Viewing Video Content on RTÉ Online

RTÉ has secured rights to stream certain live and on-demand events via its website. Of these events, a number, including GAA matches, are available to internet users in Northern Ireland and the Republic of Ireland.

The system is not without its problems however and the broadcaster has received numerous complaints from viewers within Northern Ireland who have been unable to view events, despite being within the allowed territory.

This is due to the way an IP address' geographical location is recorded. An IP address is a unique number assigned to every computer connected to the internet.[i] Overall coordination of the IP address network, on an international basis, is carried out by the Internet Assigned Numbers Authority (IANA). The overall policy dictating IP address allocation is developed by the Internet Engineering Task Force, the Internet Engineering Steering Group, and the Internet Architecture Board.[ii]

A top-down process exists whereby IANA delegates responsibility for IP assignment to a regional internet registry, in Europe this is the Réseaux IP Européens (RIPE). RIPE develops IP assignment policy through a forum mechanism which allows a bottom-up process of discussion and consensus-based decision making. This policy determines the manner in which IP addresses are distributed to Local Internet Registries. Local Internet Registries are usually Internet Service Providers (ISPs), companies like BT, Virgin, 02 and so on. ISPs in turn allocate IP address to end users.[iii]

A broadcaster streaming video content over the internet will use *geo-access* software to match an IP address to its physical location. This is common practice for broadcasters stream TV over the internet. The BBC, for example, uses this type of software to ensure viewers are from within the UK since:

> *"Rights agreements mean that BBC iPlayer television programmes are only available to users to download or stream (Click to Play) in the UK".[iv]*

Similarly, since RTÉ has rights agreements in place with territorial limits corresponding to the Island of Ireland, they use Geo-access software to ensure this limit is adhered to.[v]

This becomes problematic in some instances because IP addresses are assigned:

> *"…to ISPs within region based blocks. In some cases IP addresses assigned to Northern Ireland customers may fall within Scottish and English regions blocks."[vi]*

In other words, even though a viewer may be physically located in Northern Ireland, the software used to trace his/her IP address will understand it to be located outside the territorial limit and thus block the user from availing of the service.

This problem is not confined to internet users wishing to watch programmes online. It extends across the range of internet content emanating from Northern Ireland. Research carried out by internet marketing, training and consultancy firm Hallam found that of a sample tested at Invest NI workshops, only 17% of companies addresses where

correctly identified as being from Northern Ireland. Search engine Google ranks business results based upon IP address location; a user from Northern Ireland searching for 'restaurant' should in theory receive a list of results within their proximity. If, however, the IP address is incorrectly recorded as London, the user will see results based upon that area, potentially putting Northern Ireland firms at a disadvantage. Similarly, if a company wishes to analyse the location of people accessing their site, they might wrongly assume that a disproportionate number are from England and Scotland.[vii]

In the case of blocked content on the RTÉ site, the broadcaster recommends that users in Northern Ireland experiencing this problem contact their ISP who will in turn contact them, adding that they:

> *"…can only accept applications from an ISP to have an IP address range included for the service. This is because the authenticity of each new applicant needs to be checked before access can be enabled".[viii]*

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28 October 2009

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[i] How Stuff Works *What is an IP address* http://computer.howstuffworks.com/question549.htm (accessed 19/10/09)
[ii] The Internet Assigned Numbers Authority *IANA's Policy* http://www.iana.org/about/ (accessed 28/10/09)
[iii] RIPE *IPv6 Address Allocation and Assignment Policy* http://www.ripe.net/ripe/docs/ripe-481.html#rir (accessed 28/10/09)
[iv] BBC iPlayer *Help: Can I use the iPlayer ouside the UK* http://iplayerhelp.external.bbc.co.uk/help/download_programmes/outsideuk (accessed 19/10/09)
[v] RTÉ *Viewing video content on RTÉ.ie* http://www.rte.ie/info/geoinfo.html (accessed 19/10/09)
[vi] Belfast Telegraph *You IP address could present a problem* http://www.belfasttelegraph.co.uk/business/opinion/watching-web/your-ip-address-location-could-present-a-problem-14435810.html (accessed 19/10/09)
[vii] Hallam Internet marketing, training and Consultancy *Challenges of Search Engine Optimisation in Northern Ireland* http://www.shcl.co.uk/blog/tag/northern-ireland (access 19/10/09)
[viii] RTÉ *Viewing video content on RTÉ.ie* http://www.rte.ie/info/geoinfo.html (accessed 19/10/09)