Multicast

Group:

IP Multicast is a bandwidth conserving technology that can reduce traffic by transporting single streams of information across the network backbone to regional and local distribution points where the data is replicated for simultaneous delivery to multiple users. Some applications that can take advantage of Multicast include videoconferencing, video serving and news distribution.

- An IPv6 Multicast Technical Guide [1] is available.
- The updated **IPv4 Multicast Technical Guide** will be available in due course for comment. The existing version is available in PDF [2] format.

Connection procedure and support

Requests for new multicast connections and general queries should be sent to the Janet Service Desk at service@ja.net [3]. Please note that only Regional Network operations staff may make requests for new multicast connections.

Operational queries and fault reporting on existing multicast connections must be sent to the Janet Service Desk [4].

A mailing list is available to the Janet community for discussion on multicast issues: JANET-MULTICAST@JISCMAIL.AC.UK [5]

Multicast on Janet

IP Multicast has been supported on Janet since 1991 using an overlay of IP tunnels forming a multicast backbone (MBONE) carrying encapsulated multicast data packets and multicast routing information (Distance Vector Multicast Routing Protocol - DVMRP).

This approach has long been acknowledged to be very difficult to manage and hard to debug, particularly as the number of tunnels increases, so there is a trend to move to a more modern form of multicast service where the multicast packets are transported directly between the routers without the need for tunnels or encapsulation and a different routing protocol is used (Protocol Independent Multicast Sparse Mode - PIM-SM).

This form of the service is known as native multicast. During 2000 the old Janet MBONE was dismantled and mostly replaced with a new native multicast service. DVMRP tunnels are no longer supported. This service was withdrawn as of 31 October 2002 .

Multicast Beacons

The multicast beacons [6] on Janet provide information on the status of multicast across the network.

Default group content privacy:

Log in to request membership [7]

Source URL: https://community-stg.jisc.ac.uk/groups/multicast?f%5B0%5D=bundle%3Aarticle&f%5B1%5D=bundle%3Ablog_article&f%5B2%5D=is_

Links
[1] https://community.ja.net/system/files/487/ipv6-multicast-web.pdf
[2] https://community.ja.net/system/files/487/ipv4-multicast-web.pdf
[3] mailto:service@ja.net
[4] https://www.ja.net/support-advice/support/janet-service-desk
[5] mailto:JANET-MULTICAST@JISCMAIL.AC.UK
[6] https://community.ja.net/groups/multicast/article/janet-multicast-beacons
[7] https://community-stg.jisc.ac.uk/