

# JANET NEWS

Issue 18 | May 2012

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## GLOBAL REACH

How Janet is working internationally

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## NETWORK RESILIENCE

Planning for the unthinkable

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New EU Data Protection proposals introduced

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### PROFESSOR MARTYN HARROW

JISC welcomes Martyn Harrow  
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### DR MALCOLM READ OBE

Driving and overseeing JISC change  
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## CEO WELCOME

Let me start this edition of Janet News with a warm welcome to Professor Martyn Harrow. Martyn joins JISC as the new Executive Secretary at a time of significant and positive change following the recommendations of the Wilson Review. As Martyn settles into his new role, Dr Malcolm Read retires and I'm sure we would all want to thank him for his commitment to research and education ICT over the last 18 years, and particularly for his support of the development of the Janet network. We wish him all the best in his retirement.

Martyn's experience will be invaluable, both as CIO at Cardiff University and before that internationally with Unilever. Over the next few months we will be working with him and other parts of the group to establish JISC as an effective world-class organisation, fit for the future. The JISC Transition Group produced a report in April 2012 on the future of JISC, which I urge you to read: <http://www.jisc.ac.uk/aboutus/hefcerreview.aspx>

These are exciting times. Janet is delighted to be playing a significant part in these changes and looks forward to having a much more integrated relationship with JISC to deliver innovative and effective solutions to support future research and education. It is essential, that even in this time of transition, we will continue to deliver outstanding services, and that is our firm commitment to you all.

Tim Marshall,  
CEO Janet

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## EDITORIAL

Welcome to the May issue of Janet News. Since the last issue was published in January, there have been a number of developments within research and education. With a new leader at the helm of JISC, Martyn Harrow shares his vision of the future on pg 14.

Further transformation is on the horizon for the Janet community – as this issue went to print, the Cabinet Office has approved plans to progress with the development of the next generation Janet infrastructure, Janet6 (pg 11).

During these times of change, Janet remains dedicated to providing value-added services such as videoconferencing (pg3), and bolstering existing functionality with improvements to IP Telephony (pg30). Brokerage has delivered the first cloud framework, with eight suppliers selected (pg6).

Another Workshop has come and gone, with delegates, speakers and exhibitors discussing hot topics such as cloud and Big Data (pg9) and our thanks go out to all those involved in making this annual event a success.

As always, we value your feedback on our services, events and of course, Janet News, so do read on and feel free to get in touch.

Dan Perry,  
Director, Product and Marketing



# BRINGING IMPROVED VIDEOCONFERENCING TO YOUR DESKTOP

## JANET COMPETITION Where am I?



For a chance to win your own Janet water bottle, go to <https://community.ja.net/groups/janet-news> and tell us **on what glacier was this photo taken?**

Please note: the first correct (or closest) answer submitted to the forum before 30 June 2012, will be the winning entry; we will only be able to contact the winner; the answer will be posted by Janet on the forum on 1 July 2012; Janet staff may not enter.

Changes to the Janet Videoconferencing Service now make desktop conferencing easier and simpler to use for everyone. Removing technical barriers related to hardware widens the user base, so that many more schools and colleges can now access videoconferencing.

You can now take part in multipoint or desktop-to-desktop conferences with just a webcam and headset. We've completely redesigned the Booking Service to make it easier for you to register. All you need is the new Janet desktop client (ConferenceMe2) on your computer.

Richard Sedding, Videoconferencing Service Manager said "We have listened to feedback from the Janet community and in particular the problems with accessing ConferenceMe when using a web proxy. The new version of ConferenceMe overcomes this difficulty making videoconferencing more accessible."



Additional functionality means easier control of microphone and audio levels using the client program, and you can now share content on full screen. **JN**

## GETTING STARTED

You can download the new client now  
<http://www.ja.net/desktopcheck>

For more information please visit  
<http://www.ja.net/services/video/jvcs/desktop/index.html>





Sam DCruz / Shutterstock.com

# RESHAPING JISC

JISC is bringing the leadership from across JISC into a more cohesive and more focused structure, to work with and deliver value to the communities that it serves.

The changes are designed to provide a firm footing for the organisation as it responds to the recommendations made in the Wilson Review of JISC which was published in February 2011.

"This is the start of an exciting future for JISC," said Professor Martyn Harrow, Head of JISC. "We are determined to continue to develop our crucial role in supporting UK colleges and universities and skills providers, helping to keep them at the forefront of best practice internationally. This has never been more important than now at a time of tighter funding and unprecedented challenges to the sectors."

One of the first changes will see JISC become a company limited by guarantee on 1 August 2012 bringing together the JISC offering across its products and services. The new company's primary focus will be on three distinct areas for UK research and education:

- **Infrastructure services:** networks, access management and cloud services
- **Data and content services:** procurement, data hosting, data management and interoperability
- **JISC futures/solution services:** focused on supporting education, students, research, and the running of institutions as businesses.

JISC will be set up initially as a holding (parent) company and following this, step by step, the current elements of JISC will be brought into this new company structure. [JN](#)

Find out more about JISC's reshaping at <http://www.jisc.ac.uk/aboutus/hefcereview.aspx>

# JANET SPONSORS OUTSTANDING ACHIEVEMENT AT JISC RSC NORTHERN AWARDS

Members of the North East's Further Education & Skills sector joined representatives from JISC, Janet, BIS and other academic organisations at an awards ceremony at Durham Castle on Thursday 22 March.



Right to left: Tim Marshall, CEO at Janet; Stuart Edwards, Deputy Director, Further Education Directorate at BIS; Ralph Holland, South Tyneside College, and Gareth Davies, Manager at RSC Northern.

The Leading Lights Awards and Gala Dinner celebrated exceptional contributions to e-learning and education in the North East. Categories included Outstanding e-Learning Achievement, Learning Support, and Accessibility and Inclusion through Technology.

The e-Learning Leadership Award, sponsored by Janet, was presented to Ralph Holland from South Tyneside College. Ralph was commended for his efforts in encouraging staff to use the Virtual Learning Environment (VLE)

Moodle, which resulted in 185% year-on-year increase of hits to resources hosted on Moodle.

JISC RSC Northern will be hosting a follow-up showcase event on 3 July, where Leading Lights Awards nominees will get the opportunity to discuss and demonstrate best practice with other members of the region as well as those from outside the North East. **JN**

For more information about the event, visit <http://www.jiscrsc.ac.uk/northern>

## THE WINNERS

**e-Learning Leadership Award**  
Ralph Holland, South Tyneside College

**e-Responsibility Award**  
Iain Arthurs and the e-Responsibility team, Gateshead College

**Technical Achievement Award**  
ICLT Information and Security Team, Stockton Riverside College

**Learning Support Award**  
Business Improvement Team, Zodiac Training

**Bringing Fun to Learning Award**  
Bob Metcalfe, TTE Technical Training Group

**Accessibility and Inclusion through Technology Award**  
Skills for Life team, Newcastle City Learning

**Outstanding e-Learning Achievement Award – Adult and Community Learning**  
Peter Samson, Middlesbrough Community Learning Service

