# IP intelligence and the internet broadcast revolution

IP geolocation - the defacto standard in managing geographic licensing rights







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# IP intelligence and the internet broadcast revolution



The rise of the internet has revolutionised the broadcast industry. The days of a fixed programme schedule delivered through a small number of terrestrial TV stations are long gone. Instead viewers have access to over the top and video on demand services (OTT/VOD) and have become their own programme schedulers, with a vast array of programme content at their fingertips. Consumers can now view content when they want. Appetite for OTT is set to continue to grow, worldwide VOD revenue is predicted to reach 37 billion euros by 2023, a 37% increase on 2017, according to Statista.

Not only is the convenience of choosing what to watch, when, compelling for viewers, so is the proliferation of premium content available through increasingly popular OTT services such as Amazon Prime's SVOD service, that provide content not available elsewhere for low cost.

This programming revolution has gone hand in hand with the explosion of devices that are capable of streaming high-quality video. Better quality mobile screens, the proliferation of low cost data plans and the increasing number of WiFi hotspots are fueling this growth. People are no longer viewing through one TV per household, they can access content through a variety of tablets and smartphones wherever they want.

This viewing revolution presents some interesting challenges for broadcasters. As people are watching more content whilst on the move from multiple devices, broadcasters have to be mindful of compliance with licensing, copyright agreements and cultural differences – granting access where viewing is permissible, restricting access where it is not, all whilst making the user experience as seamless as possible.

# There is a solution

Digital Element's premium IP solution, NetAcuity, at its most granular level can accurately locate a user down to the city/postal code sector level and identify WiFi connection location without becoming personally identifiable. This enables broadcasters to confidently restrict or permit access to content.





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# IP intelligence and the internet broadcast revolution

This viewing revolution is, in the main, being led by a younger, more tech-savvy generation who have grown up in a world where access to the internet is commonplace. And it looks likely that this shift from linear to on-demand is set to continue, SVOD and cloud based services now look set to dominate.

It's not just the small screen that is driving viewing consumption change. According to Strategy Analytics, the global Connected TV device installed base broke through the one billion unit barrier. This growth has been powered by the proliferation of the smart TVs and branded OTT set top boxes. As the IAB has pointed out, the average 'living room' looks very different from its counterpart ten years ago, having at least two screens (including tablets and smartphones) and probably more.

The increase of SVOD and TVOD services are also changing the way people want to interact with advertising, with many subscribers of such services preferring to pay extra to remove commercials. Consumers adopt different tactics to avoid watching ads, such as browsing the internet on other devices and recording to skip ads. Advertisers need to get smarter in terms of delivering ads, making them more contextually relevant and personalised.

#### The value of IP intelligence

In a market where legislation and rights can rapidly change, the serving of content to the right user can be far from simple. And the consequences for not protecting assets can adversely affect revenues, incur cost penalties for non-compliance and damage a brand's reputation for blocking access when it should be allowed.

IP data is vital for content providers to comply with digital rights licences, either at a country or regional level, and yet many are using poor approaches that restrict content to users who should be able to view, while allowing access to those who should not. The deployment of accurate IP technology negates this issue because it accurately identifies the user's location. Working with less accurate data providers can create false restrictions, leading to disgruntled consumers.

Additionally, accurate IP-derived connection speed data helps ensure streaming content is optimised to the viewing platform and helps eliminate the technical problems associated with delivering video or music over a range of devices and connectivity types.

There are many unscrupulous users who try to access content they should not be viewing by masking their location, using proxies or VPNs. Broadcasters need to ensure they are using a premium IP solution to ensure they are not falling foul of nefarious methods of internet access, helping to prevent circumvention and content piracy.







# The increasing VPN and Proxy threat

According to the Global Web Index on average 25% of internet users have used a VPN/Porxy in the past month. This figure rises in emerging markets such as Indonesia 38%, India 38% and China 31%. Moreover, accessing restricted entertainment content and websites is key for VPN users, with an average of 50% citing this as their key motivation for VPN/Proxy use. This rapidly growing threat increases as does the proliferation of SVOD services and represents a major threat to service providers.

Preserving anonymity is a major motivation for North American VPN users, but access to better entertainment drives VPN usage in all other regions

**Global Web Index** 

# **MOTIVATIONS BY REGION** Keep my Access better anonymity entertainment while browsing content FUROPE 38% 379 NORTH AMERICA ASIA PACIFIC 29% 37 55% 2 LATIN AMERICA MIDDLE EAST & AFRICA 47% 329 43% 369

# The value of IP intelligence

Digital Element's proxy database is the most advanced in the world. It can identify the type of proxy - such as anonymous - or if the traffic is coming from a hosting centre. In addition, it can ascertain from where the proxy emanates, such as Tor exit, Tor relay, and cloud or through a VPN. This data is refreshed daily to ensure it is sound. This level of proxy identification provides the ability to identify more suspicious connections and minimise false positives, enabling the broadcaster to make more informed decisions about allowing or denying access to content.

