,
St Helier, Jersey JE4 8RR

Telephone: 01534 283143

E-mail: claire.small@rbc.com

Website: rbcprivatebanking.com

Closing Date for applications: 10th May 2005

All applications will be treated in the strictest confidence.

™ Registered trade mark of Royal Bank of Canada, used under licence.



**Royal Bank
of Canada**

GLOBAL PRIVATE BANKING

Pensions Management

Pensions Systems Analysts

Darlington

To £35,000 + benefits

Pensions Management are a major provider of pensions administration services to the pensions industry.

We use the Profund Classic system, automated to an advanced level and fully integrated with other computer systems, to administer both defined benefit and defined contribution pension schemes.

As part of our future business development plan, we are recruiting experienced technical Pensions Systems Analysts, from junior through to senior levels. Both temporary and permanent contracts are available.

Preferably, although not essential as training will be provided, you need good practical experience of the Profund Classic pensions administration system, including Propay. Expertise in one or more of the following would be an advantage: instruction set programming, variable updates, standard interfaces, workflow development with document imaging, report writer and dataviews.

The work will involve both the development of new processes for pension schemes and the ongoing enhancement and maintenance of existing processes, together with their thorough testing, all to the highest quality standards. There will also be opportunities for consultancy work.

You must be able to demonstrate experience in the practical application of other more general computing skills. The specific areas of technical expertise that would be useful are: Visual Basic, Access databases, SQL server and web integration development. For the more senior positions, you should possess excellent systems analysis and design skills together with an aptitude for producing good shareable documentation.

You need to be able to work effectively and to project cost and time objectives, both as part of a team and as a self-motivated individual using your own initiative at the more senior levels. Excellent organisational and managerial skills are required as you will take a lead role in the successful implementation of some significant computer system developments. You must be able to communicate effectively with staff at all levels in all departments, as well as with external clients.

These appointments are excellent career development opportunities for the right applicants.

Applications should be made in writing, with a copy of your CV, to Ken Frame, IT Manager at the address shown below.

The closing date for applications is **31 May 2005**.

**Pensions Management, Stoopersdale Offices, Brinkburn Road,
DARLINGTON, Co. Durham, DL3 6EH**

What will IT look like in 2 years' time?

So IT's changing. What's new? Here, we're talking transformation. Quite simply we must make sure that IT is connected with the rest of the organisation, providing practical solutions that will support the Council's reputation for innovation, and our drive towards excellence.

Changes have already begun, with the appointment of a new Head of IT. Now, we must press on. The key to delivering lies with three smart-thinking IT professionals who can bring broad technical awareness and commercial vision to a complex local government environment.

Technology Services Manager up to £65k

Calling on at least 10 years' IT management experience, you'll take care of day-to-day operations, making sure the processes are in place for responsive, effective scheduling, fault-handling, contingency and security. The watchword is efficiency - and that means your technical skills (including network, desktop and operations management) are matched by a proven ability to motivate a team and to manage external suppliers. You've also shown you can wisely manage a sizeable budget.

To find out more, visit the website www.betterITbetterservices.co.uk to download an information pack. For a confidential discussion, please call our advisors, Marek Dobrowolski on 0870 190 4366 or Jonathan Clark on 0870 165 4269.

IT Strategy Manager up to £65k

In a nutshell, you'll make sure our Information Technology keeps pace with IT demands. To design a roadmap for the future, you'll need a firm grasp of emerging methodologies, products, techniques and services, matched with the commercial awareness and customer focus to get under the skin of a complex organisation. You'll need at least 5 years' success of setting strategy in motion and managing both people and budgets.

Programme Management & Development Manager up to £65k

Your robust programme and project management experience will ensure that the council reap the benefits from IT investment. That potentially means rewriting our structures, processes and working practices - whatever it takes to ensure that projects are delivered effectively from procurement through design and build to live handover and training. A PRINCE 2 practitioner, your 10 years' experience in a complex organisation includes procurement and contract management. Not least, you've shown your readiness to take responsibility for making things happen.

VEREDUS

executive resourcing | leadership solutions | interim management



Northamptonshire
County Council

Marek Dobrowolski, Veredus Executive Resourcing, Bank House, 8 Cherry Street, Birmingham B2 5AL.

