



Quarterly Report to the Community

August – October 2009

Editorial

JANET(UK) has published a paper: "[Outcome of Consultation with Users and Operators of Regional Networks: Improving the JANET Delivery Model](#)". The review was made to ensure that the model continues to serve customer needs, now and in the future whilst also improving overall value for money. Following the initial discussions with Regional Network Operators and the feedback received from customers, the paper responds to feedback from the community and describes the way JANET(UK) plans to move forward. [[More information](#)]

At the end of this quarter JANET's old Server Certificate Service was replaced by a new JANET Certificate Service. A simple online interface offers a range of new features that enable the automated processing of certificate requests, along with the ability to monitor and manage new certificates that are issued, and federated access for nominated contacts: once registered, nominated contacts will be able to access the service by authenticating with their home institution's Identity Provider rather than relying on the username / password combination provided by JANET(UK).

Network Access projects in the fields of Mobile IP and Location Awareness have completed their work, and deliverables have been published in the Development area of the JANET web site. Paradoxically, this important, ground-laying work will eventually become invisible in the background, taken for granted by users who simply assume they can gain their network access in any place and at any time.

As well providing the physical infrastructure of the JANET network and the JANET services that run over it, JANET(UK) maintains a combination of operational vigilance and active engagement in the regulatory process that provides the framework in which we all operate. A new blog on JANET(UK)'s activities in the area of regulation has been created and can be found at <http://webmedia.company.ja.net/edlabblogs/regulatory-developments/>.

The end of this quarter also saw the publication of the [JANET Report 2009](#): the definitive statement on how JANET(UK) has achieved its objectives within the last year and on its approaches to the future.

1 Introduction

This report broadly follows the sequence of the SLA (Service Level Agreement) between JANET(UK) and the funding bodies represented in JISC (Joint Information Systems Committee), for the financial year 1 August 2009 to 31 July 2010.

The numbering follows that of the SLA, and apparent omissions reflect the fact that there is nothing to report for this period.

2. Support Services (SLA J2.4)

(a) Documentation [[more information](#)]

Documents published between August-October 2009

Newsletters	JANET News 9
Reports	The JANET Report 2008-2009
Services	Videoconferencing The Benefits of Videoconferencing
Factsheets	Using Screen-Sharing Systems

(b) Workshops and Conferences [[more information](#)]

UK federation in Practice: Case Studies from the Community

Members of the community shared their experiences of implementing federated access management at a successful cross-sector event held by the UK federation on 14 October. Seventy two delegates listened to presentations from HE, FE, Schools and service providers that highlighted the different approaches required for each sector. 39% of delegates were from the HE sector, 13% from FE and the rest from sectors including Research, Schools, county councils and commercial providers.

As well as the service provider view, Nicole Harris gave an update on JISC-funded work on identity and federated access management within HE and FE, and Paul Shoesmith presented initiatives by Becta that are reinforcing its commitment to rolling out federated access management in the schools sector. It was also very encouraging to see how schools sector service providers are working to implement and promote federated access management, with Britannica, Just2Easy and EducationCity providing a small exhibition of their federated services.

Video presentations are available on the UK federation website. To be kept up-to-date with information from the UK federation or involved in discussions, readers can sign up to the mailing lists *UK Federation Announce* and *UK Federation Announce Discuss*.

JANET CSIRT Security Conference

Sixty nine delegates from the JANET community, 55 being from the HE sector, attended this event in London on 22 October. Topics included general sessions like "A shared approach to information security", "The value of security testing" and "P2P copyright infringement", and product-specific presentations from providers like Netflow and OWASP (Open Web Application Security Project).

Some presentations from the day are [available on the JANET website](#).

Exhibitions attended

JANET(UK) has attended several events and conferences in Scotland this quarter, including the annual members conference of Universities UK, the annual conference of SOCITM, and the Scottish Learning Festival.

(c) Network User Groups

The South East JANET Regional User Group did not meet over the summer.

The SWERN User Group met on 28 October 2009. The meeting heard about the latest service updates from JANET(UK) including plans for regional delivery of the network in the future.

(d) Security, Regulation and Policy [[more information](#)]

Over the summer there has been considerable discussion in the UK and elsewhere on how to deal with the illicit use of the Internet to breach copyright. JANET(UK) responded to a consultation launched by the Department for Business, Innovation and Skills and a subsequent ministerial statement, pointing out the limitations and side-effects of suggested technical 'solutions' and the success that JANET and its customers have had by dealing effectively with complaints of copyright breach. Our comments on proposals have also been sought by the UK and EU film rights-holders' organisations, and we have been working with the Internet Society on a position paper. We were also invited to attend a pre-draft consultation meeting with the Information Commissioner's Office on a Good Practice Guide to personal data online that will be launched for public consultation in December.

Within JANET(UK) discussions on security and regulatory issues have taken place with the new JANET Certificate service and with the JANET txt services re procurement. Discussions with the JANET Videoconferencing Service and Becta have resulted in a new [factsheet on screen-sharing systems](#) that suggests good practice in how to configure and support these types of application. Work has also continued on policies to link the UK Access Management Federation with peer federations in other countries: this was presented at the GN3 Symposium in Vienna and TERENA's REFEDs meeting in Rome.

JANET(UK)'s courses on "Computers, Privacy and Law", "Information Security Policies" (both Manchester) and "Managing IT Security" (Birmingham) were each presented once. Talks on privacy and networks were given at the NorduNET conference in Copenhagen and TERENA's CSIRT Task Force in Tallinn. Other meetings attended included ENISA's Permanent Stakeholders Group, LINX and the Annual General Meeting of the Internet Watch Foundation.

A new blog on JANET(UK)'s activities in the area of regulation has been created and can be found at <http://webmedia.company.ja.net/edlabblogs/regulatory-developments/>.

3. IP Services (SLA J3)

3.1 IP Service (SLA J3.1)

This reporting period has seen a total of 35 new or enhanced customer connections completed and brought into use:

Further Education

- Bridge College
- City College, Birmingham
- Exeter Royal Academy for Deaf Education
- The Grimsby Institute of Further and Higher Education
- Hartlepool Sixth Form College
- Hertford Regional College
- Highbury College
- Kendal College
- Kirklees College
- Macclesfield College
- Mid-Kent College of Higher and Further Education
- The National Centre for Young People with Epilepsy
- North Lindsey College
- Oakwood Court
- Orpington College
- Queen Mary's College
- Sparsholt College, Hampshire
- Thurrock Adult Community College
- Walsall College
- West Thames College

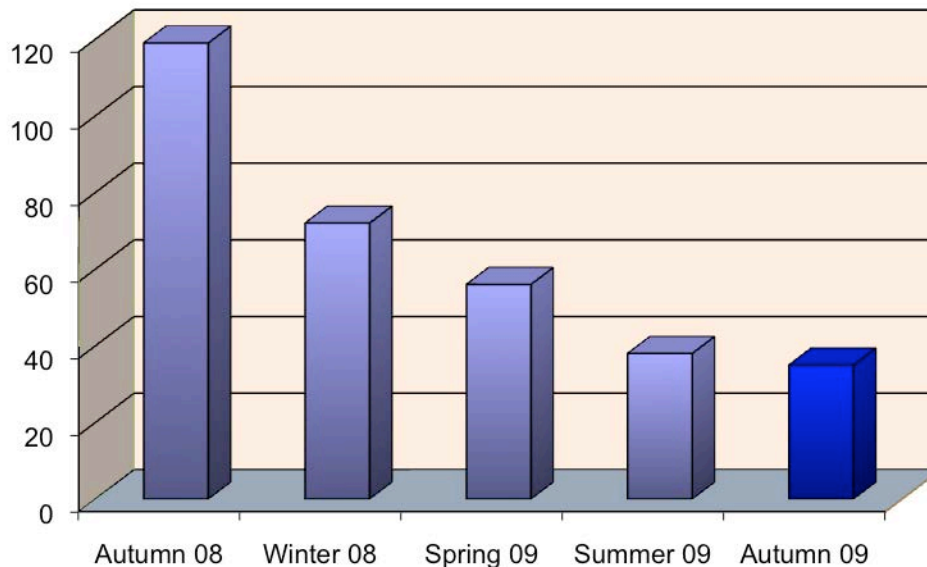
Higher Education

- Anglia Ruskin University
- Canterbury Christ Church University
- University College Birmingham
- University of Cambridge

Self-funded

- Ashridge Business School
- Bracknell and Wokingham College
- The British Library
- British Pathe Ltd
- CableCom Networking Ltd (for the provision of Halls of Residence connections)
- Energus
- Mid Beds District Council
- VT Group
- Warwickshire County Council

New or enhanced customer connections



For information regarding current upgrades or connections, please contact JSD at: connect@ja.net

A list of all primary sites connected to JANET may be found at: <http://www.ja.net/janet-sites/>

(b) FE

England

Work has continued on the capital-funded project to implement upgrades beyond 10Mbit/s. Upgrades have now been delivered to 332 colleges.

Wales

All 22 college connections have now been migrated to the new network.

(c) Core Network

Following the [issue related to the latest JUNOS release](#), a new patch to fix the identified bug was released during the reporting period. Two core routers were upgraded with the new release during October and no problem has been observed so far. Therefore, upgrading JUNOS on the rest of core routers is scheduled for the next few weeks.

