

News NetWork



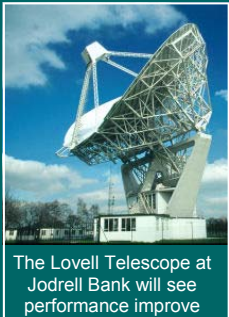
Net North West's Official Newsletter

Issue 1 Autumn/Winter 2005

Investing in Speed

Nearly £4million is to be invested into Net North West on developments to help keep our position at the forefront of the industry.

Included in this upcoming work are upgrades for the network links that connect all of the higher education institutes



The Lovell Telescope at Jodrell Bank will see performance improve

in the region. These will be increased in speed, from 155 Megabits per second to 1 Gigabit per second.

This huge increase can be explained much more simply. At 155 Megabits per second, the equivalent of approximately 807 full floppy disks could be sent over the network every minute. At 1 Gigabit per second, the network will be capable of sending the equivalent of around 5334 full floppy disks every minute. In one day, over 7 and a half million floppy disks worth of information will be able to be travel the network!

Brilliance in Resilience!



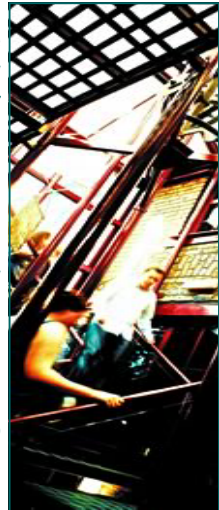
NNW provide resilience for HE and FE networks

Resilience is vital to Net North West and we are working to increase this by ensuring there is always more than one route for data to travel the network. This is vital in case of a site or a link failure, so that data can always reach its destination quickly and easily.

Additional links between Liverpool sites will be installed forming "The Merseyside Ring", along with new links for Bolton, Edge Hill and Chester HE Institutions. The link between Manchester and Liverpool will also be upgraded.

We are also investigating building added resilience into Cumbria by strengthening a link to Westlakes Science and Technology Park and introducing a major new link to UCLan's Carlisle campus, which will provide alternative routes for data to travel through this area - the "Cumbria Ring".

This work is to support NNW's SuperJANET5 developments (more information on page 3).



UCLan's new Carlisle campus

FE Upgrades

The 64 FE colleges that are part of the Net North West network are to have their bandwidth upgraded, meaning that more data can flow faster over these network links. The bandwidth will be upgraded to either a 4 or 10 Megabit per second JANET Connectivity and the work should be completed by December 2005.

Net North West Explained - What is it?

Net North West is a regional network which provides modern communications capability (e.g. the Internet and Telecommunications) to over 80 academic and research based institutions in the North West of England, allowing them to mutually share information:

- 13 Higher Education Institutes
- 2 research labs
- 3 science parks
- 3 museums
- 64 Further Education Colleges
- 3 Learn Direct centres
- a variety of schools
- 6 specialised Colleges
- 4 local government locations
- 15 NHS sites



Above, some NNW member institutions clockwise from top left: Liverpool JMU, Bolton, Liverpool, Liverpool Hope, MMU



Net North West also provides a connection to the Joint Academic Network (JANET), which enables communication with other academic regional networks within the UK, as well as internationally with networks right across the globe.

The network is already vastly powerful and allows information to be shared amongst users at high speeds. However Net North West has a programme of continuing investment that will enable it to keep pace with the ever increasing demands of research, teaching and learning, including new opportunities for E-Learning.

In the near future, Net North West is set to change, thanks to huge investments that will alter the structure of the network and the way in which data can travel from one place to another. A new structure for the core of the network between Manchester, Preston, Liverpool and Stoke/Keele, will be introduced to support SuperJANET5 and add resilience. New network links and sites will be connected to the network as well, for improved resilience and network power.



The other NNW Member Institutions, clockwise from top left: UCLan, Manchester, Keele, Salford, Daresbury Laboratories, Edge Hill, Chester, Staffordshire.

JANET: A background

JANET is the UK's Joint Academic Network, and it connects networks like Net North West across the UK, and around the world. Over 16million users are currently served by the network, including Universities, FE Colleges, Research Councils, Specialist Colleges, Adult and Community Learning providers and the national schools network. It allows the mutual sharing of academic and research based information between users, at incredibly fast speeds and with high capacity capabilities.

Net North West provides a connection to the JANET network for it's members and customers from an entry point in Warrington, which then connects Net North West to other regional academic networks across the country and over the world.