Email: marek.dobrowolski@veredus.co.uk

www.veredus.co.uk A part of The Capita Group Plc

Veredus is both an employment agency and employment business

The CCLRC is a government-funded science research organisation. We provide world leading research facilities across a broad spectrum of science, engineering and technology. The expertise of our staff and the research carried out at Rutherford Appleton Laboratory (Oxfordshire), Daresbury Laboratory (Cheshire) and Chilbolton Observatory (Hampshire), are internationally renowned.

TIER 1 EXPERIMENT AND APPLICATION SUPPORT 2 Posts (VN2681/C)

The CCLRC e-Science Centre seeks two Linux system administrators, or scientists with a strong Linux background, to deploy and support Linux services and Grid Middleware on the GRIDPP Tier1 Service (<http://www.gridpp.ac.uk/tier1a>) at Rutherford Appleton Laboratory. These Grid technologies are being deployed onto the Tier-1 as part of an international, large scale, production quality Grid infrastructure being developed to meet the considerable challenge of LHC data taking due to start at CERN in 2007 (see <http://lcg.web.cern.ch/LCG/>).

Applicants must have an excellent user level knowledge of Unix (preferably Linux), preferably with some Linux system administration experience. Experience installing and running Open Source applications (such as Apache or mysql) is highly desirable. They will have a good understanding of the problems associated with building, installing and running applications and servers. Programming skills in any of Perl, Python, C, C++ or Java would be an advantage as would any experience developing or using Grid middleware. A working understanding of TCP/IP, network operation and performance would be desirable.

Good communication skills, both verbal and written, are essential as interaction with a wide range of scientists and project members in a multi-disciplinary environment will be required. Candidates should have a degree in an IT, Scientific engineering or mathematics related subject. The post holders will maintain the Tier-1 web site and ideally will have experience of building and maintaining a web presence.

Salary is in the range £22,605 to £34,163 per annum, dependent on experience. An excellent index linked pension scheme and generous leave allowance are also offered.

Closing date for applications is 5 May 2005.

Interviews will be held on 23 & 24 May 2005.

LINUX SYSTEM ADMINISTRATOR (VN2638R/C)

The e-Science Centre at the Rutherford Appleton Laboratory is charged with spearheading the exploitation of e-Science technologies throughout CCLRC's programmes, the research communities they support and the national science and engineering base. The work of the e-Science Centre covers four broad areas; Data Storage and Management, Scientific Computing Support, Grid Development and Grid Exploitation. Across these areas the centre is engaged with a wide range of projects, focused on developing, deploying and supporting advanced IT solutions and services to the UK science and engineering base. Almost all of the centre's projects are collaborative developments, involving other CCLRC departments, UK university research groups, research groups from Europe and the US, or a combination of these. These projects are funded from a range of sources, including the UK research councils and the European Commission.

Applicants should have experience in system administration of Unix machines with Linux, HPC clusters and database experience preferred. Good communication skills, self motivation and the ability to work within a team would be an advantage. The post requires a flexible person with a wide range of skills. Training will be provided where necessary to enhance the skills of the successful applicant.

Salary is in the range £22,605 to £26,911 according to experience. An excellent index linked pension scheme and generous leave allowance are also offered.

For more information on the post please contact Dr Peter Oliver via email p.m.oliver@rl.ac.uk

Closing date for applications is 4 May 2005.

Interviews will be held 20 May 2005.

Application forms can be obtained from: Operations Group, HR Division, CCLRC, Chilton, Didcot, Oxfordshire, OX11 0QX. Telephone (01235) 445435 (answerphone) or e-mail: recruit@rl.ac.uk Please quote the appropriate reference number.



www.cclrc.ac.uk



Senior PC / Network Support - MCSE

Founded in 1988, Flexsys achieved success by providing reliable and comprehensive support to blue-chip corporations. From these beginnings the Flexsys Group has grown into a multinational organisation with offices in the UK, USA, Spain, France and Germany. The Flexsys Group today specialises in technical support, business continuity, application development and help-desk support.

We are looking for an experienced IT professional to support an expanding client base of local SMEs from our offices in North Manchester. The ideal candidate will have 3+ years experience specifying, installing, configuring and troubleshooting systems based on MS technologies. You will have up-to-date MCSE and CCNA accreditations, with in-depth knowledge of W2000/W2003 Server, Exchange and / or SBS, along with sound networking skills. Experience of any of the following would be a distinct advantage: Firewalls (esp. SonicWall), Citrix, Veritas, Novell, VPNs, Opera, server architecture (esp. Dell, HP).