With revenue and reputations at stake it pays to work with the world's most accurate and granular IP data. NetAcuity ensures compliance and accurate identification of a user's location. It can also be used to help geotarget advertising making messages more contextually relevant and engaging.

# PROXY DATA REFRESHED DAILY THE ONLY PROVIDER TO DO THIS

**99.99%** ACCURACY AT COUNTRY LEVEL



# Not all IP vendors are created equal



Not all IP vendors are created equal. There are several suppliers and systems available that can determine where an IP is and for a small investment an answer can be provided, but is it the right one?

Determining the correct location of an IP address and discovering other useful IP intelligence data such as connection speed and anonymisers requires advanced infrastructure analysis, as opposed to simply scraping internet registries or repackaging publically available free data.

Digital Element's premium IP solution, NetAcuity, at its most granular level, can accurately locate a user down to the city/postal code sector level and identify WiFi connection location without becoming personallyidentifiable. It is also the only IP solution in the world that has been accredited by the Media Rating Council.

The coverage is global, accuracy is 99.99% at a country level, and the data is refreshed weekly. It can also determine how a user connects; enabling the identification of data that broadcasters need to effectively manage digital rights.

This is achieved by combining IP routing infrastructure analysis with anonymous location insight gleaned from a network of global commercial partners.

NetAcuity is an effective one source solution that is simple to integrate into broadcasters systems and manage in-house. Conversely, publically available data has patchy global coverage, is rarely updated, is limited in terms of data parameters identified and is inherently inaccurate.



Accredited by Media Rating Council<sup>®</sup> It is imperative that the BBC ensures compliance with licensing agreements. By using accurate IP geolocation technology, we are able to ensure we abide by geographic licensing rights agreements

Matthew Wood Head of Software Engineering for BBC Future Media Online Technology Group



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# Digital Element – The global IP geolocation leader

NetAcuity provides IP geolocation solutions for a global client base, including leading media owners, such as the Hulu, CNN, Channel 5, Amobee, Youview, France TV, Discovery Networks, Disney Interactive and more.

The solution is bundled in three ways to meet the unique needs of our clients and each option varies in terms of data accuracy, granularity, technical integration and service level.

Our latest solution NetAcuity Pulse<sup>™</sup> adds a whole new dimension to IP geotargeting. It builds on the NetAcuity Edge solution by incorporating new partner data from Skyhook, which is derived from their 1st party network of data from mobile devices, billions of real-time data signals and WiFi connection points. NetAcuity Pulse<sup>™</sup> expands the global coverage and reach for postcode level targeting within cities and neighbourhoods, offering more seen IP's at a hyperlocal level than any other supplier. The new solution also enhances the targeting of mobile and connected traffic, providing unrivalled IP targeting precision.









# france•tv





## Standard NetAcuity<sup>™</sup>

NetAcuity<sup>™</sup> is *the* traditional industry standard in geographic targeting.

## NetAcuity Edge<sup>™</sup>

All the features of Standard, plus global ZIP- and postcode-level targeting, derived from user-supplied data sourced from commercial partners.

## **NetAcuity Pulse**<sup>™</sup>

All the features of Edge and Standard, plus mobile-derived IP targeting from Skyhook partnership.



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# Compelling reasons to know more about your traffic

In an age where the consumer is empowered to watch TV on their terms, when and where they want, broadcasters have a myriad of challenges to face to manage the rights of their content.

IP intelligence provides a simple one-source solution to enable broadcasters to manage digital rights and enhance the user experience.

Easy to deploy on an internal server, in less than 20 minutes, NetAcuity<sup>®</sup> is queried by various supplied APIs, and its response time is superfast and reliable at less than 0.03 milliseconds – allowing it to handle up to 30,000 requests per second.

Digital Element is the only dedicated global provider of IP intelligence. With over 15 years of experience and knowledge, specialised European and US teams can advise on how to manage digital rights using IP geolocation techniques. Knowing more about where the customer is coming from – and how they connect – will deliver critical information to manage digital rights.

**G** Digital Element's NetAcuity solution provides us with a highly accurate and comprehensive global database, and their solution was easy to integrate with delivery systems. We also receive great customer service, and the other intelligence data variables – including carrier and device type recognition – allow us to access additional datasets should we need to in future.

Channel 5





# **Clients include**





















odloc











Contact us to learn more about how we can help give your online initiatives the competitive edge. UK | +44 (0)2033 184 702 USA | +1-678-904-6393 www.digitalelement.com