For more information visit www.ja.net

The Future of NNW

To support the complex technology that SuperJANET5 brings, Net North West is upgrading its network to match the SJ5 capabilities, over the next five years.

This includes improving core resilience, introducing the Merseyside ring to link sites around Liverpool, improving resilience to individual sites, as there are some members that only have one route for data to travel to their main site. Net North West will also be working to meet the complex technical requirements of its E-science and E-research members - Daresbury Laboratory, University of Manchester (for physics and Jodrell Bank) and the University of Liverpool (for physics).

How JANET connects to various academic networks like NNW in the UK *

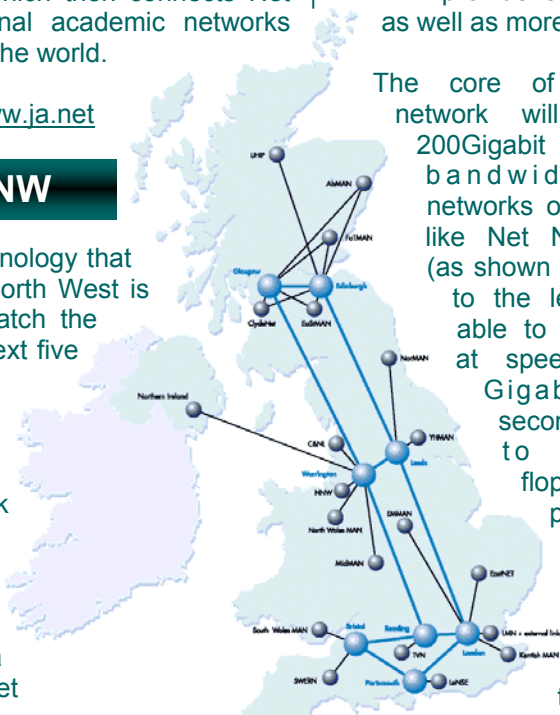
SuperJANET 5 is coming!

UKERNA (United Kingdom Education and Research Networking Association) are now in the final stages of a multi million pound project to implement the next generation of academic network; SuperJANET5. This new network can separate different types of network traffic, and so will provide faster speeds as well as more resilience.

The core of the SJ5 network will have a 200Gigabit per second bandwidth and networks over the UK like Net North West (as shown on the map to the left) will be able to share data at speeds of 80 Gigabits per second - equal to 426720 floppy disks per minute!

At present, Net North West connects to Super JANET 4; the fourth version of

the JANET network. This has been in place since 200 / 2001 and it connects approximately 1,000 research and teaching organisations across the UK.



*Image Source: <http://www.ja.net/about/topology/janetbackbonekey.pdf>

Adding Value to Net North West

For the past 12 - 18 months Net North West has been exploring how it can help its users to be better protected against hostile electronic attacks such as viruses and spam, and be better enabled to recover from a loss of data, through modern recovery systems.

The solution is to offer a range of "Added Value Services" to users of the network, working in conjunction with other companies to bring well tested services at very competitive prices. These services are in the early development stages; look out for more information soon.



New services will offer data back-up and recovery, for loss of important information

All Change!

Net North West has been through some changes recently, as part of a new PR and marketing strategy which is aimed at making more people aware of the company and what it does.



The old Net North West Logo

A new logo is in operation and a new website is being designed which will contain much more information than before and will be better maintained to stay up to date with developments.

Previously Net North West had worked as the "electronic iceberg" where the majority of its activity went unnoticed and stayed under the surface - as does the bulk of an iceberg. However the time has come to tell people about the amazing technology and capabilities that NNW provides to all its users, many of whom don't even know that they rely on the network every day!

Westlakes merge with UCLan

Westlakes Research Institute, based on the Westlakes Science and Technology Park, has merged with UCLan to create a substantial HE campus to serve the west coast of Cumbria.



Westlakes

Westlakes is situated in quite an isolated area, and the hilly environment previously made access to modern communications difficult. In 2002 NNW secured an internet connection at 34Mbps between Westlakes and the NNW primary hub in Manchester, giving Westlakes access to NNW users as well as the internet. In 2003 NNW worked with Blackbox Ltd to install a 1Gbps Local area network which connects all buildings on the Westlakes site together.

The merger with UCLan gives Westlakes Research Institute connectivity across all of the UCLan campuses, and to JANET.

Net North West

The new and improved logo



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