**Outstanding e-Learning Achievement Award – Further Education Colleges**  
Richard Spencer, Stockton Riverside College

**Outstanding e-Learning Achievement Award – Higher Education in Further Education**  
Kay Dover, New College Durham

**Outstanding e-learning Award – Sixth Form College**  
Dave Allen, Stockton Sixth Form College

**Outstanding e-Learning Achievement Award - Specialist Colleges**  
Christopher Surtees, North East Autism Society

**Outstanding e-Learning Achievement Award – Work Based Learning**  
Lab Technician Team, TDR

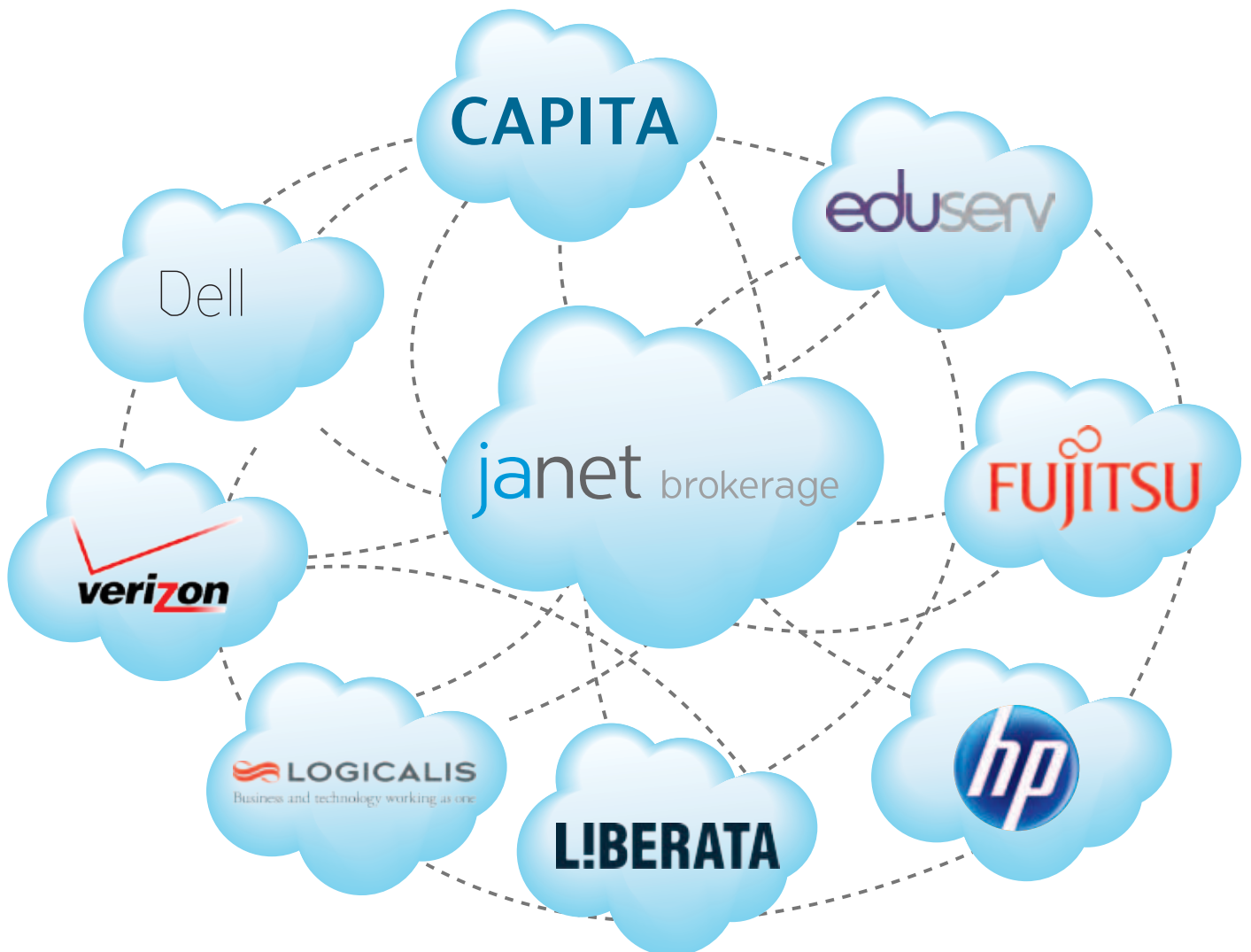
# SECTOR INFRASTRUCTURE CLOUD SUPPLIERS ANNOUNCED

Janet Brokerage has spent the last five months working hard to create an EU compliant framework for cloud infrastructure and managed data centre services for the Janet community. This culminated in the recent announcement of a framework with eight world-leading cloud and data centre suppliers that deliver high quality cloud and data centre services.

The wide-ranging framework offers co-location hosting through to cloud infrastructure services. In conjunction with the Janet Brokerage service, this will help drive the use of cloud computing across the sector.

The eight selected suppliers are:

- Capita
- Dell
- Eduserv
- Fujitsu
- HP
- Liberata
- Logicalis
- Verizon



We're already in discussion with several universities and FE colleges keen to use the framework. We've provided a number of institutions with indicative pricing from our eight suppliers.

With more institutions investigating the use of cloud technology, this framework reduces the time and costs traditionally associated with public procurement. Institutions can start talking to suppliers about their needs and ultimately adopt technologies that match their strategic direction. Having a variety of use cases, ranging from disaster recovery through to a complete virtually managed infrastructure, the Brokerage will be helping to shape solutions within this framework to meet your needs.

Previous Janet frameworks have saved millions of pounds for the sector. The telecommunications framework made net savings of £50m for the London Grid for Learning in 2010.

If you have a requirement for any of the services available through the framework, but aren't sure of the cost, let us know and we can request an indicative quote from our framework suppliers on your behalf. **JN**

For more information about Janet Brokerage, visit <http://www.janetbrokerage.ac.uk> or call 01235 822333.

### Supplier speed dating

We're organising an event this autumn where you can meet the cloud and data centre suppliers on our framework. This will give you the opportunity to explain your needs and hear what the suppliers have to offer.

Spaces will be limited, so to find out more, please visit <http://www.janetbrokerage.ac.uk/events> or follow us on Twitter @Janet\_Cloud







## NEW EDUROAM ANDROID APP

The eduroam Companion application was launched on the iTunes App Store in December 2011. So far we've seen over 2500 downloads. At the same time, work on a port of the application to the Android platform has been completed by a team of students from the University of Southampton, supervised by Dr Tim Chown.

Building on the crowd-sourcing functionality of the iOS application, the eduroam Companion for Android will feature a native Android user interface, enhancements to the quality and types of information captured when a user tags a location, integration with popular social networks and stunning visualisations of wireless coverage.

Mark O'Leary, Development Group Manager for Janet said "We've listened to community demand to bring the eduroam companion to more users. Porting to Android has enabled us to extend the app's capabilities. We are delighted that our ongoing partnership with Southampton's students has delivered an outstanding Android app for eduroam users." **JN**



Keep an eye on our eduroam twitter feed for latest news and developments [twitter.com/eduroamUK](https://twitter.com/eduroamUK)



## NAMING REGISTRY MADE EASY

A new Online Domain Registration tool is now available to Janet Registrars and customers.

This new tool reduces the administration associated with ac.uk and gov.uk domains, and reverse delegation. This gives you the ability to track new domain requests, as well as modify existing domains. Streamlining the new domain name request process gives Registrars and customers greater control over their domains.

As an added feature, the online tool will allow you to

add your DNSSEC key, either directly into the tool or as an attachment.

We shall be providing login details to Registrars and customers as and when they contact us regarding new or existing domains. If you would like to receive further details regarding this tool and our registration process, please email [naming@ja.net](mailto:naming@ja.net) or phone the Janet Service Desk on 0300 300 2212. **JN**



# NETWORKSHOP 2012 – YORK



Over 300 delegates attended Networkshop 2012



Central Hall, The University of York



Paul Bevan,  
Customer  
Engagement  
Manager, Wales

It's unusual to attend a conference that manages to mix a cocktail of strategic overviews with on-the-ground case studies, but it's even rarer to arrive at a 9am session the morning after the conference dinner that is so well attended – where delegates are sitting in the aisles and standing at the back!

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>>> CONTINUED FROM PAGE 9



Evening reception at the National Railway Museum, York



Leon Lobo, NPL



Tim Marshall, CEO at Janet



Miles Jupp

It is this image that for me best illustrates this year's Networkshop held at the University of York where almost 300 delegates, over 20 speakers and 41 exhibitors – along with 10 red shirted student helpers – came together at one of the UK's premier universities.

York was my first Networkshop, and was the perfect location for a 'newbie' like me as there was no chance of falling astray between sessions. Prolific squadrons of University-sponsored ducks and geese kept a keen check on all attendees and creative distract-and-run methods had to be employed by those making a break for the bar early.

Reflecting the changing nature of IT in education, cloud computing was by far the most common theme of the conference. The programme provided every delegate with the opportunity to hear cloudy-skies visions of the future, explorations of the politics of moving revenue spend off-campus, examinations of the legal and security concerns of new service models and case studies of the practicalities of moving to Google Apps.