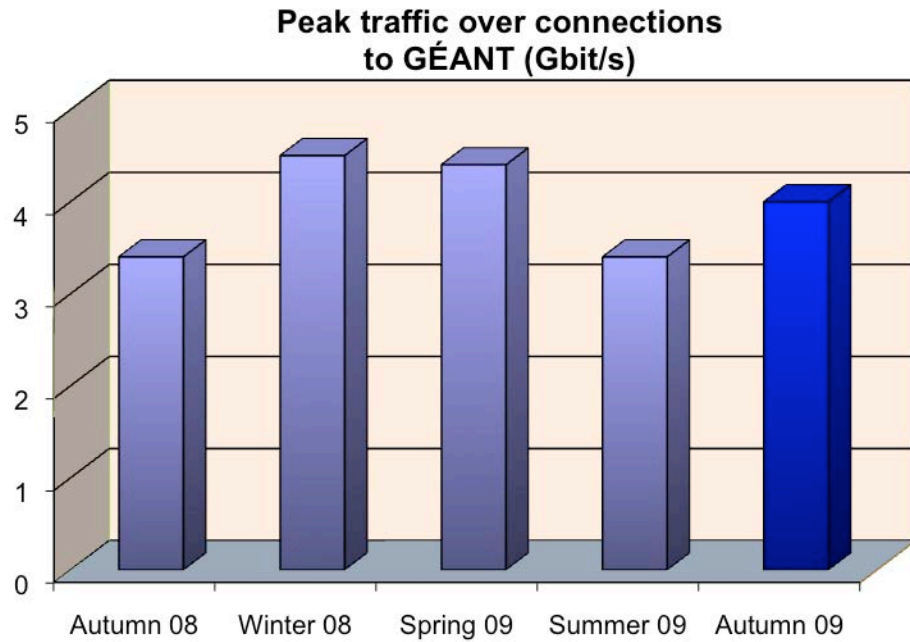
The core network remained stable during the reporting period despite a few circuit breaks with traffic rerouted automatically.

(d) External Network Access Provision and Transmission

(i) Access to the European Research Network

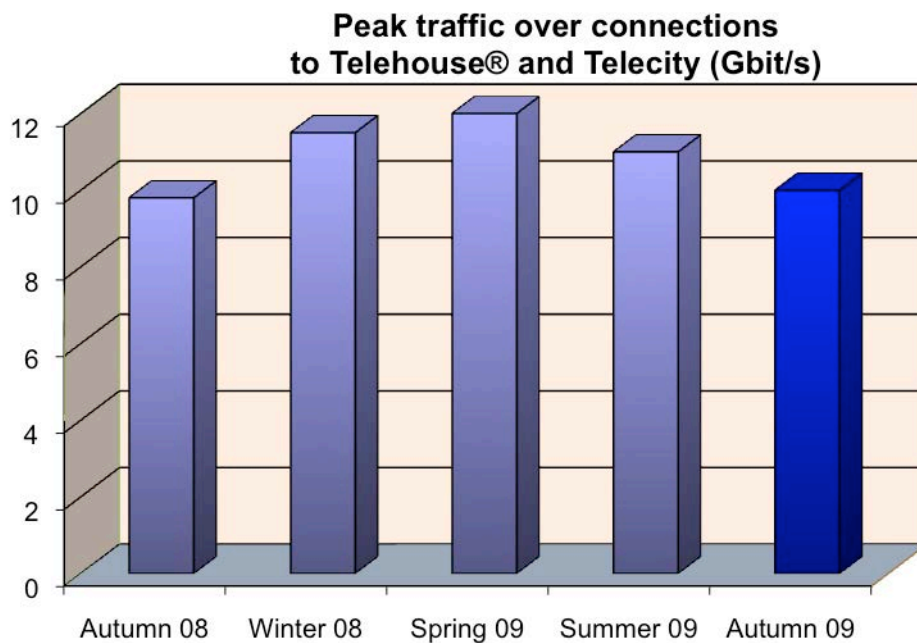
JANET access to European NRENs is via a 10Gbit/s connection to GÉANT from the Telecity R-PoP with a 10Gbit/s backup connection from the Telehouse® R-PoP. Peak traffic on the

connection is normally around 2Gbit/s but in the second week of October it peaked at over 4Gbit/s.



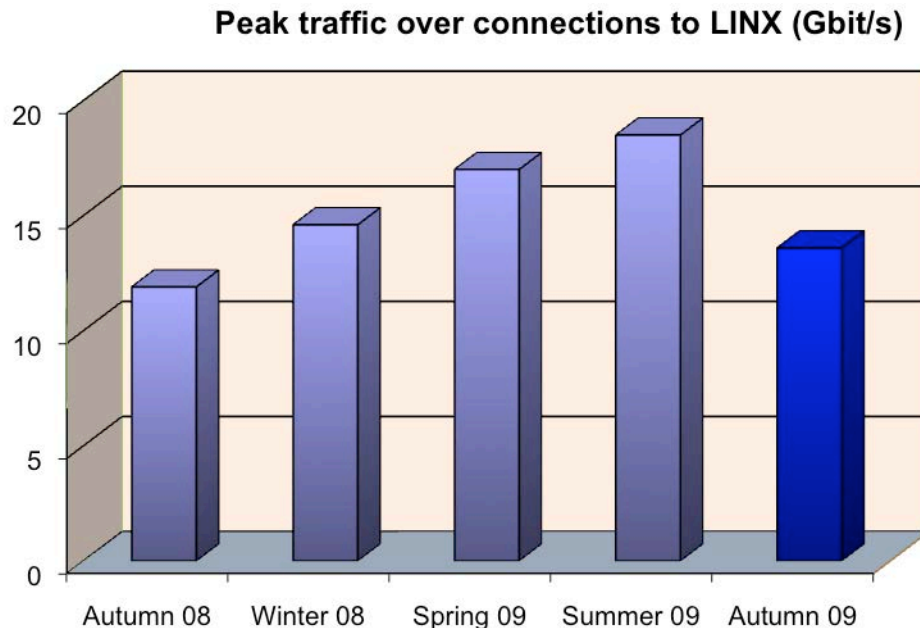
(ii) Access to the Global Internet

JANET access to the global Internet is via two global transit providers - TATA Communications and TeliaSonera. Each company provides four 10Gbit/s connection to two JANET PoPs at Telehouse® and Telecity in London. Aggregated peak traffic dipped over the summer break but was back to 10Gbit/s in October.



(iii) Access to the UK's Internet Exchanges

JANET access to the LINX (London Internet Exchange) is via four 10Gbit/s connections from the Telehouse® and Teleticity PoP locations. Aggregated public peering traffic peaked at 13.6 Gbit/s after the summer break.



(iv) Access to CERNET

All traffic to CERNET is now via GÉANT. The service was stable during the reporting period.

(v) Access to North American Research Internets

Services are provided via GÉANT and have been stable throughout the reporting period.

(vi) Peer Networking Agreement Administration

PUBLIC PEERING CONNECTIONS					
<u>Connection Point</u>	<u>AS No</u>	<u>ISP Name</u>	<u>Date of initial request by peer</u>	<u>Date all info received from peer</u>	<u>Date of accept/reject of peering agreement</u>
LINX	17451	Biznet Networks	28/07/2009	29/07/2009	03/08/2009
LINX	23148	Terremark	09/07/2009	31/07/2009	11/08/2009
LINX	42369	Lbi	20/07/2009	31/07/2009	11/08/2009
LINX	35916	Multacom	22/07/2009	02/08/2009	11/08/2009
MANAP	39925	Optimum Internet	03/09/2009	07/09/2009	05/10/2009
LINX	33920	AQL	24/08/2009	04/09/2009	09/09/2009
LINX	31290	Murphx	17/09/2009	05/10/2009	09/10/2009

3.2 Fault Reporting (SLA J3.2)

The JANET Service Desk handles the fault reporting function. Fault reports should now be made to service@ja.net.

3.3 Management of Maintenance Activities (SLA J3.3)

During the reporting period there were a total of 13 planned maintenance sessions. However it should be noted that there was a moratorium on any major service affecting work taking place for a number of weeks during the university clearing period from 20 August-20 September.

Major activities that took place included:

- Access links to Kentish MAN and have been upgraded to 10Gbit/s.
- New routers deployed at Leeds Metropolitan University, Inverness and Docklands Telehouse PoPs.
- Core router upgrades at Warrington and Leeds C-PoPs.
- Routers decommissioned and new routers deployed in TVN at Oxford University and Harwell PoPs.
- Various PoPs and routers decommissioned in Scotland due to GLOW-2 migrations.
- Line card replacement at Warrington due to hardware fault.
- New linecard deployed in EastNet at Cambridge University PoP.
- New 10Gbit/s circuits between Leeds-Edinburgh and Glasgow-Edinburgh brought into service.
- A number of connections moved to new interfaces.
- Regrade of JunOS in some of the JANET core routers.
- IOS upgrades to a number of backbone access routers.

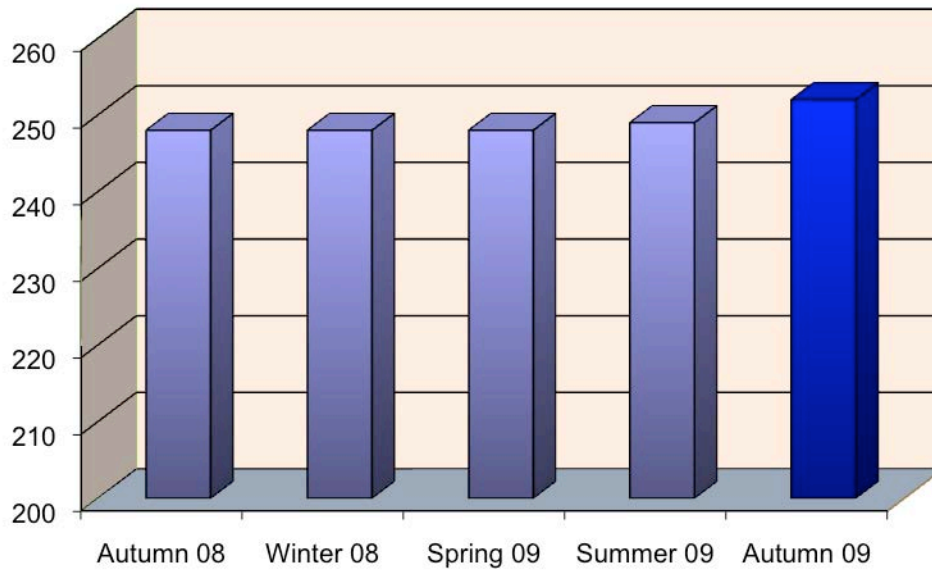
3.4 Network Status Information (SLA J3.4)

All 18 regional networks plus schools have been transitioned to the new Netsight system. The only systems yet to transfer are PSBA (Wales), UHI and SSDN, and their transition is underway.

