

CASE STUDY

Providing End-to-End Piracy Protection during Rugby World Cup 2023

Watermarking, IP Blocking, Real-time Analysis and Technical Investigations



irdeto

DSTV

MULTI CHOICE
ENRICHING LIVES

World of Champions

INTRODUCTION

Digital Satellite Television (DStv) is a sub-Saharan African direct broadcast satellite service owned by MultiChoice with headquarters in Randburg, South Africa. During the recent Rugby World Cup 2023 tournament, rugby fans could watch all 48 matches using the DStv platform. Alternatively, 16 out of the 48 matches were broadcasted and available through the South African Broadcasting Corporation (SABC).

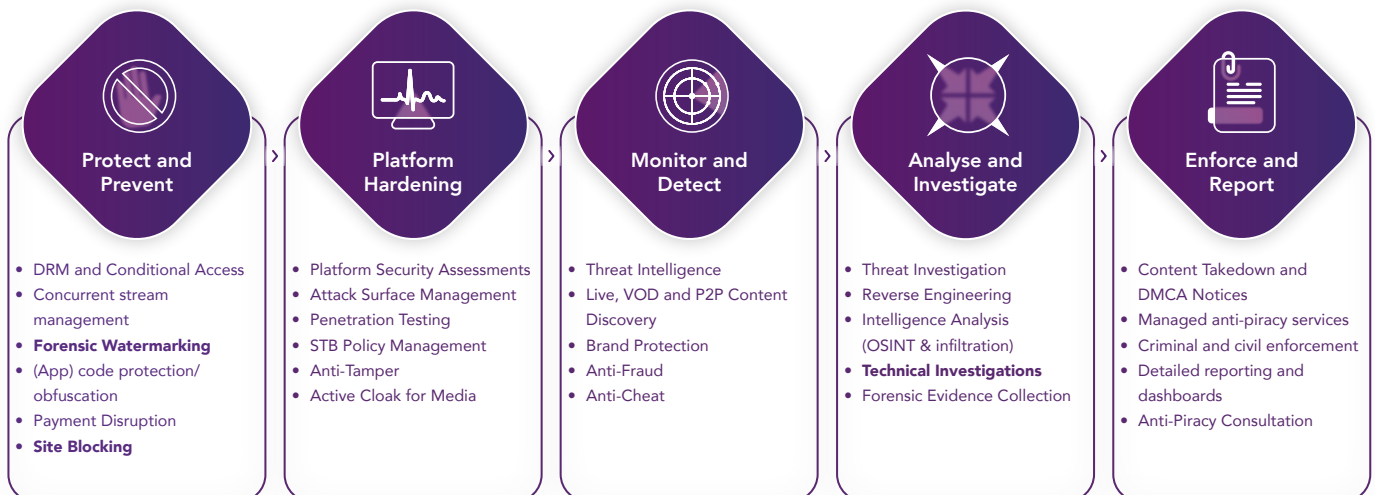
The Rugby World Cup is a men's rugby union tournament that takes place every 4 years between top international teams. This year's tournament was held in France from September 8 – October 28. South Africa retained the RWC title after defeating New Zealand in the final.

With broadcasting rights in more than 50 countries worldwide, the Rugby World Cup is viewed by millions. It also offers diverse opportunities for content pirates and cybercriminals. MultiChoice and Irdeto are committed to continue to pursue and prosecute illegal streaming sites offering illegal, cheap, or even free access to Rugby World Cup 2023 matches. In an attempt to keep those criminal activities to a minimum, Irdeto provided the following anti-piracy and cybersecurity services:

- Forensic Watermarking of matches on the OTT platform,
- Technical Investigations into the pirate platforms and pirate services available,
- IP Blocking of rogue addresses identified during the live broadcasts, and
- Real-time Analysis of watermarking detections and tracking of piracy footprints. (This enables pro-active and preventative actions to neutralize piracy apps from coming back online during a premium live sports event.)

Irdeto provides extensive end-to-end expertise to our customers and partners to mitigate the risk of piracy as outlined in our **5-step program for Anti-Piracy and Cybersecurity management:**

5-step program for Anti-Piracy and Cybersecurity management



THE CHALLENGES

Staying ahead of pirates and cybercriminals always requires a multi-pronged approach.

With broad coverage of sport championships around the globe, it also requires international collaboration with partners both online and on the ground.

In the case of the Rugby World Cup 2023, with so many pirates active during the 7 weeks of the tournament, we knew the challenge required the utilization of various anti-piracy and cybersecurity solutions. An additional challenge would be to raise public awareness through broadcast adverts explaining that “piracy is theft” and how the public could report piracy to MultiChoice via a recently implemented website and dedicated telephone line.

More detailed and technical solution information follows below.