For many, Networkshop is a chance to learn and connect in equal measure, and the differing approaches to cloud computing, and strategies for engaging

positively with these changes, was the major talking point in many of the sessions – as well as in the bar.

The other key theme of the conference was scale – the scale of computing power (from exaflops to zettaflops and beyond), the scale of Big Data and the scale of the connectivity that is required to support this. Simon Garrington from Jodrell Bank Observatory described the huge network capacities needed to control the Square Kilometer Array. Leon Lobo described how the National Physical Laboratory is exploiting the power of the Janet Aurora dark fibre network to gain a new understanding of the second, and are finding new ways to disseminate standard time through resilient network links.

Scale continued to be examined at the conference dinner where, in the company of some of the most famous trains to ride the rails of the UK, many delegates took it upon themselves to 'measure up' against the mighty Chinese Government KF7 or experience the journey from London to Brighton in a compressed four minutes.

With the wit and wisdom of Miles Jupp still ringing in our ears, the final day of the conference saw delegates taking their last opportunities to discuss issues from the conference with colleagues





Exhibition Hall, The University of York

and suppliers before hearing about the BT/University of Cambridge Culture, Communication and Change project. This small research group had conducted a global study on the impact of technology on individuals and families in just eight months, a feat which clearly illustrated the powerful enabling effect that connectivity can have on research.

As the conference began to draw to a close I asked some of my fellow 'newbies' what counsel that we should give to next year's fresh-faced contingent. Everyone agreed that Networkshop is the kind of conference where you come with your challenges, and leave with solutions – and perhaps a few new challenges you'd like to tackle as well. All in all the clearest

advice for Networkshop 4 I came from an anonymous FE colleague; "Book early and bring bird seed." **JN**

**Networkshop 4 I will be held at Keele University from the 9 – 11 April 2013.**  
<http://networkshop.ja.net>

## STOP PRESS - STOP PRESS - STOP PRESS

### JANET6: CALL FOR FINAL TENDER FOR FIBRE PROCUREMENT ANNOUNCED

Over the last year, we have been busy laying plans for the next generation of our Janet infrastructure, Janet6. With a huge growth in research data, remote working and the increase in technology for teaching and learning, updating the Janet network infrastructure to Janet6 is essential to ensure we take advantage of significant technological developments. Janet6 will continue to provide a flexible, sustainable and resilient network infrastructure to support research and education organisations in providing all these different activities.

We are now pleased to announce, that following approval by the Cabinet Office Minister Francis Maude, the Call for Final Tender (CFT) for the procurement of the fibre infrastructure for Janet6 has just been issued. The CFT has been issued to: Geo (in consortium with ESBT), SSET and Verizon. We've also been working on the procurement of the transmission equipment in parallel.

In January 2012 we shortlisted 6 bidders: Alcatel Lucent; Ciena; Fujitsu; Huawei; Nokia Siemens Networks; and Virgin Media. We aim to have the Janet6 fibre and transmission contracts in place in September 2012.

A fuller discussion on the Janet6 project will be published in the next edition of Janet News (Sept 2012). This will include an update on the outcome of the fibre infrastructure procurement and the Call for Final Tender for the transmission equipment.

We will be running an online briefing 'From Requirements to Procurement' on Thursday 5 July. To find out more and register, please visit <http://www.ja.net/onlinebriefing>

For more information on Janet6, visit <http://www.ja.net/janet6>






# DR MALCOLM READ OBE

The full interview is available online at: <http://www.ja.net/documents/publications/janet-history/MalcolmReadInterview.pdf>

Dr Malcolm Read OBE, retired from his role as JISC Executive Secretary in January 2012, after 18 years in the position.

We look back at his career and achievements, and ask what Dr Read sees as the future for JISC, and for himself as he hands over the reigns to Professor Martyn Harrow.



A recent count showed the JISC umbrella covers 625 staff of 32 different employers. The challenge is to bring them all into a much more coherent, joined-up set of activities for a common purpose, pooling intellect and resources.

**What were your first impressions of the role when you first began?**

The job was advertised as a three-year secondment to close JISC down in an orderly way. HEFCE's view was that as every university now had a Janet connection, that was its IT remit fulfilled, so it didn't need JISC anymore. Then Sir Brian Follett wrote a significant report recommending a huge investment of £45m in the university library community to help the profession get to grips with the digital age. JISC was made responsible for channelling the funding, which pretty well doubled our agenda. HEFCE then recognised the broader impact of IT on universities: it was more than just giving them a network connection for research.

The library agenda was very successful, though many universities now don't appreciate the value of what their libraries do. They still do a huge amount of work, procuring and making resources available, but the value of their role in the whole scholarly process is not being recognised as it should be.

That was one of the two big jobs that took up most of the nineties. The other was setting up UKERNA - that was my first exposure to politics at the ministerial level, which was an education.

**What challenges do you foresee for Professor Martyn Harrow at JISC?**

The big task is a closer coupling of the JISC family. The risk of moving to a private sector environment is that a university feels it can protect its own personal interests by buying cheap'n'cheerful from Bandwidth'R' Us - who needs all that eduroam and CSIRT and other Janet stuff? But that would destroy an essential national asset. The same holds true for other JISC services. To continue a successful and relevant broad range of national activities, what we now know as the JISC Executive and the services must pull together to a common set of ideals and aspirations.

A recent count showed the JISC umbrella covers 625 staff of 32 different employers. The challenge is to bring them all into a much more coherent, joined-up set of activities for a common purpose, pooling intellect and resources.

**Once you have handed over to Martyn and retired from JISC, what is the first thing that you are going to do?**

The very first thing is fly to Buenos Aires, then down to Ushuaia and get a cruise ship to the Antarctic. After that: well, I have a lot of interests. I'm very into wood working and cabinet making. I'd love to take up model engineering - I

really fancy building a steam engine. Photography is another big interest.

Professionally, I'd be very keen to carry on working and helping coordinate international infrastructure in the cloud and open agenda area. I'm interested in pursuing the whole open academic scholarly debate.

**What achievements are you proudest of, both professionally and personally?**

I'm proud of the way JISC has grown in influence, breadth and relevance. I'm proud it's been able to provide support to the HE and FE community and I'm particularly pleased with the help it's been able to give to the student learning experience.

I'm very proud of the commitment and sheer determination to promote the open access agenda. I've ensured JISC promotes a reasoned and informed approach - there are some people whose enthusiasm exceeds the bounds of reasonableness and that taints its image.

Personally - I've brought up a couple of kids who seem to have done okay and I'm very proud of them. I'm also proud that I have a reasonable international reputation. Having an international outlook is increasingly important. **JN**

# PROFESSOR MARTYN HARROW NEW JISC FOR NEW TIMES



Martyn Harrow joins JISC at a time of unprecedented change. The UK's research and education institutions are being stretched and having to adapt to a new financial landscape.

Martyn's passion for technology is clear but what comes across even stronger is his passion and commitment to people. "It is the people who we serve in colleges and universities who we need to put at the centre of the future JISC and it is our own people within JISC that will make that happen."

Martyn is four months into his role as executive secretary of JISC and is tasked with implementing the recommendations from the independent review of JISC, carried out in February 2011 by Sir Alan Wilson on behalf of the Higher Education Funding Councils for England (HEFCE). One of the principal findings was that





there is no comparable body to JISC within the UK, and internationally its reputation is outstanding as a strategic leader and partner. The review concluded that 'JISC is an invaluable national resource which has evolved in response to increasing demands over 20 years' but needs to reshape for the current economic times.

"I can't think of a job I would rather be doing," says Martyn. "We are going to make the UK the go-to country for education and research by playing a major part in delivering the best digitally enabled student and researcher experience in the world."

As a previous customer of JISC, as Director of Information Services at Cardiff University, Martyn's insight into how JISC operates and delivers for its customers means he knows JISC's past strengths and also the areas where beneficial change could be brought about.

"For me, part of JISC's success is because of the relationships it builds. Our people work hard to foster the best possible relationships with universities, colleges, our partners and funders.

**"JISC is the envy of the world," says Martyn. "My aim is to build on its strong heritage and to reshape it for new times."**

JISC's success in the future will be down to how these relationships work seamlessly to co-invent with our customers what they need and work together to make it happen."