3.5 Time Reference Service (SLA J3.5) [[more information](#)]

Three more sites registered to use the JANET NTP service during the reporting period. There are a total of 252 sites using the service. Overall, it is a stable and well-used service.

**Number of organisations using
the JANET NTP service**

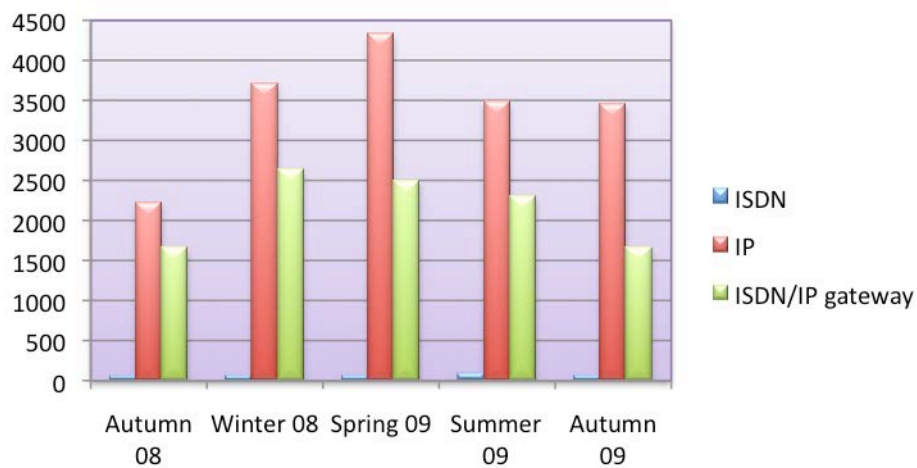


4 Application Services (SLA J4)

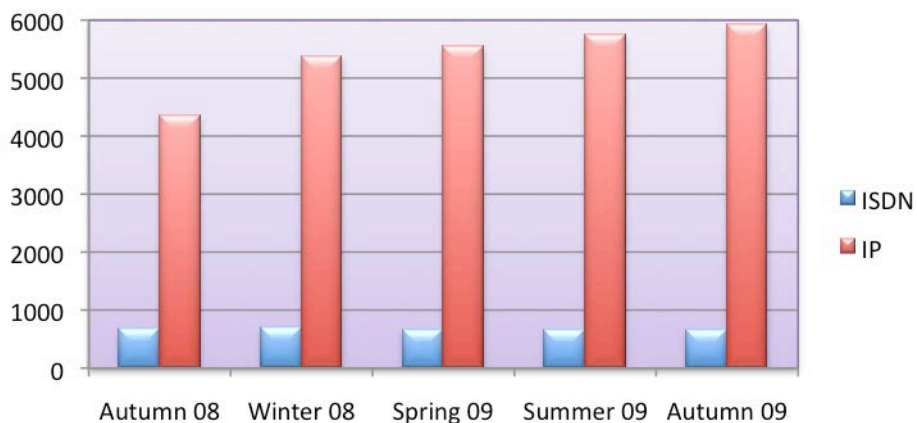
4.1 Videoconferencing Service (SLA J4.1) [\[more information\]](#)

The number of users of this service continues to grow steadily; currently 5923 of the registered venues are able to use the JANET Videoconferencing Service over IP (JVCS-IP) and 657 are able to use the service over ISDN (JVCS-ISDN). During the reporting period, 66 conferences took place using ISDN only over 142 hours, 3462 conferences took place using IP over 3828 hours, and 1665 conferences took place using the IP/ISDN gateway over 2283 hours. The overall statistical trend indicates an increase in the use of videoconferencing, particularly IP videoconferencing.

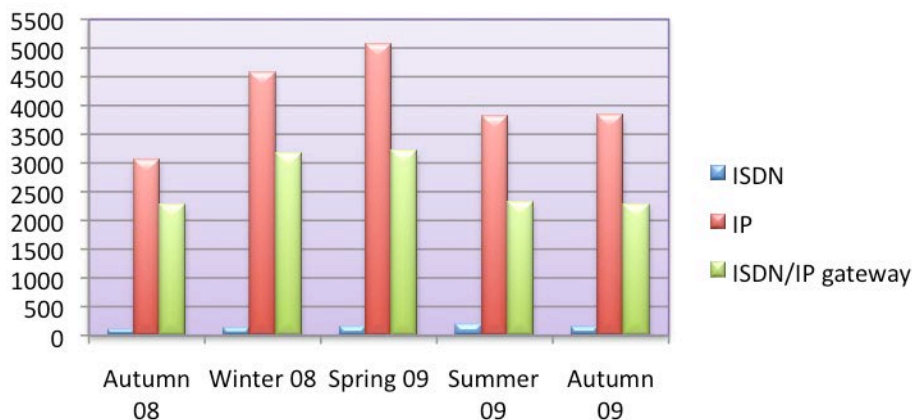
Number of videoconferences



Number of venues registered to use JVCS



Number of videoconferencing hours over IP and ISDN



JVCS ([more information](#))

The [Booking Service](#) look and feel has been reviewed to improve the user experience by making often-used functions more obvious; providing better search functionality; enhancing the visual appeal; and improving accessibility. The new user interface is now available.

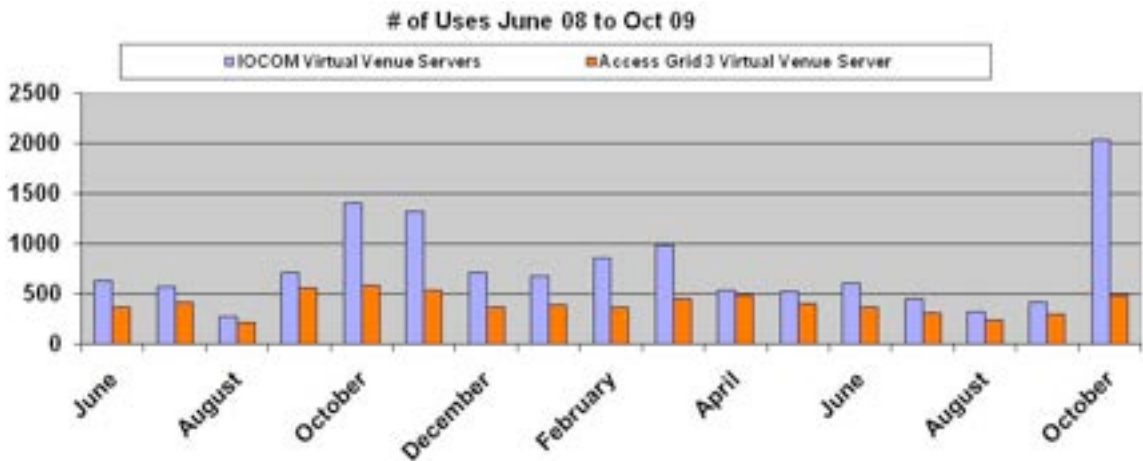
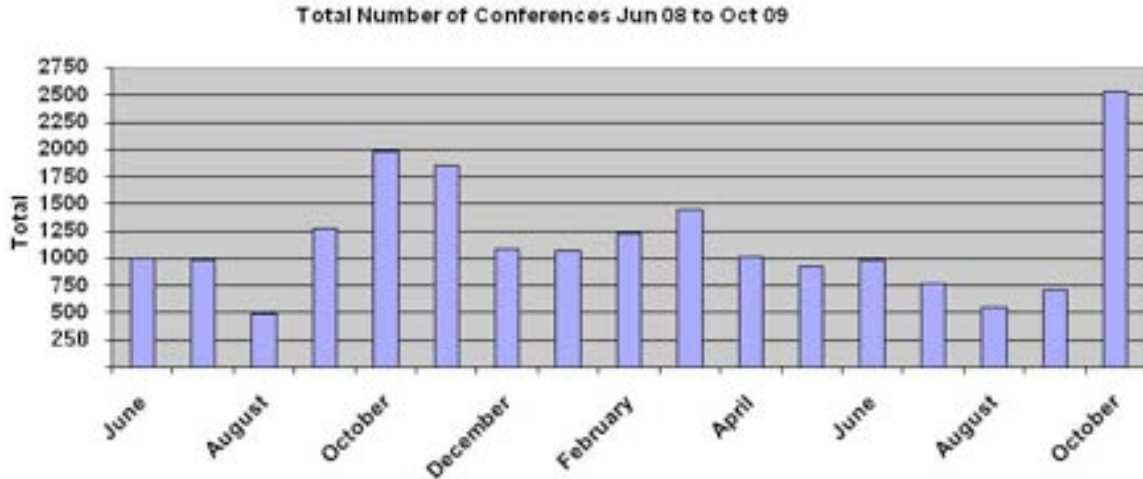
The ConferenceMe trial has been underway during the quarter. ConferenceMe is a Windows-based application available to registered users of JVCS, via the Booking Service, which allows users to participate in a videoconference from a desktop or laptop PC equipped with a webcam, speakers and microphone. ConferenceMe will become available to all registered users during November 2009. More information can be found at <http://www.ja.net/services/video/jvcs/futuredevel>.

4.2 Access Grid Support Service (SLA J4.2) ([more information](#))

The Access Grid® Support Centre continues to support the users of the Access Grid® within the UK academic network, with the aim of improving user experience through robust and resilient services.

Server and Bridge Activity

The number of registered UK AG nodes currently stands at 390, including the UK Academic desktop nodes, and the number of users stands at 652.



Booking Service

The project to revise the AGSC Booking Service user interface is now completed and the new interface was rolled out on 27 October. This should provide users with a better experience when using the site and ultimately make it easier to use.

The number of booked sessions on the Booking Service has increased significantly over the last few months due to the start of term and the new lectures series over the Access Grid.

AGSC Workshop

The next workshop will take place on Thursday 19 November 2009. To register for this workshop please go to: <http://www.ja.net/services/video/agsc/events/workshops.html>.

