

HEAnet

Services Catalogue

HEAnet

IRELAND'S NATIONAL EDUCATION & RESEARCH NETWORK



National Development Plan

Transforming Ireland

About HEAnet

HEAnet is Ireland's National Education and Research Network, providing high quality Internet Services to Irish Universities, Institutes of Technology and the research and educational community, including all Irish primary and secondary schools.

HEAnet provides a high-speed national network with direct connectivity for its community to other networks in Ireland, Europe, the USA and the rest of the world.

Established in 1984 by the seven major universities, with the support of the Higher Education Authority, to promote the interchange of information electronically within third level education, HEAnet plays a critical role in establishing Ireland as a global centre of excellence in Internet activity.

CONTACT INFORMATION

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Registered in Ireland: No. 275301

Client Support/Services Information: noc@heanet.ie

General Information: info@heanet.ie

**For information on any of these services,
please contact the HEAnet NOC at:**

E-mail: noc@heanet.ie

Tel: + 353 1 660 9040

www.heanet.ie

Connectivity Services

IP CONNECTIVITY

HEAnet provides world class IP connectivity by means of a resilient backbone using the latest carrier class technology. We provide Internet transit at speeds up to 10Gbit/s, tailored to meet our clients' needs. For research, our connections to GÉANT provide unparalleled high speed connectivity to research networks in Europe and across the world. For general Internet use, we have excellent connectivity to the Irish Internet Exchange (INEX), and high speed connections to multiple transit providers for the best performance and resilience.

POINT-TO-POINT SERVICES

HEAnet provides point-to-point services to serve intra-institute and inter-institute needs. These are typically used for LAN extensions or connecting two locations.

Two modes are available:

Port Mode is a point-to-point port-based transparent Ethernet Virtual Circuit that is used primarily to connect geographically remote LANs over the HEAnet network. It provides connectivity for both Layer 2 and control plane data.

VLAN Mode is a point-to-point VLAN-based circuit. It is presented to the user as an 802.1q trunk which filters customer Layer 2 control protocols and uses the different customer VLAN IDs to direct customer traffic to different destinations.

RESILIENT CONNECTIVITY

HEAnet helps clients to build resilient connectivity solutions, guaranteeing the highest levels of service availability. We help plan and build diverse circuit and router connectivity, and advise on configuring LAN and WAN campus switching and routing equipment.

Hosting & Data

CO-LOCATION

HEAnet co-location services facilitate clients who wish to install equipment in a managed data centre facility. Co-location equipment is directly connected to the HEAnet national backbone and is served by an excellent suite of environmental, power and management services. In addition to regular IPv4 and IPv6 connectivity, clients may also make use of the HEAnet National Backbone Extension. This allows the deployment of Layer 2 Ethernet circuits between their own network and equipment hosted in the facility, providing high speed LAN interconnections with remote equipment. Please contact noc@heanet.ie for information on our co-location offering and associated charging model.

WEBSITE HOSTING

HEAnet provides website hosting services to interest groups belonging to the Irish higher education and research community. HEAnet currently offers three levels of hosting services designed to meet your needs from basic static content to advanced data-based driven sites. For further details and pricing information, please contact noc@heanet.ie

WEBSITE HOT STANDBY

HEAnet offers clients fail over protection for their primary web servers. This is achieved by providing an alternate web server that either mirrors the client's primary web server or displays a cut down copy of the site they want protected. Clients have two options in relation to making their site highly available via this service: Zero Management where the

master server automatically pulls the latest version of their website without their involvement; or Self Management where the client activates fail over.

WIKI HOSTING

In addition to regular website hosting, the HEAnet web hosting platform supports MediaWiki, which supports websites which require collaborative development of website content. Wiki Hosting attracts a hosting charge.

VLE HOSTING

Virtual Learning Environments (VLEs) facilitate the management of educational courses, especially by helping teachers and learners with course administration. The HEAnet web hosting platform supports the very popular Moodle software, which has many features including Forums, Content management, Quizes, Surveys and Glossaries. VLE Hosting attracts a hosting charge.

SOFTWARE MIRRORING

HEAnet operates a mirror service to mirror free software and content relevant to the academic community. Currently we mirror the RedHat Linux Distribution, the Apache Project and The Linux Kernel; however, we continue to expand our base of mirrors. You can browse the server for full a listing of what we offer: <ftp.heanet.ie> (FTP and HTTP). By downloading large content from your local mirror you get faster downloads and help save international bandwidth. This service is available to the general public.

Network Management

IP ADDRESSES

HEAnet provides IP addresses to its clients in the education and research community in Ireland. It comes within the ambit of the European Regional Registry, operated by the RIPE NCC, and follows the guidelines laid down by RIPE. HEAnet uses RIPE NCC allocated addresses. The services of the HEAnet IP registry are available to those in the Irish education and research community who have a valid requirement for IPv4 or IPv6 address space for Internet connectivity.