You should be customer focussed, organised and used to providing first class support by telephone, remote connectivity and on-site presence. Ideally you will have worked extensively in a similar environment and have excellent communication skills.

Local travel during working hours is necessary and a current clean driving licence is essential. Excellent benefits, friendly working environment and a salary commensurate with experience are the rewards.

Please submit your CV along with a covering letter for the attention of The Personnel Manager to the address below, or to: personnelmanager@flexsys-group.com

Flexsys (UK) Ltd, The Courtyard, Green Lane, Heywood, Lancs. OL10 2EX
Tel 0845 644 2245 Fax 0845 644 2246 <http://www.flexsys-group.com>



ColdFusion Web Developer, Central London

Emojo, a dynamic and innovative software development firm, seeks talented, creative and disciplined ColdFusion Web Developers to help us respond to our continued growth.

These positions will specialise in customer implementations and custom projects, which requires a minimum of 2 years of project delivery experience, with great customer skills and the ability to work in a team. You will be working on brand new applications, under tight deadlines, which should keep your brain singing. Knowledge of full product life cycle is desirable. It would be great if you have experience writing functional and technical specifications, and of course you are used to writing documentation, right?

On the technical front, you will need a minimum of 2 years ColdFusion (CFMX), serious knowledge of SQL (MS SQL Server, Oracle and/or PostgreSQL), XML, Javascript and the ability to work in both Windows and linux.

Ability to speak & think other languages (our products are multi-lingual) is a huge advantage; sense of humour is non-negotiable.

You will be part of a small close-knit team that is passionate about Affino, our core product and we hope to see you progress to a senior level since we promote internally. Remuneration is from £20,000 to £28,000 per annum, contingent on experience. We are located directly on Regent Street; liberty is closer than you think.

All applications and CV's to be sent to AM@emojo.com

For more information please contact Ann Mari Fineman on 0207 291 1070 or apply online at www.emojo.com

Strictly no agencies.

The challenge of PROTECTING sensitive DATA

The pace of change in policing has never been faster. To support the many developments taking place and empower police forces and officers, PITO (Police IT Organisation) consistently works at the forefront of technology.

Information Security Officer

£24,500 per annum
Blackfriars, London SE1

Data sensitivity is a major issue for organisations of all kinds; none more so than the police community. By its very nature, the intelligence the police has on record can never be allowed to fall into the wrong hands. Whether that information is held within the originating force or transmitted to other forces, the delivery of a nationwide Information Security Policy is clearly of the highest importance.

Framing that crucial policy is the stimulating challenge at the heart of this complex role. It's one in which you'll ensure that encryption standards protect every force. In addition to taking a national view on shared information, you'll help advise individual forces on how best to protect their own data. This is an autonomous role that also brings some peripheral involvement with the protection of the Critical National Infrastructure.



Success will mean working at the forefront of encryption techniques and other areas as technology advances.

To respond effectively, you will need two years' experience of information security, most likely in the public sector. Here you will have demonstrated your ability to formulate and follow policy, exercise powerful influencing skills and display political astuteness - essential elements if you're to work closely with Senior Police Officers and other key stakeholders.

If you're ready to shape the future of policing in Britain and share in the rewards of our success, please log on to our website www.pito.org.uk to obtain further details and an application pack. Alternatively, you can call 0870 1420995 or email: pito@mbo.co.uk

Closing date: 13th May 2005.

Ref: ITA/08/05

We are fully committed to equality of opportunity and value our diverse workforce.



Systems for Policing



WEB DEVELOPER/PROGRAMMER

£Neg

Our company specialises in producing e-learning courses primarily built using Macromedia Flash. We also produce and host web sites for healthcare companies and organisations. This is a great opportunity to join our creative and dynamic team at a very exciting time in the companies history.

The primary role will be in developing new web sites using PHP and MySQL / fast templates and maintaining our existing sites. You will need extensive experience in PHP and MySQL, expert knowledge of HTML CSS (especially W3 accessibility guidelines) and good knowledge of FreeBSD and Apache. You will need to have experience in information architecture and in writing proposals. The successful candidate will also be required to attend sales pitches - so client-facing skills are important. Finally, experience in the use of Flash would be advantageous.