Conferences & Outreaches

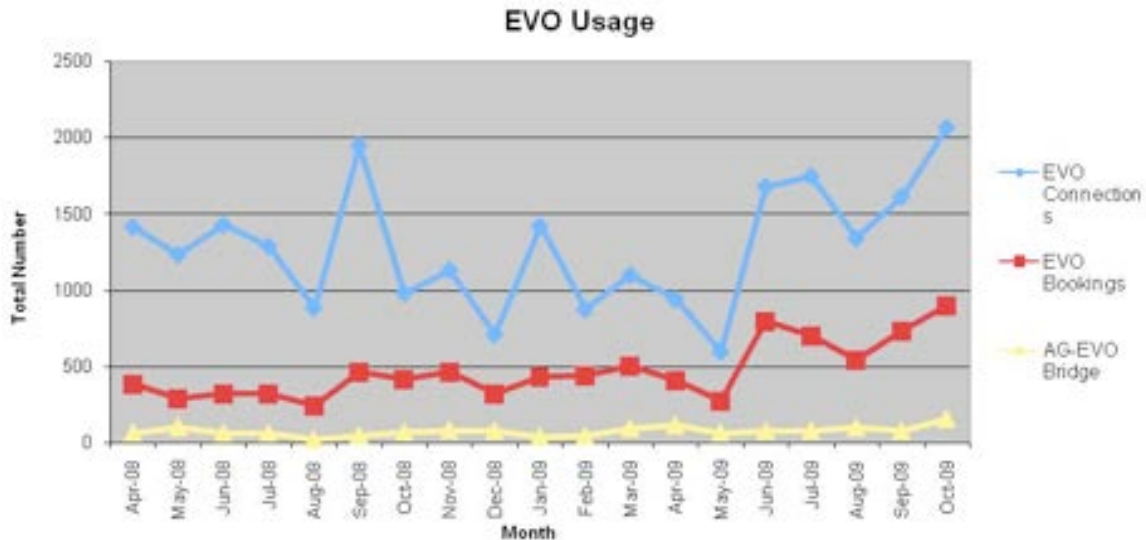
AGSC staff exhibited Access Grid technologies at the LSIS Learning Innovations Conference at the NEC. JVCS and Access Grid shared a joint stand at the event where plenty of interest was generated from the 150 delegates in attendance.

Staff also visited the RSC NW offices in Lancaster to advise the RSC on a potential new node setup for their strategic advisory group. After the initial node is set up in Lancaster it is hoped that a further 15-20 desk nodes will be created to take part in the SAG meetings.

Documentation

There are now [20 documents on the AGSC website](#) which is constantly being updated. There should be something helpful for all user skillsets. Suggestions from the Access Grid community on what documentation should appear on the site may be submitted to the AGSC via telephone or email.

EVO (Enabling Virtual Organizations)



The EVO - Telephone Bridge is now live. This is a VoIP Gateway which allows anyone with a telephone to dial into an EVO meeting. This may be helpful if users are experiencing hardware, software or networking issues and are unable to join a session by video: alternatively, users may find it a convenient way to attend a meeting if they are away from their desk, e.g. at home.

4.3 Usenet News Service (SLA J4.3) [\[more information\]](#)

4.3.1 News Feed Service (SLA J4.1) [\[more information\]](#)

The News Feed Service continues to function well. There are currently 20 client sites connected to the service and most are taking a full News feed.

4.3.2 News Reader Service (SLA J4.1) [\[more information\]](#)

33 organisations elected to be removed from the News Reader Service during the reporting period. There are currently 47 sites connected to the Service.

4.4 Electronic Mail Services (SLA J4.4)

4.4.1 Mailer Shield (SLA J4.4.1) [\[more information\]](#)

No more organisations have joined this service during this reporting period. The number of recorded clients of the service remains at 28.

4.4.2 E-mail Advice and Testing Service (SLA J4.4.2) [\[more information\]](#)

The system continues to run reliably and effectively.

4.4.3 E-mail Abuse Protection Service (SLA J4.4.3) [\[more information\]](#)

The system continues to run reliably and effectively.

4.4.4 Web Mail Service (SLA J4.4.5) [\[more information\]](#)

During the reporting period one organisation joined the service. There are a total of 36 sites using the service.

4.6 Nameserver Services (SLA J4.6)

4.6.1 Second Level Domain Service (SLA J4.6.1)

DNS (Servers)

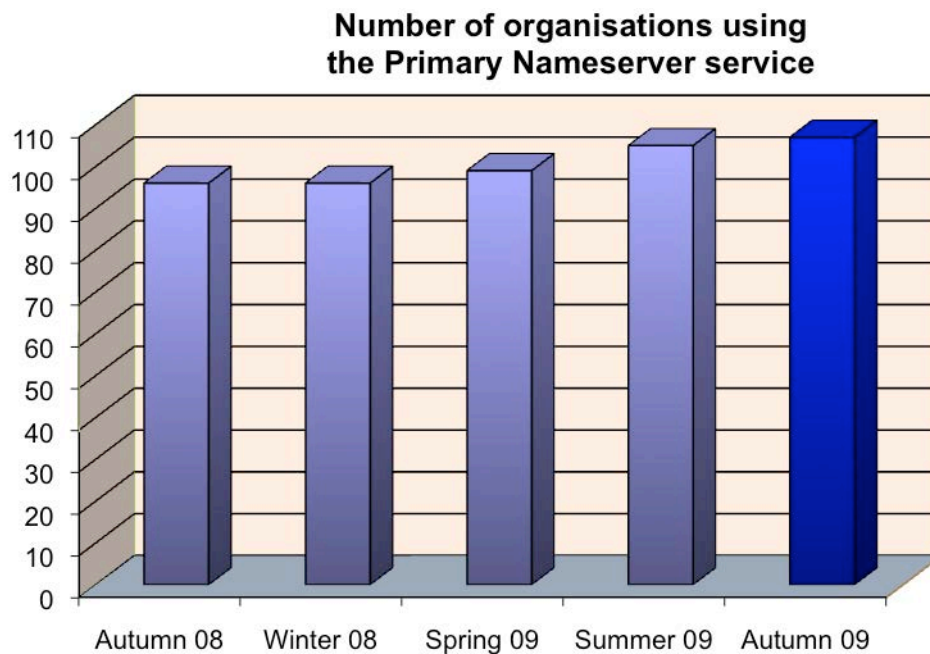
The JANET DNS service continued to run reliably with no problems encountered during this quarter.

DNS (Whois Service)

There were no reported problems with whois.ja.net during the reporting period.

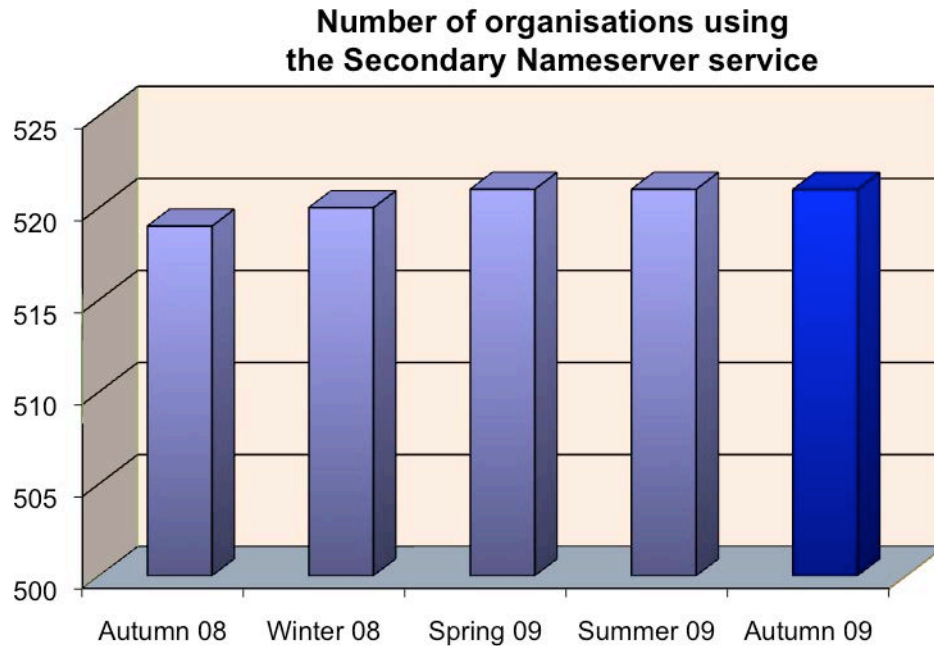
4.6.2 Primary Nameserver Service (SLA J4.6.2) [\[more information\]](#)

Two more organisations registered during the reporting period to use the JANET Primary Nameserver service. There are now a total of 107 users of the service.



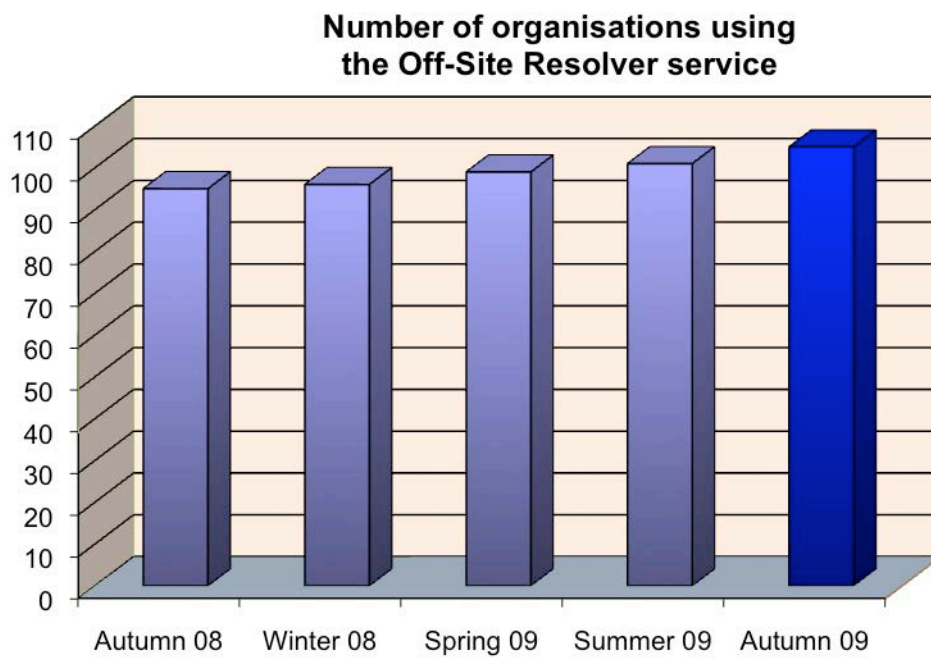
4.6.3 Secondary Nameserver Service (SLA J4.6.3) [\[more information\]](#)

There have been no breaks of service within this quarterly period. The number of organisations using this service has remained at 521.