Martyn's background in both the private and public sectors puts him in a strong position to bring a more business-minded approach to JISC without changing the core values and ethos, that make JISC the collaborative and inclusive organisation it is today.

Martyn's early career centred in local government where he became Senior Principal Management Services Officer at Avon County Council; subsequently his career majored on global roles as Chief Information Officer for several international operating companies within Unilever. At various times he was responsible for IT across the USA, Europe, Africa, the Middle East and Asia. Before joining Cardiff University, Martyn was Vice-President, IT, for a global food and fragrance company within ICI. 

Find out more about JISC's transition at <http://www.jisc.ac.uk/aboutus/hefcereview.aspx>

# TOMORROW'S TECHNOLOGY, TODAY



2012 Olympic Stadium, London

Podmajogini / Shutterstock.com



When the UK last hosted the Olympics in 1948, the BBC bought the most up-to-date broadcasting equipment available. The new cameras were set up at the Empire Pool and the first ever outside broadcasting truck was filled with the latest technology.

### Super Hi-Vision

The London 2012 Olympic Games will again showcase the use of new technology in practice, marking the first truly digital Games in the UK. In September 2010, we reported that Janet had taken part in a first-of-its-kind broadcast of Super Hi-Vision TV, in collaboration with the BBC and NHK in Japan. The trial, which involved the broadcast of a live Charlatans gig to a Japanese audience, was made possible by high-speed network connections to Tokyo using parts of the Janet, GÉANT (European) and NTT (Japanese) networks.

The Super Hi-Vision technology, 16 times the resolution of normal full HDTV, has been developed by Japanese public broadcaster, NHK. In 2012, the Janet network will be used to broadcast key moments of the Games in Super Hi-Vision at locations in London, Bradford and Glasgow.

Janet will also be enabling the BBC and NHK to broadcast the stream outside the UK and around the world. The high bandwidth stream will be simultaneously transmitted around the world, in easterly and westerly directions. International Research and Education Networks are working with Janet to ensure that the Super Hi-Vision stream can be broadcast to live sites in Japan and Washington DC, USA during the games.

"We are extremely pleased to play a key role in enabling such a historic event. It's been a privilege to work with the BBC and other organisations to implement this technology for the 2012 Olympic Games," says Tim Boundy, Applications Development Manager at Janet.

### Wi-Fi visualisation tool

All major national events see an increase in demand on the network and we anticipate that the Olympics will have the same impact. In 2011, we reported on a new tool, developed at Loughborough University, which provides an almost real-time indication of wireless usage and provision on campus, implemented via the Google Earth plug-in. The tool, which evolved out of a research project involving Ramesh J. Baskaran and his supervisor Dr Iain Phillips, is of use to both technicians and management.

As a management information tool, along with the supporting log files and graphs, the system can inform the installation of more wireless access points (APs) or the upgrade to higher density 802.11n APs.

A displayed map of campus provides an at-a-glance view of the wireless usage in different buildings, which can identify areas of oversubscription. Users can select locations, and a count of APs and the active users in that

building will immediately be displayed. The system supplements additional data, analysing the student usage of wired versus wireless access within halls of residence, and this management information informs the future provisioning decision of whether or not to continue to provide wired access in halls or to provide wireless only.

Matthew Cook, Network & Security Manager at Loughborough University, noted at the time that this information is "becoming even more important as we prepare for the Olympics in 2012, and the focus on the roll out of additional access points to improve the student experience which Loughborough is famous for". (Loughborough is the official preparation camp for Team GB in the forthcoming Olympics.)

### Broadcaster

In addition to these different technological developments, Tim Marshall, CEO of Janet, also has a long history of broadcasting with the Olympics.

In 2004 and 2008 Tim was seconded to the Athens and Beijing Olympics broadcasting organisations, with responsibility for the quality of international TV coverage.

In 2012, Tim will have responsibility for outside broadcasting of the games in London. **JN**





Sheppard Library, Middlesex University



# SPOTLIGHT ON: PAULA VICKERS

Paula Vickers was appointed Director of Middlesex University's Computing & Communications Systems Service (CCSS) in 1998 following an internal reorganisation, which brought together the University's Computing Service and its Management Services.



**When you assumed the post as Director of CCSS, what type of IT landscape were you faced with?**

When I first got the job we had three different suppliers for PCs; we separately tendered every cabling job; we had disparate technologies for our server environment. It struck me that cost savings and improved efficiencies could be gained from consolidating contracts, as opposed to making suppliers compete with one another at the point of sale for every unit/task we wanted. And, where we are now is an extension of that.

Now we have more centralised, standardised contracts, and are delivering more cost effective services without damaging academic freedom. This is being done with fewer staff, which was always on the cards, and thankfully my staff have understood and accepted this approach, and worked with me to make it work.

**That's an impressive level of staff engagement – how did you achieve this?**

We had a number of quite technically complex transformation projects that involved external suppliers, so I had to free up my most technically skilled staff to work with the suppliers, to gain knowledge in the new technology being implemented. This meant I had to backfill these roles with my more junior, less technical staff.

Stepping into those vacated roles meant that they acquired different knowledge – both technical and business knowledge. Once they had done this they didn't want to return to their previous roles. So, when I restructured the service to remove those less technical roles and offered new roles, they had the skills to move on.

Staff developed this way tend to be more open minded to different ways of thinking and working. This also created space for suppliers to come in take on those more routine, less technical tasks.

"Sometimes, outsourcing is not cheaper - but often it can produce better value for money ... I got 24x7 pro-active monitoring and response for the same price. In-house, I could never have afforded what we now have."

CONTINUED ON PAGE 20 >>>





Rickett Quadrangle, Middlesex University

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### What was involved in re-shaping the CCSS model of working?

The first thing I did as head of service was bring our desktop contracts together to be delivered by one supplier. We now design the service and work with the supplier to deliver it.

You have to be less precious about 'your things'. We have a contract with IBM for an offsite data centre. Is it important that the data centre sits on our space? No, though many universities I speak with seem to think they will get business advantage from having the data centre on their premises – I am doubtful of this. What's important is that I can get access when I need to and that there's a properly secure process for doing so. There are features of the service that are very important to me – but running it is not.

It's the same with the server infrastructure. Do I want my staff patching and monitoring servers every day? No, I want them looking at single sign-on, further developments of Active Directory, working with the user community to provide seamless access to services.

You also have to be careful to outsource the right stuff. We have a partner in India who started helping with data entry on applications, and were cheap and efficient. They had the capability to provide IT helpdesk, so we trialled outsourcing some of the more routine IT helpdesk tasks, this worked well, so we are now looking to see what else they could help with. It's a step-by-step process.

"Now we have more centralised, standardised contracts, and are delivering more cost effective services without damaging academic freedom."





The Grove, Middlesex University

### Where does the future lie – managed services, outsourcing or the cloud?

We are happy to embrace either cloud, managed services or outsource, if it's appropriate to us. What we need to do is be the design authority, working with the user community and the supplier to craft the solution that's right for the university – but not necessarily to deliver it, unless we gain business advantage from doing so.

Sometimes, outsourcing is not cheaper – but often it can produce better value for money. My costs didn't go down in tendering – in fact they stayed roughly

the same – but I got 24 x 7 pro-active monitoring and response for the same price. In-house, I could never have afforded what we now have.

Our entire server estate is now more than 90% virtualised. However, we bought our own equipment because we weren't mature enough to go for an entirely cloud-based service, and cloud-based services weren't mature enough either at the time. We didn't know how many virtual servers we would need, how much capacity etc. So we're in a good position to move the entire virtual estate into a cloud service.

I don't believe cloud services are the panacea for everything, but where they are, it is important they are supported by detailed service operations manual and other documents detailing pricing, security controls, exit strategy and so on. The challenge for universities is to get to a level of maturity in their own service and operations management to be able to approach the market with clear, mature processes so they can engage with these new cloud services.

### This is an ideal moment to ask about your thoughts on Janet Brokerage

Had the service been available back in 2009 I would have definitely been interested – although I would still want separate Janet links to the production and disaster recovery data centres, as I do now, to avoid clogging up my campus internet links with data passing between production and DR systems.