As a minimum requirement, you will need to have at least:

2 years commercial experience in PHP MYSQL

2 years experience using complimentary skills such as HTML, CSS, JavaScript, XML - along with relevant applications such as Dreamweaver, Flash and Photoshop.

Experience in Flash MX 2004 would be advantageous.

For further information or to apply, contact:

Patrick Cannon
Patrick@smile-on.com
020 7400 8986

APPLICATIONS FROM AGENCIES WILL NOT BE CONSIDERED

Clear thinker? Enthusiastic about the potential of IT? Want to make a difference?

Change Manager
(3 year appointment) £35,000

Business and IT Development Analyst
(Initially for 2 years, with the prospect of permanent appointment) £30,000 - £33,000

e-Government Support Officer
(20 hours per week, 1 year temporary appointment) £23,000 - £25,000 pro rata

The Change Manager will lead, advise and support the Council in sharpening our focus on customers and the process changes that will drive improved performance and service.

The Business and IT Development Analyst will support the Change Manager and service units during IT systems implementations. A systems analysis and project management background is required, whilst exposure to process mapping and workflow technologies will be of particular interest.

The e-Government Support Officer will support the Council to manage e-Government. Experience of project management techniques, enthusiasm for using IT to improve services and good communication skills are required.

An organisation that is friendly and committed, we can offer you a great place to work and an opportunity to contribute significantly to our challenging programme to continually improve the way we work. Join us and enjoy our range of benefits including free car parking, flexible working hours, final salary pension scheme, bi-annual health screening, subsidised restaurant, leisure facilities and car/cycle loans.

Full information and application forms are on the website: www.eastleigh.gov.uk or email your contact details to jobs@eastleigh.gov.uk Alternatively, for an informal discussion on the Change Manager post, contact Christine Holloway, Assistant Chief Executive on 023 8068 8250. For the other posts, contact Andrew Walmsley, Head of IT Services on 023 8068 8070.

Closing date for all posts: midday 25th April 2005.

The Council is genuinely committed to equality of opportunity in recruitment and service delivery. We also operate a no-smoking policy.



ICT DATABASE ADMINISTRATOR – Ref 1307

Salary level £26,157 to £28,179

We are seeking a self-motivated and enthusiastic individual to join our I.T. Operations team. The duties will include:

- Providing a full technical and support role to the Councils database systems
- Assisting in the development of the Councils e-government projects
- Assistance with Servers and PC hardware/software support to cover staff absences

The post is offered under the Council's flexible working scheme, flexibility in working hours is essential, the service to our computer users being of paramount importance.

The Councils ICT Services support a wide range of technologies including Windows and Unix operating systems, Oracle and SQL Server databases and both bespoke applications and software packages. Although some training will be provided, at least two years experience of Oracle and Microsoft database systems is required with the ability to communicate to both technical and non-technical audiences. Candidates need to exhibit a strong sense of personal responsibility for jobs undertaken, and be able to balance the demand of multiple tasks. You must be a good team player and able to work with the existing ICT Services team and share expertise.

Our benefits include: generous holiday entitlements, final salary pension scheme, free life assurance, low-interest car loans, leisure discount, on-site canteen and good training opportunities.

Closing date: 29 April 2005

You will have the opportunity to work for a Council recognised as 'Good' in our recent CPA inspection



"Committed to equalities in employment and service"

24 HOUR JOB LINE
01582 474 147

www.southbeds.gov.uk
human.resources@southbeds.gov.uk

Safe roads, Reliable journeys, Informed travellers



Smart roads, smart people, smart move

The Highways Agency is responsible for operating, maintaining & improving the strategic road network for England. This is an exciting time for us as we take over traffic management responsibilities from the police on 6000 miles of motorways and trunk roads.

Infrastructure Support Team Leader

£38,167 per annum

Leeds

Ref: VV436

Reporting to the Group Leader, Customer Services, you will lead a number of teams responsible for IT support to colleagues and for maintaining and developing the provision of the Agency's technical office infrastructure.