4.6.4 Off-site Resolver Service (SLA J4.6.4) [\[more information\]](#)

Four sites joined during the reporting period taking the total number of users up to 105.



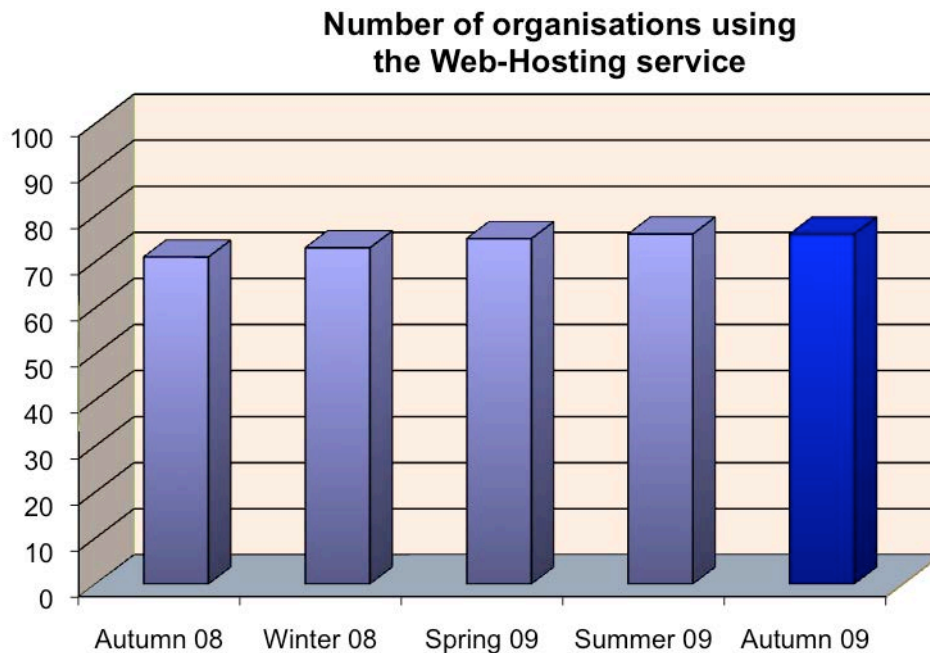
4.7 Managed Router Service (SLA J4.7) [[more information](#)]

Nothing to report.

4.8 Web-Based Services (SLA J4.8)

4.8.1 Web Hosting Service (SLA J4.8.1) [[more information](#)]

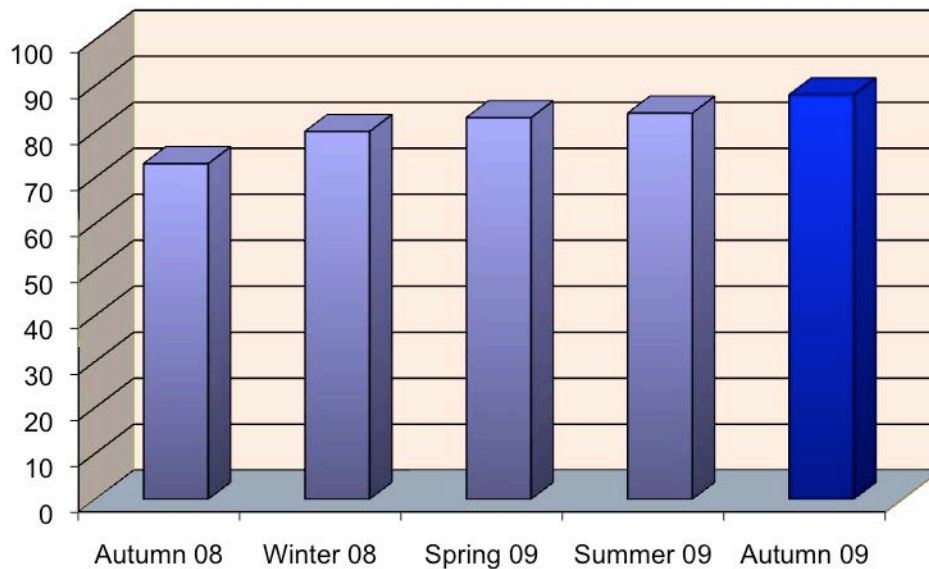
One site has joined the service during the reporting period and one has left, keeping the total number of sites using the service at 76.



4.8.2 Web Filtering Service (SLA J4.8.2) [[more information](#)]

During the past reporting period 4 organisations joined the service. A few organisations have elected to have two filtering accounts. There are currently 88 individual organisations using the service.

Number of organisations using the Web Filtering service

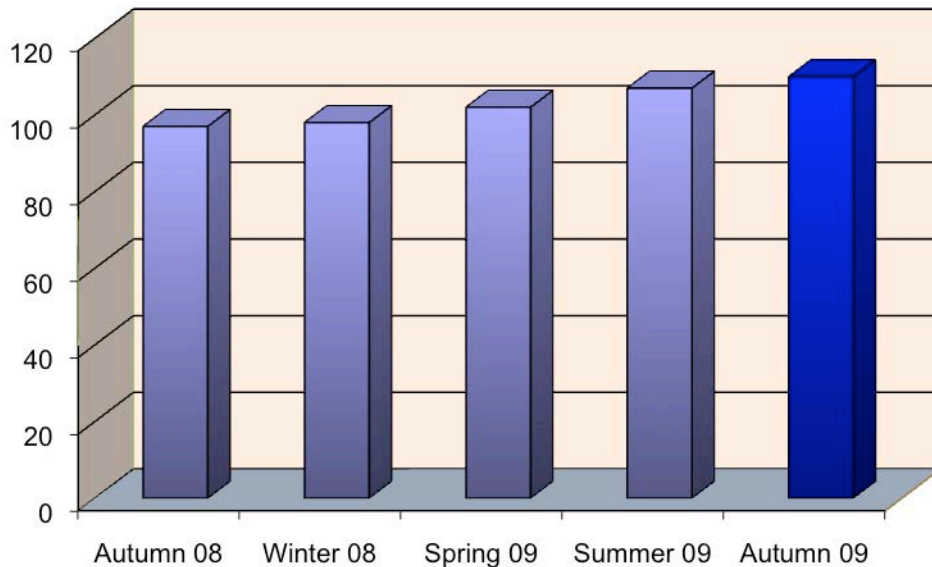


4.9 JANET Roaming Service (SLA J4.9) [[more information](#)]

Uptake continues to be promising, with the number of participating organisations now at 110 and increasing volumes of authentication traffic being seen.

Key news this quarter is the introduction of the facility for participating organisations to define the role of their RADIUS servers, thus enabling them to improve the efficiency of their JANET Roaming deployments. A service has also been implemented to allow organisations to carry out test and development work on JANET Roaming-connected RADIUS servers without disturbing the operational service at the organisation. Development work continues on enhancing gathering of statistics from the national RADIUS servers, and JANET(UK) continues support for development of the OpenSEA open source 802.1x supplicant, which is now nearing the stage of release of a stable version 2.

Number of organisations using the JANET Roaming service

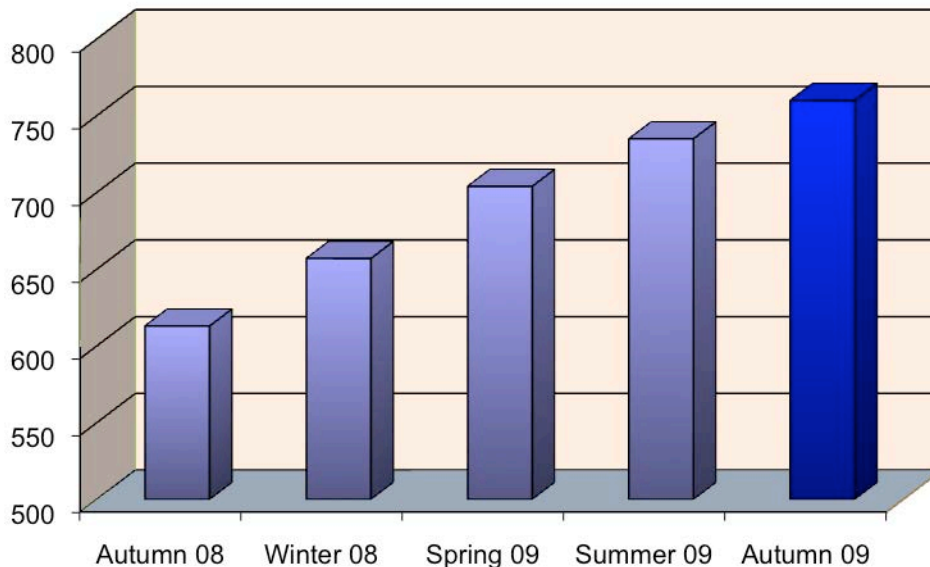


4.10 UK Access Management Federation [\[more information\]](#)

4.10.1 Membership of the UK federation

At the end of October there were 760 members in the UK federation, made up of organisations from UK education sectors and of commercial organisations providing online services to these sectors. A list of services available through the federation can be found at <http://www.ukfederation.org.uk/content/Documents/AvailableServices>.

Total UK federation membership



4.10.2 UK federation Support, Training and Events [\[more information\]](#)

Organisations are now almost exclusively registering Shibboleth 2 entities, in anticipation of the end of development support for Shibboleth version 1.3 in July 2010.

Due to popular demand, JANET Training is continuing to run all three courses covering federated access management in various locations around the UK. There are courses scheduled in November and December as well as for next year.

The cross-sector event "Federation in Practice" took place on 14 October, with presentations from JISC and Becta and with case studies from across the education community. The next event in the calendar is [FAM09 "Federating: The Next Generation"](#), which takes place in Cardiff on 23-24 November.