I think the Brokerage is a great resource for the community and it's where universities should be. I say this not just because I am now a member of the Janet Brokerage Advisory Board. I genuinely don't think we should be in the business of building, monitoring and managing servers and server rooms 24x7.

If suppliers can offer attractively priced data centre solutions, connected to Janet and also understand higher education, fantastic. When you're giving someone your crown jewels – and my servers and systems are crown jewels – you want to know they're in safe keeping! Everything a university does now is so dependent on IT, so it's great that Janet are working with the Brokerage suppliers to make the move as painless as possible. **JN**



# CHAMPIONING INTERNATIONAL COLLABORATION

A direct link between the UK and China has been present for almost 15 years, evolving from a direct peering of 2Mbps, to high speed links over a thousand times that capacity,

Between 2007 and 2010 the ORIENT project provided the first high capacity link between GÉANT and the Chinese education and research network (CERNET), enabling innovative EU-China research and education collaborations to flourish.

This link has been maintained and will be further developed by the ORIENTplus project which will run until 2014. Janet is a leading member of the consortium of European partners

who have been working with DANTE (the providers of GEANT), CERNET and Chinese Science & Technology Network (CSTNET) to make this happen.


The ORIENTplus link is available to all European and Chinese research and education institutions. The connection between London and Beijing provides a capacity of 2.5Gbps, enabling European NRENs to improve European communications with the Chinese research and education sector.

The key objectives of the project include upgrading the link during the term of ORIENTplus to meet growing

capacity demands from end users, and providing a wider range of services. Once upgraded, the ORIENTplus link should operate in a hybrid mode, to carry both IP and point-to-point (Janet Lightpath) services.

We're aware of a number of significant collaborative projects that are using the link but we'd be interested to hear how the rest of the Janet community is making the most of the international connection. If you're planning, or currently involved in, research projects with Chinese partners please get in touch with us. Whether your projects

are problem-free or you'd like more support with your connection, contact Dr Baoyu Wang (see details below).

We understand the increasing importance of 'trans-national education' to our community and how this represents a significant part of our members' business. Reliable end-to-end connections are critical to business continuity, but these connections can be expensive and difficult to obtain in certain countries. It's certainly worth utilising research and education networks wherever possible for reaching international campuses before implementing an investigation for commercial arrangements. 

For further information about ORIENTplus and Janet's involvement in supporting UK universities to connect international branch campuses, please email Dr Baoyu Wang on [baoyu.wang@ja.net](mailto:baoyu.wang@ja.net).



The University of  
**Nottingham**

UNITED KINGDOM · CHINA · MALAYSIA

## Nottingham goes truly International

Janet has been working with the University of Nottingham, which has campuses in China and Malaysia, to review their international connectivity requirements. The primary focus was to identify how the University could reduce the cost of running connections between campuses.

"We've been testing the Janet Videoconferencing Service via the Janet, GÉANT, ORIENTplus and CERNET networks, to connect with the University's Ningbo campus in China," said Caroline Gregory, Head of IT Support at the University of Nottingham. "We've also tested Janet's private peering with a Malaysia ISP to

enable videoconferencing with Nottingham's other campus in Malaysia."

Initial testing has provided positive performance statistics, which are comparable to those provided by the incumbent managed service supplier.

The results have been discussed with the University of Nottingham who are currently reviewing their requirements for videoconferencing as well as their needs for transmission of data and accessing other core services. This will require a review of data security and ensuring SLA arrangements are fit for purpose.



janet for research

# WORLD CLASS RESEARCH – WORLD CLASS NETWORK

Supporting research is at the heart of what we do at Janet. We can trace our roots in this back to the mid-seventies, when two reports published by the Universities and Research Councils' computer board recommended the construction of a national university network. These two reports, known as the Wells reports, outlined a vision that is still central to Janet's mission – enabling world-class science to be undertaken within the United Kingdom.

We have come a long way from those early days where 300 bits per second was considered blisteringly fast. Nowadays universities and research institutes are regularly connected to Janet at one billion bits per second (1 Gbit/s) and the Janet backbone has the capacity to carry 100 billion bits per second (100 Gbit/s).

For more than two decades the Janet network has enabled UK researchers to be involved in global collaborations and engaged at the forefront of scientific exploration. One notable example of

this is the much talked about Large Hadron Collider (LHC), at CERN on the Franco-Swiss border. A significant proportion of the data generated by the LHC is held at the Rutherford Appleton Laboratory in Oxfordshire and distributed onwards via Janet to physics departments around the country.

#### Guaranteed network capacity

This data is sent from CERN to the UK via the Janet Lightpath service which guarantees that a set amount of network capacity is available to

transmit data across the UK and Europe via GEANT. This dedicated capacity enables the LHC to distribute the analysis of the petabytes of data the LHC experiments generate across the physics community. The Lightpath service concept was developed as a direct result of requests from the scientific community for 'special purpose bandwidth' and is used across physics and other scientific disciplines.

#### Planning for the future

You may have heard the phrase 'data deluge', and have seen a dramatic


increase in the volume of scientific data that is being generated, for example by next generation genome sequencing technologies. This incredible growth in data, generated by various scientific disciplines, is a key driver in both the planning for the next generation of Janet, and the e-infrastructure initiative<sup>1</sup> announced in December 2011.

Both of these activities are underway now giving us a fantastic opportunity to invest in a robust and ultra-fast network to enable new scientific research as well as to lay the deep networking foundations for data-intensive science.

<sup>1</sup><http://nds.coi.gov.uk/content/Detail.aspx?ReleaseID=422307&NewsAreaID=2>

### Janet Research conference 2012

This tradition of responding to research requirements continues today, and will continue into the future – which is where we need you. Janet is holding a conference in June 2012 that will offer you a great opportunity to come and talk to us and see how the new Janet network and e-infrastructure initiative will benefit you and your organisation.

More news will be published via the Janet website, and you can follow us on twitter. Who knows, maybe Janet has helped in finding the hitherto elusive Higgs-Boson! 



Follow us on Twitter  
[@Janet4Research](https://twitter.com/Janet4Research)



## World Class Research – World Class Network

The Royal Society, London – 21 June 2012

In June 2012, Janet is holding an event for the research community to discuss the capabilities that Janet6 will provide. One of the key themes of this conference is around collaboration and strategic planning to understand how Janet6 might support your research needs.

Procurement for the new Janet6 network is now well underway with an opportunity to add extra capability through the national e-infrastructure programme of work announced in Autumn 2011 by the Department for Business, Innovation and Skills.

### Exploring strategic requirements

During this event, you will have the opportunity to:

- Understand the capabilities and services that Janet6 will offer to support your research
- Discuss your requirements with Janet experts who understand the network and its services

Janet6 is being designed to support evolving network services with a forward look of between five and ten years. We want to work with you to explore how your requirements can be matched to Janet6 services. To achieve this, your support is essential in helping us to understand the strategic network requirements in your disciplines.