“In an age where content piracy threatens the very foundation of sports broadcasting, the deployment and utilization of Irdeto Watermarking technology proved to be a game-changer. The successful detection and subsequent blocking of pirated accounts during the Rugby World Cup 2023 not only protected our content but also sent a powerful message to pirates and the industry at large.”

Nyiko Shiburi,
Group Chief Technology Officer
MultiChoice Group



THE SOLUTIONS

Our approach for fighting piracy during the Rugby World Cup 2023 required multiple end-to-end anti-piracy technologies. And to be successful, we had to take individual findings from each technology and connect the dots to stay ahead of the activities of both pirates and infringing consumers. The end-to-end technologies we used included:

Forensic Watermarking (before first matches)

Using innovative technology, the Irdeto TraceMark™ watermark played a key role in identifying the accounts used by the pirates to restream the matches while remaining imperceptible to the fans enjoying the live matches. Over 80 watermarked streams were detected and identified as being restreamed using DStv Now accounts. After identifying the account used by the pirates, we were swiftly able to block the account on the platform.

Technical Investigations (before first matches)

In advance of Rugby World Cup 2023 matches, Irdeto intelligence services analyzed piracy apps, websites, and social media sites, to identify the platforms and services which would illegally make live matches available. Irdeto watermarking was deployed and analyzed on these services to identify accounts being utilized for the illegal redistribution of content. At the start of a Rugby World Cup 2023 match, any accounts identified from watermarking were blocked. Our integrated piracy stream detection and watermarking platform facilitated this.

Proactive IP Blocking (during all matches)

During the competition we performed an analysis of the highest consuming IP addresses connected to DStv platform. As a result, we identified and blocked multiple rogue IP addresses associated with pirate streaming operations. Through these actions we were able to stop the pirate streams in real time.

Real-Time Analysis (during all matches and the finals)

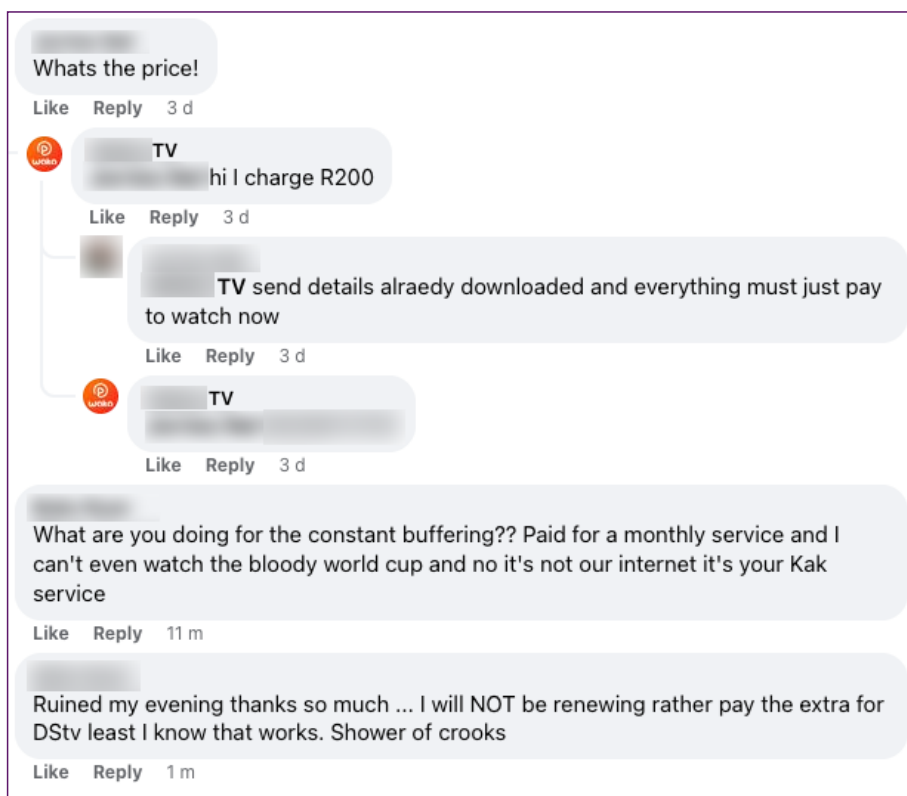
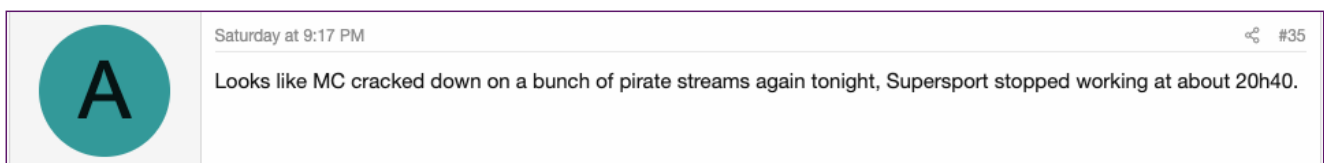
Irdeto and MultiChoice deployed technical analysts during all Rugby World Cup 2023 live events to monitor and analyze watermark detections and carefully review the footprint of any detected account. This allowed for pre-emptive actions to be taken to prevent a piracy service from coming back online during the match. Additionally, this helped to identify IP addresses associated to the piracy services, which were then blocked in real-time.