5 Technology Advisory Services (SLA J5)

5.2 Multi-site Connectivity Advisory Service (MCAS) (SLA J5.2)

[\[more information\]](#)

A number of enquiries for the service were received during the quarter, mainly on the topics of options for inter-site connections for organisations with multiple sites, high bandwidth local links, and networking strategy following college mergers.

5.3 Video Technology Advisory Service (VTAS) (SLA J5.3)

[\[more information\]](#)

The service has received a number of enquiries this quarter which include queries on getting started with videoconferencing, equipment advice, technical difficulties and how to sign up to the JANET Videoconferencing Recording Service.

A [VTAS News web page](#) has been created to give users quick access to important latest information. Current stories include Videoconferencing Endpoint Interoperability with JVCS.

5.5 Wireless Technology Advisory Service (WTAS) (SLA J5.5)

[\[more information\]](#)

An enquiry was received on the subject of Vista Home problems with DHCP. Production of product evaluation and technology papers is being considered.

6. Training Services (SLA J.6) [[more information](#)]

Sixty five courses have been delivered so far this year at ten venues throughout the UK. The course portfolio now stands at eighteen courses, with the new "Virtualisation Fundamentals" course and "JANET Roaming Fundamentals" entering the schedule. The Shibboleth courses have also been completely revised to cover Shibboleth 2 and "Introduction to the UK federation" revised to reflect new practices connected with the implementation of Shibboleth 2.

[The schedule for 2010](#) is now available on the website and courses are available for booking. Prices will be increased for the first time since 2006 for courses held in 2010. The courses are run on a cost recovery basis and the price rises reflect the increased costs in running the courses. The Training Credit Scheme will still allow organisations with Primary connections to purchase multiple course places at a reduced cost.

Work is continuing on development of other new courses including IPv6 Fundamentals, Multicast Fundamentals, Wireless LAN Analysis, Hands-on Digital Forensics and JANET Roaming Implementation.

The development of EdLab, our online learning and collaboration facility, is continuing. We have developed a number of interactive online resources supporting the UK federation and are currently developing re-usable resource templates, allowing us to produce high quality resources quickly and in-house, to fulfil just-in-time training needs.

7. Administration Services (SLA J7)

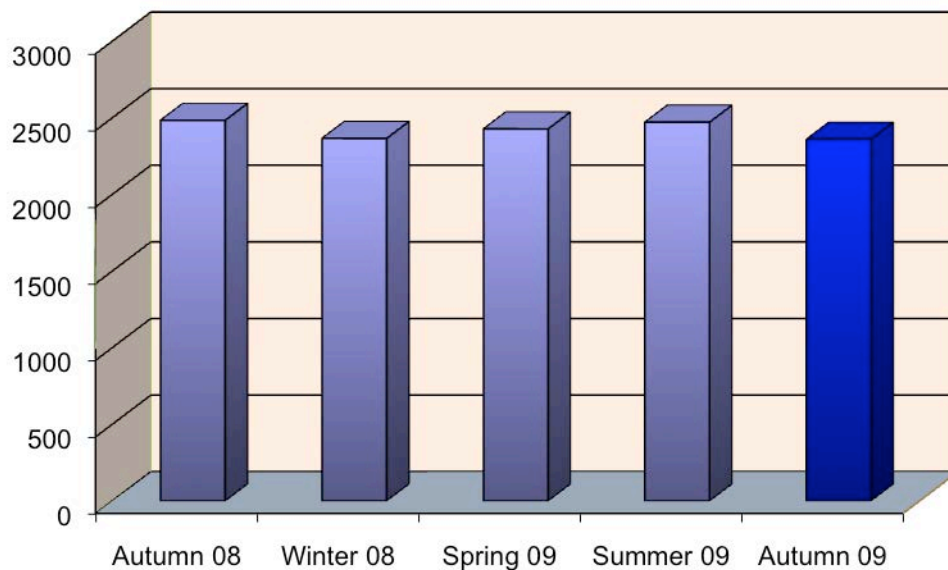
7.1 JANET Service Desk (SLA J7.1) [[more information](#)]

JSD provides the primary point of contact for all enquiries concerning JANET services and requests for information.

During this reporting period the total number enquiries received was 2360. Most of these queries related to the Domain Name registration service, requests for JANET Connections and applications or queries relating to other JANET services.

One complaint was received, which was successfully concluded in this reporting period.

Number of enquiries to JANET Service Desk



7.2 Connection Services Administration (SLA J7.2)

JANET(UK) administers the procedure for the approval and commissioning of new and upgraded connections to the JANET network. This involves liaising with customers to report progress on their new or upgraded connections. All sites connected to JANET must adhere to the JANET Connection Policy that can be found at:

<http://www.ja.net/documents/publications/policy/connection-policy.pdf>.

Requests for new or enhanced JANET connections should be made via the JANET Service Desk.

A list of organisations connected to JANET during the reporting period is provided in section 3.1. For information regarding current upgrades or connections, contact JSD at service@ja.net.

7.3 Licence Administration (SLA J7.3)

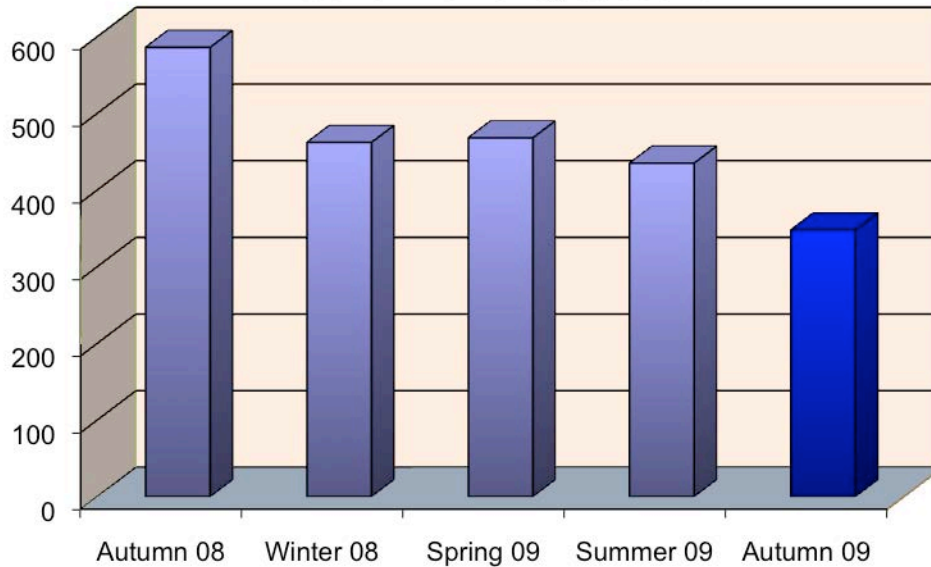
Over the past three months only 1 new Proxy Connection Licence has been issued.

7.4 Domain Name Service Administration (SLA J7.4)

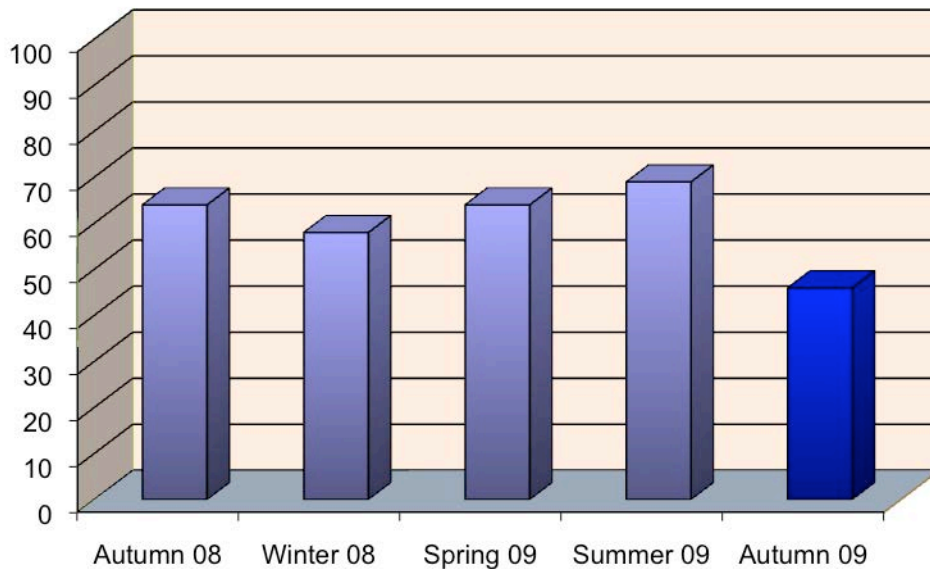
7.4.1 Domain Name Registration Service (SLA J7.4.1)

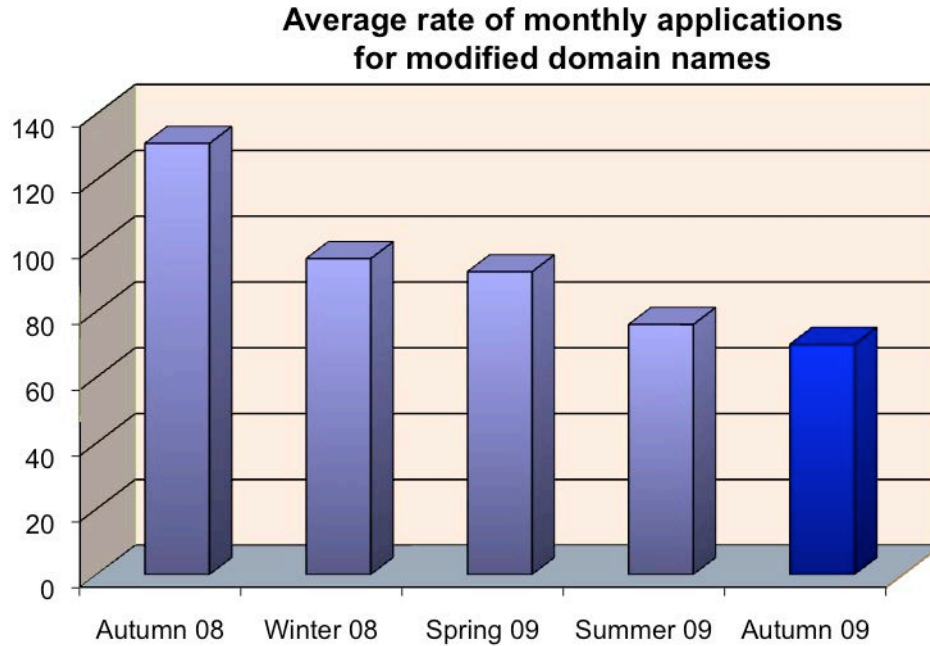
During the reporting period a total number of 348 requests for both new domain name registrations and modifications to existing entries were received. The rate of applications for new domain names averaged 46 per month, with an average of 70 modifications for each month.