Responsibilities include identifying business opportunities for emerging technologies, providing definitive advice to senior management and liaising with other teams. As well as working alongside the Business Development Team to identify business needs and deliver solutions, you will also be required to provide effective line, contract and programme management services to the Infrastructure Support Teams at an exciting time of growth across the Agency.

To this role you will bring 5 years' experience of supporting information systems and technical infrastructures, at least 8 years' experience of service and project management and an ITIL qualification, with an awareness of PRINCE2 & similar methodologies.

Benefits within the Agency include: the opportunity to make a real difference in a challenging and exciting role in a rapidly changing public sector; professional development and training opportunities, flexible working, and generous annual leave.

The Civil Service offers a choice of valuable pension arrangements - a final salary or money purchase pension - giving you the opportunity to choose the pension that suits you best.

For further details and an application pack please contact: **Geeta Sedha, 3E, City House, New Station Street, Leeds LS1 4UR** on **0113 283 5850**, quoting the above reference number, or email: **geeta.sedha@highways.gsi.gov.uk** Alternatively, please look on our website **www.highways.gov.uk** for further details.

Closing date: Wednesday 4th May 2005.

Applications will not be considered after this date.

The selection process will involve an assessment as well as an interview.

The Highways Agency is an equal opportunities employer. We value diversity and positively welcome applications from all sections of the community. We also operate a guaranteed interview scheme for disabled people who meet the minimum criteria for our employment opportunities.



Programme & Systems Delivery (PSD)

**If you think you have the skills and
you think you have the drive
Help us to move from 'Good' to 'Great'**

With an estimated total IT spend of more than £1bn a year the Department for Work and Pensions is one of the largest and most significant purchasers and operators of IT services and solutions in Northern Europe

We are currently recruiting high calibre senior IT Managers.

For a full list of vacancies please see our advert on page 51

If you like the idea of working in a dynamic creative environment, which offers committed IT professionals the chance to develop to their full potential, then come in and talk to us at:

The Windermere Suite
Thistle Hotel
3-5 Portland Street
Piccadilly
Manchester

Thursday 28 April 2005 from 10am to 8pm
Friday 29 April 2005 from 8.30am to 3pm

Look forward to meeting you.

For further information contact Sue Lancaster on 01253 335924

DWP Department for Work and Pensions



Signpost Housing Group is one of the most successful organisations in the South West region. With a development programme of over 500 homes across 22 local authority areas, Signpost manages over 3,800 homes and maintains a further 25,000 properties for a variety of clients.



Senior ITC Officer

£20,000 - £25,000 pa

Blandford based

With over 300 ITC users spread over a number of sites throughout the South West, the organisation employs a mix of technologies (WK2/W2003, Citrix, UNIX, VPN and WAN), to support a number of applications required to meet the differing demands of a group of companies. We are seeking to appoint a Senior ITC Officer to support and lead the development of our business applications. You will need in-depth experience in managing and developing regional databases, and experience with a Housing Management System would be an advantage. You should also be able to produce business process diagrams and apply project principles for the introduction of enhancements and system upgrades. In addition, you need to be customer focused, organised and conscientious with an adaptable and friendly approach.

For an application form and further details, please telephone the Signpost Recruitment Hotline on 01258 484841 (24 hour answerphone) or e-mail **recruitment@signpost-group.co.uk** quoting reference 5262.

Closing date for applications: Friday 6 May 2005.

www.signpost-group.co.uk

Signpost Housing Group is committed to equality and diversity and welcomes applications from all sections of the community.

Embracing Diversity.



Programme & Systems Delivery (PSD)



Leading the way to world class IT solutions

Permanent posts based in Birchwood Park (Warrington), the North West and the North East

Attractive salary with flexible starting pay

With an estimated total IT spend of more than £1bn a year the Department for Work and Pensions is one of the largest and most significant purchasers and operators of IT services in Northern Europe. The Program and Systems Delivery Group within DWP is undergoing a significant transformation to build a world class organisation and this demands we attract the best in IT

We are looking to recruit high calibre senior IT Managers in the following posts:

