

DEVELOPMENT UPDATE BULLETIN

DECEMBER 2008

CALLS

JANET Talk – phase 2 call

The JANET Talk Trial is now well underway with over 100 JANET organisations taking part. We are inviting other members of the JANET community to take part in the remaining duration of the trial, due to run until 31st August 2009. This will give you access to the full range of features of JANET Talk <http://www.ja.net/development/talk.html> through the standards based collaboration platform, at no cost to your organisation.

For further information, please visit the JANET Talk Trial section of the JANET website:

<http://www.ja.net/development/talk.html>

Portable WLANs

Call for Participation – Portable WLAN Trial

JANET(UK) is inviting proposals from organisations in the education sector to investigate the design of a portable, rugged, temporary wireless LAN system that can be deployed outdoors in support of field study courses. Such a system would extend the edge of the JANET network out into the field, providing resource access and IP-based communications to students and researchers in diverse disciplines such as ecology, archaeology and geology. Designing a portable WLAN 'kit' that community members can replicate and use will require solutions to the challenges of wireless data backhaul, independent power supply and network management.

Submissions are requested by December 23rd.

The full call document is available at <http://www.ja.net/development/PortableWLAN.html>

EVENTS

JANET Optical Event

JANET(UK) is organising a JANET Optical Event on Wednesday 28th January 2009 at the ICO in London. The aim of the event is to provide an overview of the work being carried out under the JANET Optical Development Programme, and to provide a glimpse into the future of optical networking technologies.

For further details, please see: http://www.ja.net/services/events/2009/optical_event/index.html

UK federation – Moving Towards Implementation, regional event

JANET will be holding a UK federation event on 11th March in Bristol. This will be third in the programme of regional events aimed at moving organisations towards the implementation of access management.

The event has been specifically designed on a small scale so that attendees get the chance to discuss access management issues relevant to their organisation and share experiences with their peers at different stages of deployment.

Further details will be available soon at: <http://www.ja.net/services/events/calendar-2009.html>

Networkshop

Networkshop is an annual event organised by JANET(UK) and hosted by a Higher Education organisation. Aimed at network managers and technical staff from the JANET community, the conference provides a forum for discussion on the latest network technologies and brings together expertise from all fields of networking.

Networkshop 37 will be held at the University of Cambridge from 31st March to 2nd April 2009.

For further details and to book onto the event, please go to: <http://www.ja.net/services/events/2009/networkshop-37.html>

NEW SERVICES/PROJECTS

Portable WLANs

Please see 'call' section for further details or go to <http://www.ja.net/development/PortableWLAN.html>.

Videoconferencing

Equipment/service updates

MCU: JANET Videoconferencing Service (JVCS) has increased its hosting capacity with the deployment of two new multipoint control units (MCUs); using the latest high definition (HD) multipoint technology by Tandberg.

JVCS installed two voice and videoconferencing media services in September, doubling JVCS' videoconferencing capacity while supporting a far greater number of high bandwidth multipoint HD conferences simultaneously.

The new JVCS capability will ensure the very highest picture quality for all end users with HD enabled equipment. Picture quality on existing Standard Definition (SD) systems will also be improved significantly as each multipoint control unit will run Clearvision software.

Booking Service Integration:

Booking Service Integration: By the end of November, the Conference on Demand (COD) Booking Service and JVCS Booking Service will be integrated into a combined facility. Users will then only need to register and log-in once to book a videoconference or to launch a session immediately. This is available through the JVCS website www.ja.net/jvcs.

Videoconferencing Streaming:

Another feature, expected to be available by Christmas, is a new conference 'streaming' facility. While booking a conference, JVCS users will have the ability to invite other organisations, via a URL link, to access realtime video and audio footage of a videoconference.

Videoconferencing Recording Service:

Due to be completed in early 2009, this service will enable organisations to record their conference and download it, in their chosen format, for future use. Organisations will need to sign a licensing contract, after which they will be able to access the automated facility when they book a videoconference through JVCS.