Requests for new or modified domain name registrations



Average rate of monthly applications for new domain names





7.5 IP Address Assignment (SLA J7.5)

During the reporting period 17 applications were received and completed.

7.6 urn:mace:ac.uk Namespace Administration (SLA J7.6)

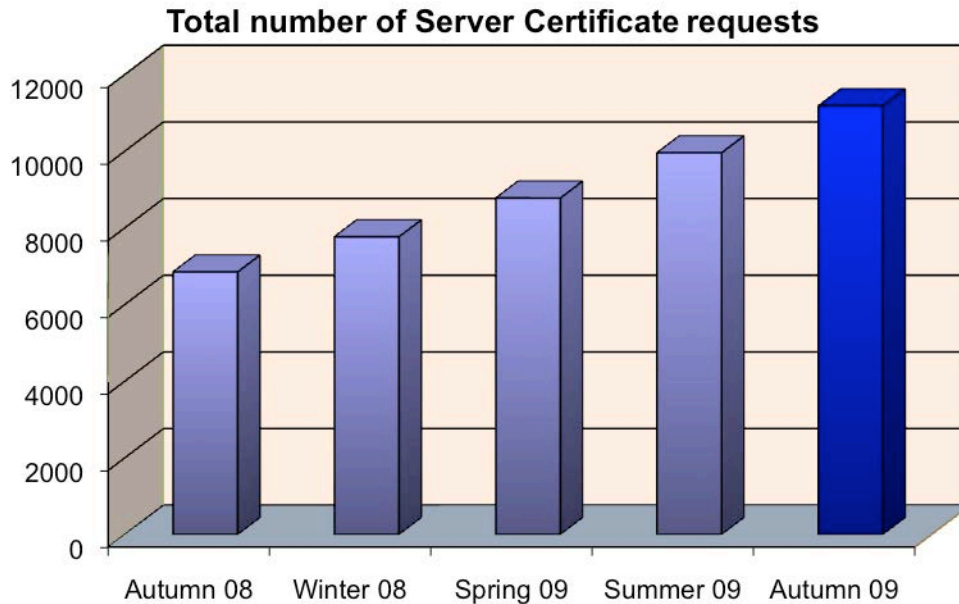
There was 1 new application during this quarter.

7.7 JANET Lightpath (SLA 7.7)

JANET Lightpath has completed a connection to the University of Essex's High Performance Digital Media Network (HPDMnet).

JANET Certificate Service [\[more information\]](#)

The number of processed Server Certificate requests increased by 1224 to 11184 in this quarter.



The Server Certificate Service has now been replaced by a new JANET Certificate Service. Following a procurement undertaken by TERENA on behalf of the European National Research and Education Networks, JANET(UK) has undertaken a new agreement signed at the end of September whereby certificates will be issued via Comodo CA. Under the old service certificates were issued by GlobalSign.

Through a simple online interface the service offers a range of new features that enable the automated processing of certificate requests, along with the ability to monitor and manage new certificates that are issued. It also includes certificate revocation and automated alerts when these certificates are close to their expiry dates. The online interface allows federated access for nominated contacts: once registered, nominated contacts will be able to access the service by authenticating with their home institution's Identity Provider rather than relying on the username / password combination provided by JANET(UK).

Existing customers are being invited to migrate to the new service in order to take advantage of these additional features. These changes will not affect the high levels of service provided to customers with existing certificates and JANET(UK) will continue to absorb the costs of providing this service to its customers.

All GlobalSign certificates issued as part of the original Server Certificate Service will now continue to be valid for their stated lifespans. This means that organisations in possession of certificates issued as part of this service will not need to replace these certificates by April 2010. Please note, however, that certificate requests for the old service will not be accepted after 11 December 2009.

Customers who did not use the old service but now wish to join the new JANET Certificate Service for the first time should refer to the Briefing Document which provides additional information at <http://www.ja.net/documents/services/scs/certificate-service-briefing.pdf>.

8. Security Services (SLA J8)

The primary efforts of JANET CSIRT for this quarter have been in attempting to combat the Conficker worm and its effects.

The Conficker worm is still very prevalent across the community due mainly to re-infections as well as first-time infections of a system. Unfortunately, from CSIRT's perspective the worm does not currently have a damaging payload and as far as the infected system is concerned, to date it has done nothing malicious. Therefore the perception is that it is benign and, while irritating, not damaging, so it can be ignored or at least left until later to be sorted out. CSIRT is dealing with many hundreds of infections across the community each week which if not challenged with more effort within the community have the potential to cause serious amounts of damage to JANET.

CSIRT continues to tackle recurring events across JANET: phishing attempts, general scanning for vulnerabilities and compromised systems due to poor password policy or enforcement.

9. Development

9.1 Federated Access Management [[more information](#)]

This area is now reported on as part of 4.10.

9.1.1 Federation Expert Group on Portal Design [[more information](#)]

After a good response to the call for participation for the project in August, a team of 12 members representing all sectors of the community, including service providers, has been assembled from those working within, or supplying access management and/or portal services to, the education and research sectors. At the first meeting several areas of web portal discovery for Federated Access Management were identified which the team felt they would be able to provide best practice and guidance on, and these will now be discussed and commented on in detail in the coming meetings. The next meeting for this group is 10 November 2009.

9.1.2 WAYF Interface Development [[more information](#)]

Consultants have carried out initial usability and accessibility testing in the current WAYF. Their report is to be presented at the next meeting in November 2009.

9.2 Roaming & Mobility [[more information](#)]

9.2.1 802.1x Supplicant [[more information](#)]

The latest supplicant version following the feature freeze is 2.1.9.704. Although available for download from Sourceforge.net, there has been no official notice of this release but the aim was to fix any existing bugs from x64-based Linux distributions.

9.3 Network Access [[more information](#)]

9.3.1 Mobile IP [[more information](#)]

The project participants completed their work during the last quarter. The final deliverables from this project are available at: <http://www.ja.net/development/network-access/mobile-ip/>.

9.3.2 Local-Loop Unbundling [[more information](#)]

Significant work has been underway during the last quarter to produce a Local Loop Unbundling Technical Reference Document. This document will be published during November 2009.

9.3.3 Location Aware Wireless Infrastructure

The project participants completed their work during the last quarter and the final deliverables are available at: <http://www.ja.net/development/network-access/location-awareness/>. JANETUK) is currently consulting with the participants, the wider JANET community and European stakeholders in defining future work in this area.

9.3.4 Mobile broadband

JANET(UK) seeks to build knowledge of community demand, use cases and market capability to deliver mobile network broadband access to off-campus learning centres. Technologies to be addressed will include commercial WiFi hotspots, 3G data telephony and WiMAX.

During the last quarter, JANET(UK) appointed a consultancy firm to assist in developing a representative sampling of community needs in this area. Over the coming months the consultancy firm will be making contact with various sectors within the JANET community.

9.3.5 Southampton Group Design Project

In September 2009, JANET(UK) agreed to support a group of MSc Students on a group design component of their studies at the University of Southampton. This 10-week project involves design of a prototype system for the visual display of anonymised JANET Roaming service data. Their deliverable will be assessed for implementation on the national JANET Roaming service and offered to other National Education and Research Networks participating in eduroam.

9.3.6 Network Access Control

During September 2009, JANET(UK) issued a call to the JANET community to write case studies on their experience of deploying Network Access Control on their campus infrastructure. A small number of sites responded to the call and work is currently underway to produce these case studies.

9.4 Network Engineering

9.4.1 IPv6

The structure of the IPv6 course has been defined and work is progressing to complete the training material with an aim to delivering the course during the early part of 2010.

9.5 Voice [\[more information\]](#)

9.5.1 JANET Talk [\[more information\]](#)

A review of the current voice strategy is under way. It is envisaged that any new voice strategy will look to enhance and support current voice activities within the JANET community.

We continue to monitor developments in ENUM to identify any potential JANET can offer within this space. Early work to understand any potential synergy with the mobile telecommunications industry is under way: the main aim is to identify whether it is possible to introduce any cost savings to the JANET community.

9.7 Measurement & Monitoring [\[more information\]](#)

9.7.1 Netsight [\[more information\]](#)

See section 3.4.

9.8 Support for Research [[more information](#)]

9.8.1 JANET Aurora [[more information](#)]

The Fourth Aurora community meeting was held at UCL in October. Following a status update on the infrastructure, discussion was mainly focused on a potential bid to the Engineering and Physical Sciences Research Council for future funding of a dark-fibre platform as a mid-range facility. A tour of the research laboratories highlighted a selection of the interesting projects being undertaken.

9.8.2 JANET Lightpath [[more information](#)]

This area is now reported on as part of 7.7.

9.9 Optical Networks [[more information](#)]

9.9.1 Technology Tracking

A document "[Carrier Ethernet Emerging Technologies: Technical Overview](#)" was written and published on the JANET website in September 2009, aimed at technical specialists and describing the details of Ethernet over MPLS, PB, PBB and PBB-TE technologies. It also has two Appendixes: MEF specifications of Carrier Ethernet as a service and Glossary.