Through our analysis, we detected many accounts linked to the same device IDs used by a watermark detected account. Since these accounts' credentials are often stolen from third-party data leaks a simple password reset was performed causing minimum impact to the legitimate customer. Once the password was changed the rightful owner of the account could continue to enjoy the action. If an account was reviewed and other abnormalities were observed, the account was blocked to prevent the account from being utilized for piracy.

THE RESULTS

Real time results can show immediate successes. Before, during and after Rugby World Cup 2023, Irdeto was able to play a significant role in keeping pirates at bay and ensuring that online consumers chose legitimate channels to view these events.

Thanks to our intervention, subscribers to various pirate applications were aggravated and simply unable to view pirated matches of Rugby World Cup 2023. The impact Irdeto enforcement actions had on both stopping pirate operations and pirate apps was immense. Legitimate viewers were able to watch a seamless tournament while pirates and consumers using illegal tools were not, as can be seen in these screenshots:



A summary of positive anti-piracy results performed by our global team include:

Successful Global Piracy Disruption

Effectively disrupting piracy streaming operations globally. According to all the internet streaming piracy operations and apps that we monitored; practically no live Rugby World Cup 2023 games were pirated in South Africa.

Comprehensive Anti-Piracy coverage

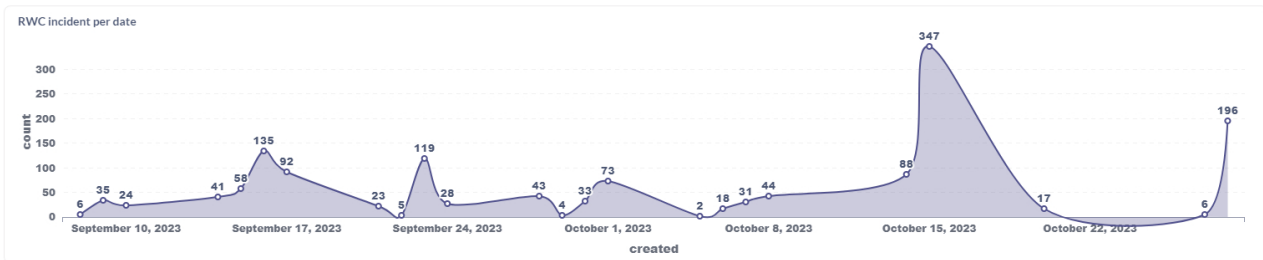
Our end-to-end approach to anti-piracy worked. Forensic Watermarking successfully pinpointed and blocked DStv Now accounts while disrupting globally operating streaming pirate services.

The IP Blocking analysis identified and blocked multiple IP addresses that were affiliated with pirate streaming operations. And our technical investigations identified various accounts that were used by pirates without the knowledge of the legitimate account owners.

The combination of technical automation combined with human interpretation and analysis allowed for pre-emptive Anti-Piracy countermeasures to be utilized which prevented pirates from simply just acquiring new compromised credentials and continuing with their illegal activities.

Anti-Piracy Ticketing System Live Report

Rugby World Cup Report



Takedown Performance

1,468
RWC incidents

1,467
Closed incidents

1
Number of open incidence RWC

Closure Rate - RWC



Response Time

Minimum 26 Seconds

Maximum 80 Minutes

WHY IRDETO

In today's competitive landscape, Irdeto helps their customers manage new technology implementations and combat the growing scale and sophistication of cybercrime and online piracy.

Our customers value the flexibility of our end-to-end solutions, and our ability to bring together various components into a one-stop shop. We call this our 5 Step Anti-Piracy Program. They rely on us for comprehensive security issues that are integral to all our long-term partnerships.

We have a long-standing and established relationship with the sports leagues, Hollywood studios and other major content providers. Our industry leading content security solutions are recognized by them for securing their most valued content and enabling our customers to secure the programming their subscriber's demand.

Beyond the diversity in solutions and business models, our commitment and proven history to deliver the best value to operators is a major contributor for our customers to embark on a long-term partnership with Irdeto.

Interested in knowing more about Site and IP Blocking, Technical Investigations, Forensic Watermarking, Live Event Coverage or even Payment Disruption?

[Visit our website](#)

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.