To find out more about these new capabilities, please refer to:

<http://www.ja.net/company/news-2008/janet-videoconferencing-upgrade.html>

To find out more about JANET Videoconferencing Service, please visit: www.ja.net/jvcs

PROJECT UPDATE

Federation case studies

Shibboleth on Windows Installer:

The project, launched earlier this year, has now come to a close. The Installer Wizard was developed to simplify the implementation of Shibboleth in a Windows / Active Directory environment.

Five organisations participated in the project and were asked to test the installer and iron out any bugs.

As part of their role as test sites for the installer, the five participating organisations were also tasked with delivering a series of case studies, configuration guides and installation guides for the Installer Wizard, to provide an insight into implementation during the process.

The case studies are now available on the JANET Web Site, along with configuration and installation guides (courtesy of Swindon College) at <http://www.ja.net/development/middleware/shibboleth-on-windows.html>

The Shibboleth installer can be downloaded from the Internet2 site with documentation and help files

<https://spaces.internet2.edu/display/SHIB/IdPActiveDirectory>

Deployment of Access Management: A number of case studies have been developed to help organisations learn from others' experiences. The portfolio of case studies will be built on during the next few months, all of which will be available at: <http://www.ukfederation.org.uk/content/Documents/CaseStudies>

40Gbit/s Deployment

Following the successful trial of 40 Gbit/s circuit technology, JANET(UK) have started an ambitious programme to upgrade the JANET core network from 10Gbit/s circuit capacity to 40Gbit/s, making it the largest deployment of 40Gbit/s over an NREN in Europe.

Phase 1, was completed in September with the installation of four 40Gbit/s circuits between the JANET Points of Presence (PoPs) in Reading and London Kings Cross and those at London Canary Wharf Telehouse and Telecity .

Phase 2, due to be completed by December 2008 will provide 40Gbit/s upgrades to the circuits from the PoPs at Reading and London to Warrington and Leeds with a direct link from Reading to London, routed via Bristol. For further details please visit: <http://www.ja.net/company/news-2008/40-gig-core.html>

JANET Aurora

JANET has been granted additional funding to support the expansion of its Aurora fibre network.

As one of the largest research test-beds in Europe the Aurora network was developed in 2006/7 to interconnect research groups at the universities of Cambridge, Essex and UCL. With the additional funding, a new fibre infrastructure will also include links to the universities of Aston and Southampton, with an extension of 2 years to the current funding agreements through JANET's funding body, JISC.

For further details, please refer to: <http://www.ja.net/company/aurora-expansion.html>

Lightpath – re-engineering infrastructure

JANET plans to replace the current equipment on the JANET Lightpath infrastructure with high end Ethernet switches. These are cheaper and easier to own and operate, and integrate easily into JANET's monitoring and measurement infrastructure.

The new Lightpath overlay network will transport traffic using Ethernet over MPLS (EoMPLS) technology, using the existing Lightpath overlay links.

To find out more, please go to: <http://www.ja.net/documents/services/lightpath/janet-lightpath-evolution.pdf>

Measurement & Monitoring - 2nd Generation JANET Netsight – Rollout Ongoing

JANET Netsight is a system providing visibility of the current and past performance of JANET. It is principally available to JANET primary connected sites and the Regional Network Operators.

The original system was deployed in 2002, and has proved very popular. However, the changing needs of the JANET community and of JANET(UK) itself have driven demand for a new system, and JANET(UK) have worked with an external software house to develop a second generation Netsight.

A region by region rollout of the new system began in the summer of 2008. For more information including a transition timetable and list of frequently asked questions, please see the Netsight pages at <http://www.ja.net/netsight>

NEW DOCUMENTATION

Network Access for Guests

The document aims to help organisations wishing to provide access to JANET for their guest to do so safely.