### Who should attend

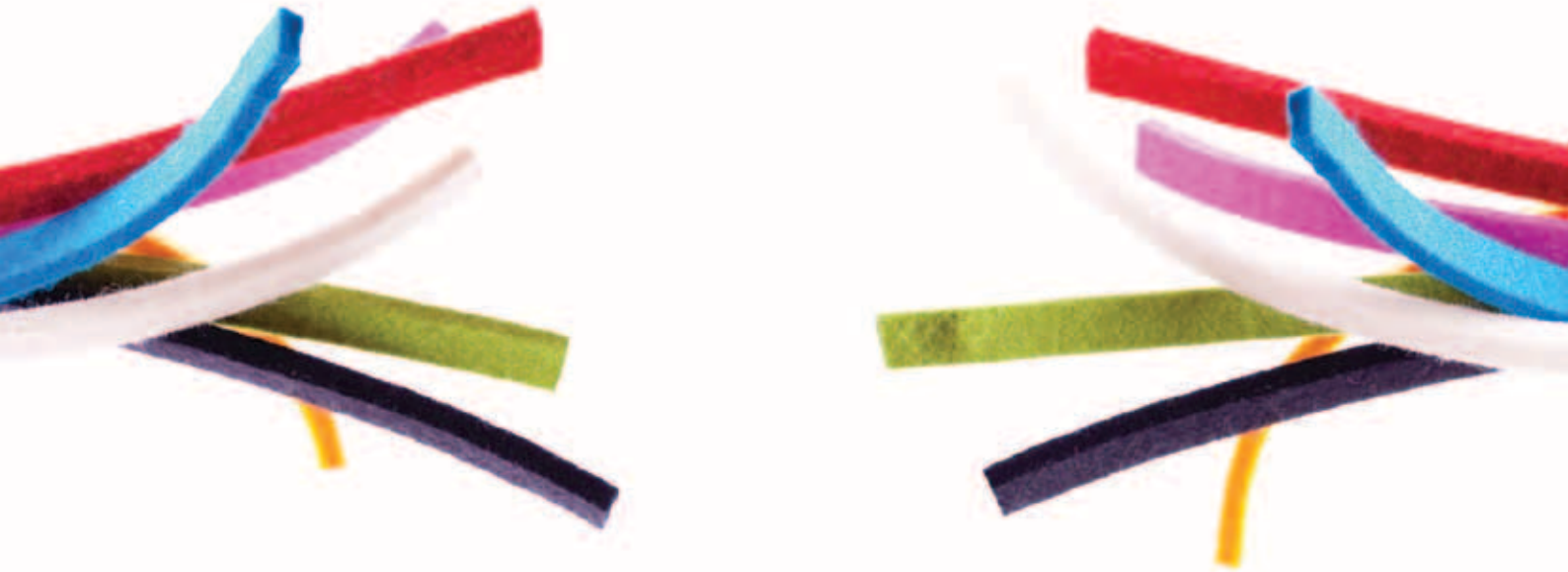
This event is aimed at research and support staff with an interest in network services and the way they support national and international research collaboration. It would also be useful for senior staff with responsibilities for research management and planning.

### Programme highlights

- Overview and status of Janet6 project and likely network structure and capabilities
- Relationship to the e-infrastructure initiative and implications for the network environment

To find out more and to book your place visit:  
[www.ja.net/services/events/2012/events\\_calendar2012](http://www.ja.net/services/events/2012/events_calendar2012)


**janet** for research



# PLANNING FOR THE UNTHINKABLE: BOOSTING YOUR NETWORK RESILIENCE







## It's an unfortunate fact of life that faults happen and network connections can break. A network outage is going to have major repercussions for the business continuity of any institution. For institutions considering cloud based services, network resilience will be crucial.

The Janet infrastructure provides a stable and reliable network service, that is designed to be robust and resilient. However, any individual connection will be vulnerable. Janet statistics from the last five years demonstrate that on average, an institution will suffer a

network outage approximately once every two years. Typical outages range from between one to five hours.

But these are averages, you may not be average. The spread is wide and up to 4% of organisations have suffered

outages of over a day, with two or three days also a possibility and longer periods, whilst rare, are not unheard of. With over 1 000 connections on the network to over 800 organisations there are typically 25 circuits down for more than 24 hours each year.

### What goes wrong

Using Janet statistics from the last five years, the table shows the major reasons for network outages that are external to a customer site, and the percentage of down time due to these outages.

If you are happy with the service being down for a day you probably won't need worry but if not then it's time to consider how to increase your network resilience.

How long can you really afford to be without network access?

Reasons for network connection outages	Percentage of down time
Telecom company connection related failures	80%
Maintenance (scheduled, unscheduled, emergency)	10%
Power failures	5%
Equipment failures	4%
Other issues	1%

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## Hardening networks

Resilience is the ability of the network to provide and maintain an acceptable level of service in the face of faults, misfortune and challenges to normal operation. Network resilience is about how the network reacts in a failure situation.

The table on the previous page shows that the major cause of connection outages is the telecoms line, so adding a second connection would dramatically increase resilience. In fact, if one connection were just 99.7% available (26 hours of downtime a year), a second connection with only the same reliability would increase the overall availability to 99.999% (the often quoted 'five nines').

Landing a second connection on separate equipment (a router, switch or firewall) would increase resilience by limiting the impact a hardware failure would have on the total network.

Providing multiple power feeds and uninterruptable power supplies (UPS) would also provide significant improvements. Around 80% of the reasons reported for the loss of connectivity due to local site problems are due to power issues. In addition, power surges are one cause of equipment failure, therefore surge and UPS protection will also reduce this type of hardware failure.

## Seven steps for assessing the resilience of your network connection

### 1. Draw a big diagram

Know your network: how is it all connected?

### 2. Ask your service providers how their networks are connected

Are they resilient?

### 3. Conduct a business impact assessment

Which systems are critical and where are the single points of failure?

### 4. Review the power options

Will uninterruptible power for critical systems keep essential services running?

### 5. Consider a second network connection

Between road works, building projects, the weather and power outages, anything can happen to your connection at any time. Telecom line outages are so much more likely than internal equipment failures.

### 6. Ask that question

If cloud computing is core to your business how long can you really afford for network access to be unavailable?

### 7. Test it

Where you have implemented resilience options, does it actually work? Test it when you make changes or at least routinely, once a year. If you're brave enough, test it during production service times, not just during the quiet of a weekend or the dead of night.

However, resilience is not just about duplicating everything; rather it is looking at the overall picture, identifying the greatest risks and reducing the number of single points of failure. It's not always the obvious that catches you out. Some examples to be aware of where resilience wasn't what it was thought to be:

- multiple lines sharing the same ducts: one JCB or a hungry rat can take out both connections.
- lines terminating in the same telecom equipment: one poor component or a 10p fuse that decides it's too old for this world and both connections are lost.
- equipment being powered further up stream from the same electrical breakers: one power supply blowing in one piece of equipment can cause a sufficient spike to trip the breaker feeding other equipment resulting in lost resilience.
- increasing complexity: network system configurations may not work quite the way you expect, or engineers may not quite understand how it's all meant to work and take inappropriate action – this is especially true when 'things have never gone wrong before'.
- spaghetti junction: how tidy and well organised are your network racks? Poor house-keeping and bad practices introduce significant delays in the diagnosis of faults and the recovery of services.
- financial pressures: 'Our primary link is very loaded. Why can't we run traffic over that second link, it's redundant, isn't it?' Using the second link for 'spare' capacity does not work: any resulting congestion in a failure situation means you don't have a resilient network. **JN**



# PRIMARY NAMESERVER SERVICE

Web presence and email have become mission critical to an organisation's business, so losing a core element of your connectivity to the outside world would be detrimental to your reputation and your users' productivity. Ensuring a continuous web presence and email is heavily dependent on a reliable DNS service.

With the increased need for resilient IT services balanced against an ever squeezed IT budget, IT Managers are looking ever harder for cost effective solutions to preserve their organisations' web presence and email in the event of an emergency.

Having almost ten years' experience running a Primary Nameserver Service for the research and education community, we're ideally placed to help meet the challenges IT managers face in providing DNS resilience in the event of an emergency.

Over 130 organisations from across the Janet community trust us to host and/or manage their DNS. More than half of these organisations come from the FE and Specialist College sectors.

Have you considered incorporating the Janet Primary Nameserver Service into your Business Continuity Plan (BCP)? [JN](#)

If you're interested and want to discuss your requirements with us please contact the DNS Team by emailing [Service@ja.net](mailto:Service@ja.net)

The basic service not only offers a fully managed DNS solution, but through recent enhancements administrators can access and edit their organisations' own DNS records securely rather than having to send the request to a Janet operator.

This enables administrators to change their DNS records quickly whenever they need to and schedule changes outside normal working hours. At the same time, the interface brings two additional benefits for an organisation's resilience.

## 1. Backup primary nameserver

It provides backup for an organisation's local nameserver. In the event that the local nameserver becomes unavailable, they can access the copy of their DNS records on the Janet Primary Nameserver and make it the master server.

## 2. Automatic failover

It can be used to ensure a continued web presence. In the event that an organisation's main web site is down, the traffic to that site will be redirected to a preconfigured alternative web site in a relatively short time.