Principal Data Architect -	Ref F9/B9	IS Strategy Architect (2 posts) -	Ref F2/B1A&B
Principal Network & Telephony Architect -	Ref F9/B1	Service Delivery Change Management Manager -	Ref F6/B1
Principal Data Centre & Storage Infrastructure Architect -	Ref F9/B4	Configuration Management Manager -	Ref F6/B2
Principal Enterprise Systems Management Architect -	Ref F9/B2	Application Release Planning Manager -	Ref F6/B15
Principal Distributed Infrastructure Architect -	Ref F9/B3	Long Term Capacity Planning Manager -	Ref F8/B4
Principal Integration Architect -	Ref F9/B6	Asset Optimisation Manager (Performance Management) -	Ref F8/B1
Head of Architect and Technology Management -	Ref F9/B12	Disaster Recovery Strategy Manager -	Ref F8/B3
Senior IS/IT Solutions Architect (5 posts) -	Ref F13/B3		

Plus various Infrastructure, Integration and Testing Management roles - Ref F7 roles

If you like the idea of working in a fast moving, creative environment, which offers committed IT professionals the chance to develop to their full potential, then contact us.

For an application pack including detailed job specifications please contact Moyra Scott on 0191 215 2701 or Pauline Love on 0191 215 2697. Please quote NLC047 along with the appropriate reference number for all enquiries. The closing date for applications is 13/5/05

Alternatively talk to us direct at our open day see details on page 50

DWP offers a wide range of benefits including Flexible Working Hours, 25 days paid holiday and an excellent pension scheme

DWP is committed to providing services which embrace diversity and promote equality of opportunity in our working practices to all our customers, colleagues and partners



NHS Connecting for Health (NPfIT) is delivering healthcare systems that will revolutionise patient care and choice and positively transform the experience of clinicians and NHS staff. The programme will deliver an integrated IT Infrastructure to support 21st century systems for all the NHS organisations in England before 2010.



Connecting for Health

The NHS Information Standards Board is responsible for assuring the process of development of information standards for their interoperability and fitness for purpose in the NHS, drawing on the expertise of specialists, driving Information Standards forward.

Secondments will also be considered for all positions.

Technical Information Standards Manager

£36,330 pa plus recruitment premia for exceptional candidates

Leeds

You will have responsibility for managing the assurance of the technical aspects of information standards, ensuring their interoperability with those of the e.Gov Unit, W3C, CEN, and the ISO. Working closely with the Programme's Technical Office, you will provide advice and guidance to ensure that patient safety is given absolute priority.

Key experience and skills will include

- A multi-discipline technical background
- The ability to compose technical standards and evaluate products with a sound knowledge of Internet protocols, web applications, and HL7/message development
- An understanding of the value of standards bodies

Statistics and Public Health Information Standards Manager

Up to £39,000 pa

Leeds

Managing the assurance of statistical and public health information standards, this role will also be key in the provision of expert advice and guidance. You will champion the work of the Programme's NHS Information Standards Board in statistical and public health assurance.

Key experience and skills will include

- Degree qualified
- Broad exposure to statistical work in the NHS or wider public sector
- Strong understanding of the strategic direction of the NHS, its information strategies and programmes, and of governance issues

Management Information Standards Manager

Up to £39,000 pa

Leeds

You will focus on managing information assurance as it relates to the "business" of the NHS, i.e. central information returns, organisational performance assessments, and financial information flows. Again, the role will provide expert advice and guidance, and will work with appraisers to ensure that standards adhere to national and international principles of best practice.

Key experience and skills will include

- Degree or equivalent in health informatics
- NHS or public sector experience in a business information related field

For further information regarding these roles contact Dily Madon at Elan IT Health on (0113) 201 0305 or email npfitcvcs@elanithealth.co.uk. Please visit www.npfit-elanit.co.uk for an application form and job description.

Closing date: 6th May 2005. Interview dates: 23rd and 24th May 2005.



Elan is the retained recruitment service provider for the National Programme. The National Programme is committed to Equal Opportunities and Flexible Working

University rolls out upgraded elearning

New system to help cope with growing student numbers

James Mortleman

MIDDLESEX University is upgrading its learning management system (LMS) to cope with a doubling of its student population in the next 10 years.

The institution has been using the WebCT Campus LMS since 2001 to deliver course content and other online facilities to students and academics, but in January began upgrading to the more advanced WebCT Vista.

Head of elearning at Middlesex University, Kyriaki Anagnostopoulou, says the new system will allow for the provision of better facilities for a growing body of students at home and abroad.