9.10 Schools Services [[more information](#)]

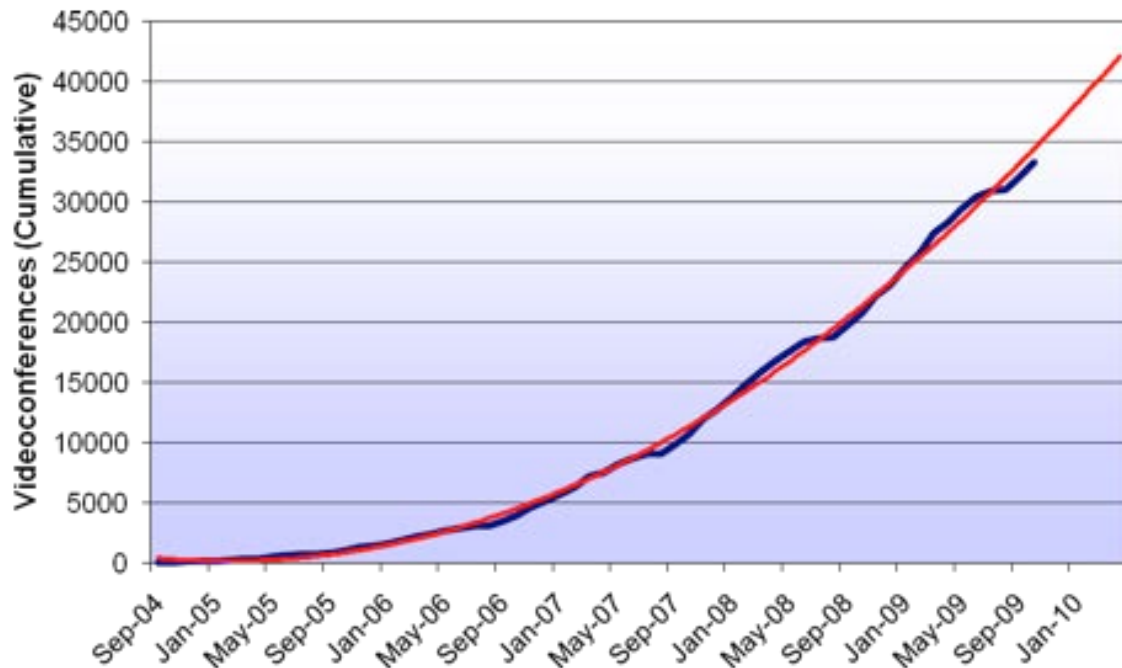
9.10.1 Content Access

Membership of the UK federation has increased substantially within the Schools sector, where secure access is fast becoming established as a necessity.

The NEN Services Group has been working in collaboration with South East Grid for Learning on the Film Education NEN Pilot, and with North West Learning Grid on hosting the National Digital Resource Bank. The team has also continued to work closely with the NEN community and Becta on a National Digital Learning Resource Strategy.

9.10.2 Videoconferencing

The take-up of videoconferencing by schools continues to grow. By the end of October 2009 the total number of schools sector endpoints registered with JVCS was just over 4000 (as compared with just under 3500 at the end of October 2008). Over 2300 videoconferences were undertaken this quarter (as compared with just over 2000 in the same quarter last year), approximately half with national content providers. Over 75% of the conferences continue to be for teaching, tutorials and related educational activities; other purposes include administrative meetings, system testing and quality assurance. The growth in schools videoconferences, managed by JVCS throughout the last five years, is illustrated below.



9.11.3 Connectivity [\[more information\]](#)

The NEN Services Group is working closely with a number of NEN Providers to explore new approaches to regional networking.

9.11.4 Collaboration

Following a very successful pilot project the JANET Collaborate prototype is to be retired. Members who are signed up will still be able to access details of videoconferencing Content Providers and the VC Partners feature via <http://www.ja.net/schools>.

This retirement has come about as a result of difficulties in maintaining the prototype beyond its intended lifetime. We are now looking at how to add the functionality into the JANET service portfolio in order to provide an improved feature set based on the requirements gathered in the pilot. In the meantime we thank all the users of the prototype for their strong, enthusiastic support during the pilot.

10. Community Update

(a) Regional Networks

JANET(UK) has been conducting a review of the regional delivery model of JANET services, to ensure that the model continues to serve customer needs, now and in the future whilst also improving overall value for money. Following this review, an announcement was made in July that we would, over a period of time, seek to implement a more directly managed regional delivery model. At the same time, a period of formal consultation was announced, to allow institutions and regional network operators to express their views and concerns.

Following the initial discussions with Regional Network Operators and the feedback received from customers, a White Paper has been produced giving details of the review process. It also responds to feedback from the community and describes the way JANET(UK) plans to move forward.

The White Paper is available at: <http://www.ja.net/documents/regional-delivery-review.pdf>.

(b) FE Liaison

JANET(UK) attends regular meetings with the LSC to raise awareness of new JANET initiatives, report on current progress with the English upgrade programme and discuss future developments within the FE community.

(c) Specialist Colleges

The Specialist Colleges sector are looking for a hosting facility for a new sector-wide in-Folio, the Independent Specialist College e-Folio which has been produced for Colleges with funding from the Learning & Skills Council (LSC) working with JISC TechDis.

(d) Scotland

As well as attending the annual members conference of Universities UK, the annual conference of SOCITM and the Scottish Learning Festival, JANET(UK) also gave a talk on "25 years of JANET" in Edinburgh at the request of the Computer Conservation Society.

The Learning and Teaching Scotland (LTS) rollout of the new schools interconnect is nearing its conclusion with connections migrating across to the new network. LTS and JANET(UK) are continuing to work closely together to offer Scottish Local Authorities and schools the full range of JANET services.

(e) Northern Ireland

NIRAN has undergone a procurement and successful implementation of its new network.

Representatives from JANET(UK) and from NIRAN met with C2K, the NI schools network. Both parties offered presentations on their network infrastructure and services and an overall view of networking in Northern Ireland education was achieved.

(f) NHS/HE Connectivity Project [\[more information\]](#)

NHS Connecting for Health has formally approved the business case for a jointly funded full N3 JANET Gateway service to follow on from the current early adopter. The order has been made and we are waiting on confirmation of the implementation date, expected in April 2010. The new N3 JANET Gateway will consist of a 250Mbit/s "active" firewalled and monitored connection in London and an equivalent "standby" link in Manchester for resilience. All traffic between N3 and JANET-connected organisations will be routed through this new Gateway (traffic is only routed to the early adopter organisations with the existing Gateway).

The quality issue with JVCS running over the N3 JANET Gateway has been resolved. This issue was preventing the early adopter NHS Trusts in the North East of England gaining the benefit of NHS University H.323 videoconferences as part of the Cetl4HealthNE project led by the University of Newcastle with the Universities of Durham, Northumbria, Sunderland and Teesside. South Tees Hospitals NHS Trust and North Tees and Hartlepool NHS Foundation Trust are now planning to make use of this service.

The next NHS-HE Forum takes place on 19 November 2009 in London.

(g) Libraries, Museums and Archives

Visits were made by the Local Authorities Business Manager to the East Midlands Museum Service, discussing moving their hosting of the service; and also to the British Library, Euston and the Imperial War Museum. The Videoconferencing Service Co-ordinator also came to the latter meeting as the museum is seeking to ramp up its videoconferencing presence in the community. The National Media Museum has requested a 100Mbit/s connection for the Internet Gallery Bradford and the Tower of London is a 100Mbit/s JANET Primary Connection.

11. European Activities

(a) TF-PR & TF-MSP

The Strategic Technologies Communications Manager attended the TF-PR meeting in Vienna on 7 September. Plans are also in place to improve collaboration across Europe and work towards a more coordinated effort: a central repository is in the pipeline to share information and material relating to comms activities across NRENs.

(b) TERENA Networking Conference [[more information](#)]

The 2010 TERENA Networking Conference will take place in Vilnius in Lithuania from 31 May to 3 June 2010. Further details about the event can be found at: <http://tnc2010.terena.org>.

The theme of the conference is "Living the network life". Calls for papers for the conference are being accepted at the present time.

(c) TERENA General Assembly

The TERENA General Assembly was held in Bucharest from 22-23 October 2009.

The meeting heard reports from the Technical Committee and details of the 2010 Activity Plan, and discussed collaboration with third parties in providing wireless network access.

(d) TERENA Compendium

Survey Data for the Compendium has been received from all NRENs and is currently being collated and analysed. We can expect the main findings to be available shortly and the Compendium to be available (in online form at least) by the end of the year.

(e) GEANT 3 – Service Activity 3 Leadership

The GN3 SA3 and JRA3 activities held a joint Kick-Off meeting at the end of May to mark the start of the work of these activities, and to initiate planning of their respective tasks.

The eduPKI task began a sequence of interviews with the NREN-operated Certificate Authorities to establish their policies and capabilities, and also with the GN3 services to establish their requirements for PKI. In parallel, the eduPKI Policy Management Authority was established, satisfying the milestone of the project. The eduPKI task also completed its task-plan for the first year of the project.

The eduroam task continued the operation of this service. Three new NRENs signed the eduroam policy, bringing the total number of participating NRENs to 37. The process of refreshing the eduroam policy was initiated by issuing a call for any desired policy alterations to the eduroam community.

The eduGAIN task began work on defining the service's Business Case, Service Description and Service Definition. Significant progress has been made in developing the task-plan for the first year. It is expected that this will be finalised soon, allowing this task to proceed with the development of the necessary technical infrastructure shortly thereafter.

(f) GEANT 3 - JRA1 Task 1 "Carrier Class Transport Network Technologies"

JANET(UK) participated in the GN3 Symposium in Vienna (8-10 September 2009). At the JRA1 Task 1 meeting which was a part of the Symposium, the scope of the task and the structure of the first deliverable were discussed. As a result JANET(UK) participation in the deliverable development was extended and now covers three sections: Ethernet developments (100GE and OAM), PBB-TE and General QoS.

Further Information

JANET(UK) manages the operation and development of JANET, the United Kingdom's education and research network, on behalf of the combined UK Higher and Further Education Funding Councils represented by JISC (Joint Information Systems Committee).

Further information on any aspect of this report can be obtained through JANET(UK)'s general enquiry point, the JANET Service Desk. This is staffed from 08.00 to 18.00 Monday to Friday, with voicemail available for calls outside these hours or if staff are temporarily unable to answer a call.

Enquiries may be made by e-mail, telephone, fax, post, or in person, as follows:

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