

## NAGRA SERVICE AND CDN PROTECTION

# Secure Content Delivery. Detect and Disrupt CDN Piracy.

As demand for live sports and premium video grows, so do the threats to how it's delivered. Pirates today aren't just intercepting content — they're exploiting your content delivery infrastructure. CDN leeching and restreaming of high-value live events like sports matches are rampant across direct-to-consumer (D2C) services and OTT platforms, threatening monetization and delivery quality in real time.



## Executive Summary

NAGRA Service & CDN Protection leverages near real-time analytics and precision disruption to stop pirates in their tracks — without alerting them. Rather than triggering an immediate switch to backup piracy infrastructure, our CDN Gatekeeper delivers subtle, ongoing interference that disrupts the viewer experience for piracy users while preserving quality for legitimate users. This approach extends impact, minimizes countermeasures, and makes piracy harder to monetize over time.

It's a modular, analytics-driven solution that doesn't just detect piracy — it helps you stop it, measure its business impact, and defend content integrity across every stream.



## Solution Benefits

- 1 Real-Time Visibility Across CDNs:** Gain unified intelligence from hybrid CDN environments — including Akamai, AWS CloudFront, Broadpeak, and more — with real-time KPIs, session tracking, and threat alerts.
- 2 Pinpoint Abuse with Session-Level Analytics:** Transform raw CDN logs into enriched streaming session views with insights into tokens, IP addresses, geolocation, bandwidth, and traffic anomalies.
- 3 Disrupt Pirate Streams — Without Fueling Backup Attacks:** NAGRA CDN Gatekeeper applies targeted disruptions — like token scrambling and stream instability — that degrade pirate service quality without tipping off operators, reducing effectiveness while avoiding rapid failover to backup systems.
- 4 Measure Revenue Impact:** Dashboards estimate monthly costs and revenue lost to piracy, supporting business decisions and security prioritization.
- 5 Unify Intelligence Across Attack Vectors:** Correlate CDN insights with other NAGRA Streaming Security solutions — including Multi-DRM, Application Security, Device Protection, and Anti-Piracy Intelligence — for coordinated, end-to-end protection across the entire streaming ecosystem.

## NAGRA Service & CDN Protection

Bringing together real-time intelligence, session-level visibility, and precision disruption tools to detect and act on piracy threats across your delivery infrastructure.

### CDN Log Ingestion & Session Modeling:

Ingest high-volume HTTP logs in real time and aggregate them into structured streaming session data with contextual KPIs.

### Real-Time Security Monitoring & Analytics:

Detect anomalies like excessive concurrent streams, token sharing, and suspicious session patterns.

### CDN Gatekeeper for Enforcement:

Automatically generate disruption lists — including compromised access tokens and IPs — for immediate action.

### Business Impact Estimation Tools:

Use configurable models to assess dollar-value losses from piracy-related delivery abuse.

### MDRM & DRM Analytics Integration:

Tie in account- and device-level behaviors to expose deeper credential sharing and restreaming abuse.

## How It Works

Whether you're a video streaming provider delivering premium live content or a content rights holder safeguarding licensed assets, unauthorized CDN access and token abuse are silently eroding your platform's value. NAGRA Service & CDN Protection ingests real-time log data to uncover threats like token sharing, datacenter restreaming, and account misuse — delivering insights down to the user, token, and IP level. Rather than triggering pirate failovers, our soft disruption approach degrades stream quality to extend impact — without alerting attackers.



### Ingest & Normalize Logs

Capture and normalize HTTP logs from multiple CDNs and Multi-DRM sources to reveal viewing sessions and access anomalies.



### Analyze Behavior & Identify Threats

Apply real-time analytics to surface suspicious usage patterns — such as shared tokens, stolen credentials, and pirate redistribution.



### Correlate & Visualize Impact

Aggregate data in dynamic dashboards showing IP-level access, CDN session volume, and business impact estimates.



### Disrupt & Enforce

Generate actionable blocklists for the NAGRA CDN Gatekeeper or third-party enforcement tools to disrupt pirate sessions and revoke access.

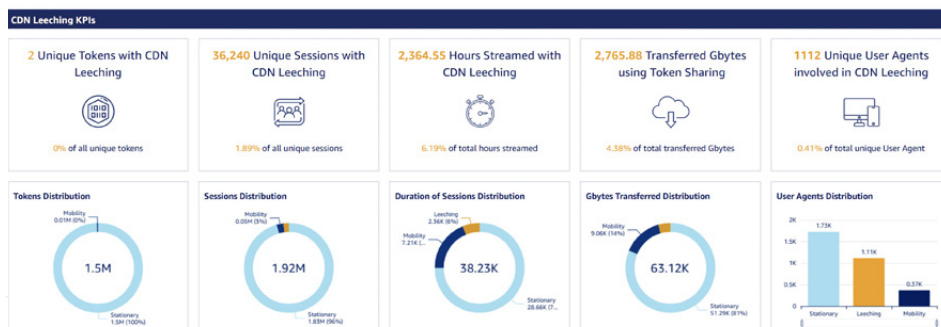


### Track KPIs & Optimize Response

Monitor piracy trends, measure mitigation impact, and feed insights into your broader Streaming Security strategy.

## CDN Analytics Dashboard

The dashboard surfaces stolen tokens, pirate activity, session volumes, and more - equipping your team with the intelligence to act decisively and demonstrate ROI.



## Strategic Intelligence. Impactful Action.

The Kudelski Group brings decades of leadership in content protection, device security, and cybersecurity — with operations in 20+ countries, protecting over 500 service providers and 400 million devices worldwide. From studios tracing leaks to telcos defending live services and rights holders managing partner risk, NAGRA Streaming Security delivers targeted intelligence and decisive tools to match your mission.

**If you'd like to learn more or explore next steps, please get in touch — we look forward to continuing the conversation.**