LOOKING GLASS

HEAnet hosts a Looking Glass which provides a view of the Internet as seen from HEAnet routers. Users can check routing tables and ping/traceroute from our network with this service. It is located at <http://www.heanet.net/cgi-bin/lg.cgi>. HEAnet provides this looking-glass as a service to our clients and network operators. This service is available to the general public.

MULTICAST IP

Multicast is fully deployed across the HEAnet backbone. HEAnet has MBGP/MSDP peerings with Global Crossing, GÉANT, Abilene, Startap, CA*net4, & JANET. Multicast enables efficient delivery of IPTV services across your campus network.

NETFLOW

Netflow's network management applications allow network traffic accounting, usage-based network monitoring, network planning and Denial of Services monitoring of client data flows (at packet header level only).

This tool is invaluable in analysing data flows, in identifying particular instances, in summarising usage patterns and trends, and in general troubleshooting.

NTP

An accurate time service is provided to clients through HEAnet NTP servers. These in turn take service from a Stratum1 server located in the HEAnet Dublin PoP. HEAnet has an agreement with JANET (UK) whereby we can also synchronise our NTP servers from their Stratum1 clocks, thus allowing for continued accurate timekeeping in the event of any issues with our primary time server.

Application Services

.ie REGISTRATION

HEAnet member institutions may register two second-level domain names under the .ie domain for no additional charge.

The member institution completes the appropriate application form at <http://www.domainregistry.ie> and nominates HEAnet as the billing contact. HEAnet can offer member institutions a discounted rate for additional .ie domain name registrations.

DNS

HEAnet provides a DNS service for HEAnet customers based on high availability primary and secondary nameservers. This service is ideal for small organisations which do not have the resources themselves to operate nameservers and maintain DNS information.

MAILING LISTS

Any HEAnet member institution may avail of this service to run electronic discussion lists of relevance to the Irish education and research community. This service enables academics to collaborate on projects via e-mail. The HEAnet Listserv Server was the first IPv6-enabled Listserv in the world. A directory of lists is maintained at listserv.heanet.ie

USENET NEWS

HEAnet provides a full USENET news service to clients in both IPv6 and IPv4. Our USENET service is fully customisable, and we can filter newsgroups in partnership with clients. HEAnet also provides Newsgroups local to the HEAnet news-server, viewable only by HEAnet clients and not part of USENET. This is currently being used to provide inter-society news-feeds between HEAnet member institutions and the Networking Societies RedBrick, TCD Netsoc and Skynet.

Security

ANTI-SPAM

HEAnet offers an Anti-spam service to its clients at no additional cost. This offer is available to HEAnet clients only.

SECURITY SCANNING

The HEAnet Security Scanning service is a vulnerability and risk assessment service that allows HEAnet clients to scan their own IP networks for security holes which, if not fixed, could become serious threats to their organisation's network security. The service allows those tasked with Network Management to probe their network's Internet-facing devices to identify those that may be vulnerable to attack from the Internet.

CERT

HEAnet-CERT operates by agreement with JANET CSIRT (Computer Security Incident Response Team). HEAnet utilises the services of JANET CSIRT to provide a single, trusted point of contact for our clients to deal with computer security incidents and their prevention. The aims of the service are to reduce the probability of successful attack, to reduce the direct costs of security to organisations and lower the risk of consequential damage.

SERVER CERTIFICATE SERVICE (SCS)

The HEAnet Server Certificate Service provides SSL certificates, valid for three years, to its clients. The server certificates can be used for institution services which require encryption, including web (HTTPS), email (IMAPS), server authentication and any number of SSL or TLS based services that require trusted certificates. With the roll out of authentication and authorisation middleware within the education and research community, the need for server certificates to provide encrypted channels has grown.

Multimedia

VIDEO CONFERENCING

HEAnet provides a video conferencing service that is available to all HEAnet clients. This service allows a user to connect with numerous sites in a single conference over our high speed IP network. We also provide inter-connectivity with legacy ISDN equipment.

VIDEO STREAMING

HEAnet offers a service to its clients whereby one may broadcast video technology to very large numbers of participants over IP networks.

VIDEO CONTENT ARCHIVING

HEAnet provides a platform for clients to upload their own content, where it can be made generally available over the network without impacting the clients own bandwidth. Once the data is uploaded to the HEAnet video archive, clients can embed links to the content in their own website for seamless presentation.

Middleware

eduroam

eduroam, which stands for Education Roaming, is a RADIUS-based infrastructure that uses 802.1X security technology to allow for inter-institutional roaming. Being part of eduroam allows a user visiting another eduroam-enabled institution to log on to that WLAN using the same credentials (username and password) as they would use at their home institution.

Please visit www.eduroam.org or contact noc@heanet.ie for more information.

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