"We at Leeds use Janet Primary DNS service as a backup primary DNS server. It worked very well in three occasions we used it to redirect our institutional website to an offsite backup server. We like the simple interface and easy operation."

QIN LI, INFORMATION SYSTEM SERVICE, UNIVERSITY OF LEEDS



# THE EVOLUTION OF TELEPHONY FROM ISDN TO IP

With squeezed IT budgets, institutions are looking for innovative and cost-effective ways to consolidate their communication services. At the same time, technology is evolving in ways that enable efficiencies, particularly in the area of telephony.

Traditionally, telephony services have been provided on a fixed line basis. Organisations deployed enough ISDN circuits connected to the Public Switched Telephone Network (PSTN) to meet the demand of their users. Unlike in a domestic environment, the number of physical channels is not one per telephone, but typically circa 3-4 handsets per ISDN circuit. This figure is extremely variable as it depends on the nature of the business and the usage in a particular area e.g. a call centre compared to an internal support function.

## Voice over IP (VoIP) technology

Organisations have been keen to embrace technologies that remove the need for these expensive ISDN circuits, by making use of VoIP technology enabling them to move some voice traffic off their ISDN circuits and onto

their IP network. Many organisations have moved their internal voice traffic onto their local data network, in that the majority of handsets now use local data networks to connect to an IP capable PBX. A significant number of customers make use of "Over the Top" VoIP services such as Skype, enabling them to use their Janet connection and the wider Internet to communicate without incurring cost.

## SIP Trunking

As network capacity grows and technologies evolve, research and education organisations are now looking to use their Janet network connection for their telephony requirements. In particular, they are seeking to connect their PBX equipment to a SIP Trunking provider who subsequently provides centralised PSTN connectivity. So instead of calls breaking out onto the PSTN at the organisation,



the calls route over the network, onto the SIP provider's network and breaks out onto the PSTN centrally.

A popular, pragmatic approach to the transition to SIP, involves sites using SIP Trunking along side traditional ISDN circuits. Typically this may be to introduce a failover telephony service in the event of an ISDN outage, or to introduce more lines at peak times such as Universities' clearing process, or other predictably busy periods. Importantly, the flexibility of SIP Trunking means that these lines can be removed when they're not required, so unused network capacity is not lying dormant.

As a case in point, the SIP Trunking process is proving useful for us at Janet – we're using this technology to connect two of our offices to a single PBX, eliminating internal call costs and avoiding extra line rental costs. We also

see the appeal to institutions in linking different campuses.

As SIP Trunking becomes more established, a full migration is likely to appeal. Best practice might be to leave a handful of ISDN circuits in place for disaster recovery and business continuity purposes.

Institutions considering a move to SIP Trunking are advised to discuss the location information for emergency services with their preferred supplier. Some location information may not be passed to the emergency services and the amount and type of data transferred is often different among providers.

### Cloud

Alongside SIP Trunking, we have also seen demand for cloud PBX services. Moving the PBX to the cloud essentially removes the need to

procure, install and maintain on-site PBX equipment. This should result in lower overall cost of ownership and increased flexibility of adding or removing telephone extensions.

From our discussions with different organisations, it's clear that call charges from fixed line telephones to mobile telephones make up the largest part of the per-minute spend on telephony services. Institutions are eager to understand how this cost can be reduced and how Janet can assist in providing a telephony solution.

We're formally engaging with the telecommunication providers market to understand how these emerging customer requirements can be best fulfilled. If you want to share your experiences or have any comments, please contact Roger Bolam in the Strategic Programmes team at [roger.bolam@ja.net](mailto:roger.bolam@ja.net). **JN**



James Mcloughlin,  
CSIRT Member, Janet  
Email: irt@csirt.ja.net

# BEING MOBILE SECURITY SAVVY

Like many who work in technology, I love my coffee. Recently, my choice of coffee shop has been determined not by the cost or quality of coffee, but whether or not free WiFi is available.

I've come to notice that there are increasing numbers of people frequenting my coffee shop who, like me, have a mobile device – be it a tablet or smartphone – that connects to the Internet at the click of a button.

This got me thinking about mobile computing security, and how accessible data has become – it takes seconds to connect to the Internet with your smartphone, but minutes to login to a wired network with multiple password entries. A quick poll of the

people around me confirmed my worst suspicions; only one out of 20 WiFi users was aware of the dangers of mobile computing.

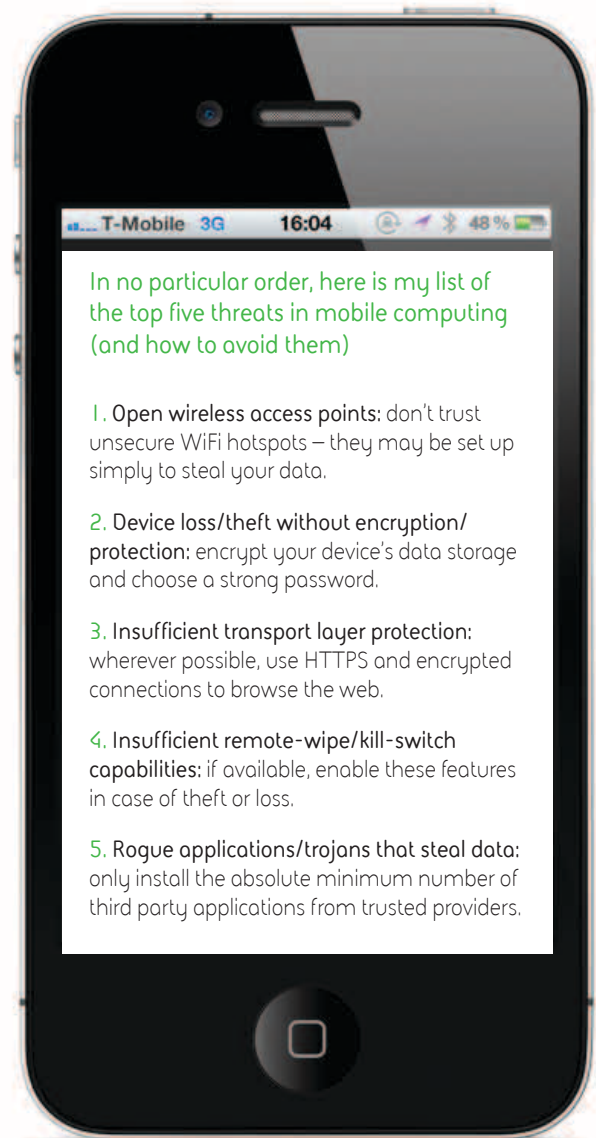
With the steady increase in mobile computing, are organisations doing enough to educate employees on the security risks associated with mobile computing?

If your organisation handles confidential or personal data, you should always use a VPN when connecting to the Internet

via an unsecured network. This method encrypts data over that connection, significantly decreasing the risk of data loss.

Ultimately, a balance must be met between enabling mobile working and minimising the security risks to the organisation's network and data. **JN**

For more information, read our wireless security factsheet, available at <http://www.ja.net/documents/publications/factsheets/040-wireless-security.pdf>







# UPDATING DATA PROTECTION LAW



Andrew Cormack,  
Chief Regulatory  
Advisor, Janet  
Email: andrew.  
cormack@ja.net

Were you online in 1995? The Mosaic web browser was just replacing gopher and archie as the way to find information about universities, Lycos was top search engine, Windows 95 was an exciting new operating system and Europe had a new law on protecting personal data.

The Internet and how we use it has changed a lot but Data Protection Law hasn't. In January this year, the European Commission proposed a new data protection law to catch up with at least some of the changes the Internet has produced in the past 17 years.

## Regulation v Directive

Perhaps the most significant change is what might seem an obscure

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alteration to the form of the law. The 1995 law was a Directive, the 2012 proposal is a Regulation. "What's the difference?" I hear you ask.

An EU Directive sets objectives that each national government must achieve using national legislation. Directives let member states decide how to achieve the objectives. A Regulation is legislation that applies directly to everyone in Europe in the same way.

