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Datasheet

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# Online Piracy Detection: P2P & DHT Services

Consumers who prefer unauthorized sites over legal sites are ensuring that peer-to-peer (P2P) piracy continues to be a major method of accessing illegal copies of copyrighted content. P2P piracy remains a prominent problem in countries with high levels of piracy.

Previous research conducted by Irdeto found that a significant portion (28%) of high-quality video content on web video sites is sourced from P2P networks. And while there has been significant growth in web video piracy, it is only adding to the global movie and TV piracy problem, rather than replacing P2P piracy

# WHAT IS IRDETO'S P2P SERVICE?

Irdeto's P2P service leverages innovative, proprietary crawling technology to constantly monitor the BitTorrent p2p network.

All content that appears to be a copyright infringement is downloaded, verified with fingerprint technology and/or piracy expert oversight, and results are geo-enriched to provide a dataset that describes detailed geographic and ISP information about each computer that is sharing the content. This workflow enables DMCA notice sending to ISPs, business intelligence reporting on where the content is being shared, as well as the ISP with which the infringing IP address is associated.

Services offered
- Notice Sending
- Business Intelligence Reporting
- Tracemark Watermark Detection

# KEY BENEFITS OF P2P SERVICES

### P2P data for better business decisions
Understanding where and when content is pirated informs content owners about the popularity of their content. The data extracted from P2P file sharing can advise a multitude of key business decisions such as region-specific content distribution strategies, the value of current marketing campaigns and whether or not they need to be refocused, or what content protection efforts are required in which region.

### Notice sending to mitigate pirate activity
Our research suggests that P2P Notice Sending may act as a deterrent to sharing content online, and could potentially drive users to consume content from legal viewership sources.

For example, Irdeto monitoring of P2P enforcement efficacy for a popular reality show revealed that 44% of downloaders stopped their activities after receiving the first DMCA notice. This number increases to 65% after a second notice. In the end, only a very small minority (2.7%) downloaded 20 or more episodes. Overall repeat infringers decreased while legal viewership remained consistent.

### P2P and Irdeto's TraceMarkTM watermarking to find piracy at the source
Irdeto's P2P services can provide the critical discovery phase of infringing content across the global piracy landscape to help identify the source of the problem.

Once illegal content is collected, it can then be analyzed for a watermark. Depending on the type of watermark deployed, the content owner can then either clearly pinpoint security weaknesses in their distribution network or identify the exact source of the pirate activity and take appropriate action.

# WHAT IS IRDETO'S DHT SERVICE?

Irdeto's distributed hash table (DHT)service leverages innovative, proprietary crawling technology to constantly monitor files being shared over DHT. DHT data is then enriched with IMDB and geographical details, such as country, city and region, to the resulting data. This provides insight into the type of content being shared, and which regions are sharing the content. (Distributed Hash Tables are a form of a distributed database that can store and retrieve information associated with a key in a network of peer nodes that can join and leave the network at any time. The nodes coordinate among themselves to balance and store data in the network without any central coordinating party.)

## How is DHT different from P2P?
P2P Services track a specific asset (movie, TV show, video game etc), performing download and verification of the potentially-infringing content, and providing services on a per asset basis (e.g. watermark detection checks on infringing files and notice sending on infringements)

In contrast, DHT gives insight into everything being shared globally with P2P file sharing networks. This content includes video games, books, movies, TV shows, etc.

Services offered
- Regional Monitoring
- Consumption / piracy trends
- Title comparisons
- Competitve Insights

# KEY BENEFITS OF DHT SERVICES

### Provides a comprehensive overview of regional viewership
Similar to P2P data, DHT data provides content owners with insight into where and when content is being pirated. DHT data however, provides a deeper view into consumption habits regardless of content owner or type.

This data can provide rich insights into regional preferences and viewing habits. For example, is television piracy more prevalent in one country over another? Does one country prefer science fiction content over drama?

### Identification of global piracy trends
This service provides key details to help develop a comprehensive overview of the piracy landscape. Data can show which countries have the highest levels of piracy, how those levels change over time, whether specific events (e.g. the COVID-19 pandemic) have an impact on piracy, pinpoint spikes or declines in piracy based on release schedules or formats (straight to PVOD versus theatrical release), etc.

### Delivers rich competitive insights
DHT data allows content owners to not only see popularity of their specific assets, but to also analyze and contrast consumption trends of against those of competitors.

Irdeto is the world leader in digital platform cybersecurity, empowering businesses to innovate for a secure, connected future. Building on over 50 years of expertise in security, Irdeto's services and solutions protect revenue, enable growth and fight cybercrime in video entertainment, video games, and connected industries including transport, health and infrastructure. With teams around the world, Irdeto's greatest asset is its people and diversity is celebrated through an inclusive workplace, where everyone has an equal opportunity to drive innovation and support Irdeto's success. Irdeto is the preferred security partner to empower a secure world where people can connect with confidence.