<http://www.ja.net/documents/publications/technical-guides/network-access-for-guests.pdf>

NEWS

MP announces new government initiative over JVCS

Schools Minister Jim Knight MP used the JANET Videoconferencing Service (JVCS) to connect to schools in Oldham and Suffolk and announce the roll out of a government initiative. At the event connected through JVCS booking service, Mr Knight spoke about the government's plans to inject £30 million into ensuring every child has home access to a computer and broadband connectivity for their school or college work.

For full details of the story, please visit: <http://www.ja.net/company/news-2008/gov-announcement.html>

JANET connects students to Freshers TV

On Monday 6th October 2008 the Freshers TV channel was launched nation-wide through the Freewire network and Sub TV over JANET, and www.freshers.tv

The broadcasts took place over a two 2 week period, covering freshers' weeks, and Universities from all over the UK submitted content that was created, presented and edited by the students themselves.

Staff, union reps, students and graduates from Loughborough University ensured a broadcast quality service was made available on Freewire's channel 106 through the University's connection to JANET. They joined forces with students at SUSU (Southampton University Student Union) who organised content and edited shows from more than 20 Student TV stations around the country

For more information on the project run by NaSTA, the National Student Television Association, please see: <http://www.ja.net/company/news-2008/freshers-tv.html>

Bagpipes brought to life over JANET

At the recent e-Science all-hands meeting held in Edinburgh during September (<http://www.allhands.org.uk>) a 1Gbit/s Lightpath connection was established between a music studio at the University of York, and a lecture theatre at the National e-Science Centre at the University of Edinburgh. This connection was used to support a high-quality studio recording session including a performance of bagpipe music before a live audience in Edinburgh, with the lightpath carrying the audio data from Edinburgh back to York to be recorded.

For further information, please visit: <http://www.ja.net/company/news-2008/bagpipes-over-janet.html>

JANET supports the 'Big Bang' experiment to understand the origins of the universe

As the Large Hadron Collider (LHC) began its work to re-create the 'big bang' at the CERN facility in Switzerland, JANET prepared to play an integral part in the worldwide distribution of the five gigabytes per second of data that will be pumped out of the site.

The Rutherford Appleton Laboratory (RAL) at Harwell in Oxfordshire is one of eleven Tier 1 sites that will handle some of the huge amounts of data generated by the experiments. Data will be carried end to end on a dedicated lightpath from CERN to RAL using the GEANT and JANET networks.

The experiments at CERN due to start in spring 2009 have had to be postponed until later in the year due to an early equipment failure. The JANET Lightpath used to support RAL and the LHC project will remain in place, so that it is available for testing purposes, and is ready to use as soon as it is required to carry live LHC data.

For further information please see: <http://www.ja.net/company/news-2008/janet-bigbang.html>

EVENT REVIEWS

IPTV

An IPTV event was held on 6th November to update people on the current developments in IPTV content and technology. The programme included Universities sharing their experiences of Student TV, High Definition technology and delivery mechanisms for sharing content. All presentations and videos of the speakers are available at:

<http://www.ja.net/services/events/2008/iptv/programme.html>

Federation schools meeting,

A meeting was held on 1st October to determine how access management fits into the schools' strategy, emerging initiatives and technologies such as the Schools Interoperability Framework (SIF) and how they all fit together in the current climate. Further details and presentations from the event can be found on:

http://www.ja.net/services/events/2008/schools_fed_meeting/programme.html

UK federation Regional Event, Leeds

The second in a series of regional events was held in Leeds on 28th October to help federation members work towards implementation of access management. Presentations were given on the key areas of the federation and were recorded for future viewing. A forum has also been set up to discuss issues raised at the event along with any other areas that wish to be raised. If you would like to access the slides and videoclips from the event please visit:

<http://www.ukfederation.org.uk/content/Documents/EventList>

If you would like to take part in the forums or access UK federation training resources, please click on the 'Edlab' link at the top of the events page (you will have to register with Edlab to access these resources).

TRAINING

For details of JANET training courses, please refer to: <http://www.ja.net/services/training>