The 1995 Directive has produced 27 significantly different Member State laws. Each law is then interpreted by separate national court systems and national regulators, creating even more opportunity for divergence. For anyone trying to move personal data across the continent, they're faced with a region that looks nothing like a single market! Not only would a Regulation create consistent legislation, the proposal also encourages national Data Protection Regulators to create consistent guidance and enforcement too.

### Working together, seamlessly

The current lack of consistency causes problems when we try to create common frameworks with other

**"The proposed Regulation recognises both the benefits and risks of an Internet that connects Europe with the rest of the world."**

National Research and Education Networks (NRENs). For example, when looking at federated access management for users and services in other countries, we've discovered that what seems the best legal arrangement in the Directive and UK law doesn't exist in several European countries' laws. It seems their legislatures thought it was either unnecessary or should be heavily restricted.

Teams responding to incidents on networks – most of which involve international traffic – have the same problem, made worse by contradictory legislation and court rulings on whether IP addresses are covered by data protection law at all.

A single, consistent, law for all 800 million Europeans should also be easier for cloud service providers to implement than the current patchwork of laws, perhaps reducing compliance concerns when using off-the-shelf services.

The proposed Regulation recognises both the benefits and risks of an Internet that connects Europe with the rest of the world. The Directive recognises a (small) number of countries as providing equivalent



protection for personal data and makes it difficult to send it anywhere else: the Regulation would offer more flexibility while still protecting personal data. Crucially for international research and education, it might even become possible to use the same approach for European and non-European users and services.

### Regulatory burden?

You may have spotted that this article hasn't mentioned the 'increased regulatory burden' that's in nearly every other headline about the proposal.

There is a change in approach – from relying on registration and enforcement to deliver data protection good practice to requiring organisations to prepare much more detailed documentation of what they do.

One issue that might concern network operations in particular is the requirement for all organisations to report security breaches affecting personal data within 24 hours unless there is good reason for delay. That's much sooner than is currently required of public communications networks – as the Information Commissioner has pointed out in his initial response to the proposal – and could even encourage organisations to divert effort to reporting a problem rather than fixing it.

### Timescales

The expectation seems to be that the proposal will now be debated and amended for at least two years before it becomes law. There will then be a further period for implementation.

Janet has been providing comments to both the UK Ministry of Justice and the European Commission on revising data protection laws since 2009 and we intend to continue to do so. **JN**

*If there are any other ways in which the proposal could affect your networked services, please contact me on [andrew.cormack@ja.net](mailto:andrew.cormack@ja.net) so that we can bring this to their attention.*

News about developments in data protection law can be found on the Janet Regulatory Developments blog at <http://webmedia.company.ja.net/edlablogs/regulatory-developments/tag/dataprotection>

twitter 

Janet Regulatory News  
is now on Twitter

As well as the existing website and blog, we're now providing brief pointers to legal and regulatory news relevant to research and education networking through Twitter. Follow [@Janet\\_RegReg](https://twitter.com/Janet_RegReg)



# DEVELOPING YOUR TEAM?

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Michelle Parish,  
Learning and  
Performance Institute

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Twitter: @janettraining or Tel: 01235 822242





# TRAINING CALENDAR

Janet runs a portfolio of one-day courses specifically written for the Janet community and delivered by experts working in UK education. Our high quality courses give you a chance to train with colleagues working in a similar environment. Courses are scheduled at locations across the UK throughout the year, and can be run at your organisation with our in-house service.

## Implementing a Shibboleth 2 Identity and Service Provider

27-28 June, Bristol  
21-22 August, Southampton

If you're responsible for implementing a Shibboleth 2 Identity and Service Provider and have system administration skills with either Windows Server 2003 or Red Hat Linux, this is the course for you.

The first stage of the course will focus on group work and lab sessions, where you'll install and configure a Shibboleth 2 Identity Provider. This will then be tested against a reference Shibboleth 2 Service Provider.

The course will then focus on the installation and configuration of a Shibboleth 2 Service Provider. With guidance from the course leader, and practical experience of integrating this with a web application's access control mechanism, this installation will then be tested against a reference Shibboleth 2 Identity Provider.

## Basic Networking for Service Desk and Support Staff

19 June, Birmingham

The network is no longer simply for the Internet, email and shared drives. It now connects the entire organisation: Building Management Systems (BMS), door controllers, streaming video, guest wireless networks, external partner collaboration, VoIP telephony, and remote access to name a few.

The format of this course will be to use a series of practical activities focusing on the key areas required to support the network. From configuration to diagnostics, and a look at new technology, the activities will improve your capabilities in reporting incidents and identifying problems.

## Managing IT Security

12 July, London

This course, led by Andrew Cormack, provides an overview of the security aspects of computer networks, from the managerial perspective and focuses on prevention, through to effective policy and procedures. Delegates will also have the opportunity to discuss issues with their peers and the course facilitator.

## Information Security Policies

13 July, London

Led by Andrew Cormack (Chief Regulatory Advisor at Janet), this course will benefit any managerial staff responsible for their organisation's information security. Information plays a part in almost all functions of research and education organisations, be it teaching, research, administration, employment or funding. The effective operation of all those functions depends on accurate information only being available to authorised users. Accuracy, availability and confidentiality are all components of information security.

This course takes a broad view of what is needed to achieve the necessary level of information security, concentrating mostly on people, processes and policies, not computers or networks.

For further information about all of our courses or to make a booking, visit <http://www.ja.net/training> or email us at [training@ja.net](mailto:training@ja.net)



# CUSTOMER ENGAGEMENT TEAM PROFILES



PAUL BEVAN

Paul joins Janet from the National Library of Wales where he was the Head of ICT and has over 10 years of experience working on IT-centric projects in the Welsh public sector. Based in Aberystwyth, he oversees customer engagement in Wales.

Connectivity is crucial to institutions in Wales but our geography is also an asset; Wales is small enough to collaborate and big enough for those collaborations to really make a difference. Cloud services are generating attention here, which has led to significant interest in Janet Brokerage as well as an increasing acknowledgement of the importance of resilient connectivity.

I'll be working closely with the PSBA team and their Network supplier Logicalis, together with the Welsh Government and all Welsh customers. I am a fluent Welsh speaker, have a PhD and (jointly) hold a Guinness World Record in Tree Hugging. I'm not sure which of these makes me prouder. **JN**



ANTONY MCKAY

Antony is based in County Durham and covers the North East, Yorkshire and Humberside Regions. Antony joined Janet from Ufi Ltd, having held a number of roles in UK-wide e-learning projects and brings over 10 years' experience in the education sector, from commercial, FE, Adult Skills and HE contexts.

The Janet community, whatever their guise or mission, tell me they face numerous challenges. These include safely navigating cloud opportunities and adopting shared services, but others are only just emerging. One thing we know is that a high-speed resilient network with responsive services, like Janet Brokerage, will be critical for success.

When I'm not working I spend most of my spare time outdoors, whitewater kayaking, mountain biking or backpacking. I also like to attend the occasional beer festival but I've yet to combine that activity with my sporting interests; probably safer that way. **JN**



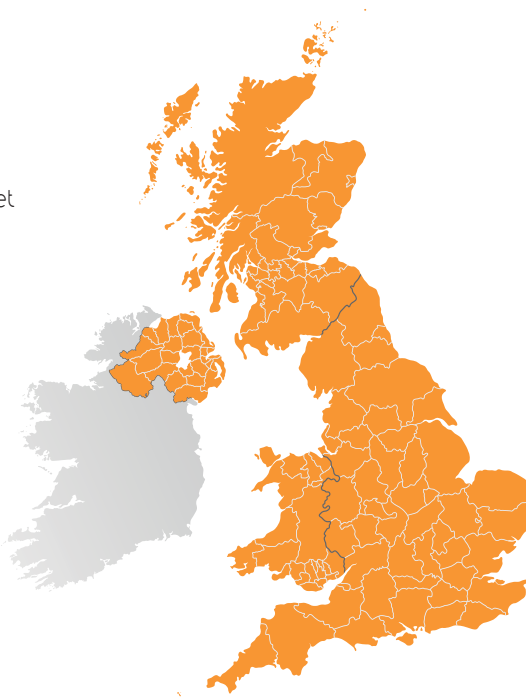
# CUSTOMER ENGAGEMENT TEAM



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