'It is our mission to double the number of student enrolments in a decade, and WebCT Vista will allow us to do that,' she said.

Anagnostopoulou says the system will also provide additional functionality, such as better collaborative features for assignments.

'Students can work together in groups online, and academics can set and mark group assignments virtually, as well as publishing them online to encourage peer feedback,' she said.

The system will also make distance learning easier. Middlesex considers itself a global campus, with partner institutions in Hong Kong, Singapore and Egypt, and a campus in Dubai.

Skillswatch: Demand for management skills

Appearance in advertisements September 1999 - April 2005



The university's School of Computing Science offers 30 online modules to overseas students. The new system will allow the range and depth of course content to be broadened significantly.

'We have hundreds of hours of study online already,' said Anagnostopoulou. 'But WebCT Vista will allow us to run distance learning more effectively, with better monitoring and feedback.'

Rollout should be complete by spring 2007.

'We're taking time to rethink our online presence, make sure our approach is pedagogically sound, and all staff are properly trained,' said Anagnostopoulou.

Further reading
www.computing.co.uk/features/1150548

 www.computing.co.uk

Inside today's Careers: View the best jobs – see our job links on page 38

Dilbert®



backbytes
back_bytes@vnu.co.uk

The price of progress

We couldn't be happier to read your letters about how progress in IT has failed to deliver.

'When I started working with computers in 1964, our weekly update run for 120,000 customer accounts took about four hours, with the payments being read from punched cards,' says Alex Black.

'The ICT 1300 we used cost £75,000, and had less power and memory than a £400 BBC Micro in the 1980s. By the 1990s, using an ICL Series 39 costing more than £500,000, updating 36,000 council tax records each week took eight hours.

'The only progress noticeable was the ability of software developers to soak up any extra power, and the ability of manufacturers to persuade customers that newer was better.'

Good clean fun for microwave abusers

Stuart Madagan, at Mothercare, writes with a good plan for microwave abuse: 'Two bars of normal soap cooked at full power provides an entertaining way to fill the entire microwave compartment. As an extra bonus, your microwave will be cleaned too,' he says, adding ominously: 'after a fashion'.

Too much train knowledge is a dangerous thing

Mark Drukker, who admits quitting Mensa in the 1970s when he went to a social event to find it populated entirely by single men looking for a Mensan girlfriend, can add to our already excessive knowledge of the trains on the Hastings line.

'There have been examples all over the UK of lines that could only take smaller trains,' he says. 'Another was Hampstead Heath tunnel. Until it was enlarged a few years ago, freight trains could only pass through if no train was going through it in the other direction.'

'Railways are similar to computers concerning compatibility. Lines were built to different gauges, tunnel sizes and electrification systems, and stock built with different couplings between carriages. Even now, the privatised railway companies buy their own trains that can't run until platforms are rebuilt and track layout changed.'

Good information Mark, but a note to randy young male Mensans: if a woman ever does actually turn up to one of your social events, don't try this conversation with her.

Log on as a less stupid user

'Steve and Mike', at the Muir Group, are the source of this week's user story. Stupid user or unclear advice? You make the call.

'Today we had to install an additional printer on a machine. We needed to log on with administrative privileges, so my colleague sent the user an email telling her to click on 'Start', 'Shut down', 'Close all programs' and then 'Log on as a different user', thinking that she would log off.'

Taking the instructions literally, she asked the user on the next desk to log on to her machine.

I talk to the screens

Last week Mick Rutherford told us how he advised users who wanted to know how to right-click on a touch screen to use their right hands. This week: the German voice-activated monitor joke.

'We were supplying 21 inch monitors to a German client, which came with a remote control to adjust the tilt and direction,' says Guy Mason, at Central Dynamics. 'We demonstrated this to the chap in the office, who thought it was great.'

'At this point his superior came in; he stood just behind his superior, with the remote control hidden in his hand, and told him it was voice-activated, which he demonstrated by shouting "Monitor up", and pressing the appropriate button on the remote control.'

He gave his boss a go, too, pressing the right button each time.

Guy hasn't had the call to say the voice activation feature is broken, but it can only be a matter of time.

More Backbytes on page 8 and at
www.computing.co.uk/backbytes

For more news, features, analysis and jobs, visit: www.computing.co.uk

