

**Synamedia**

# A Preventative and Tactical Approach to Fighting Piracy

Janice Pearson  
Director of Business Development

December 16, 2021



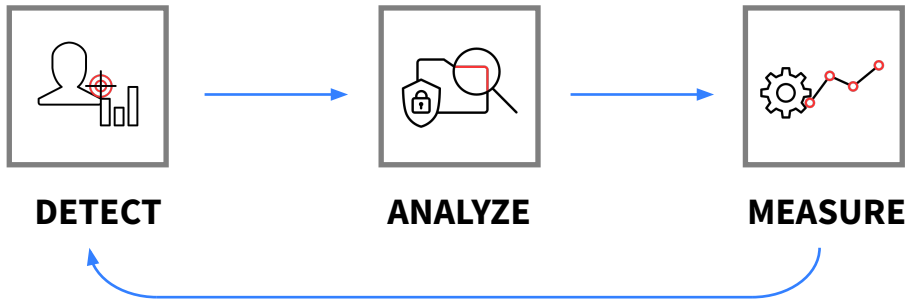
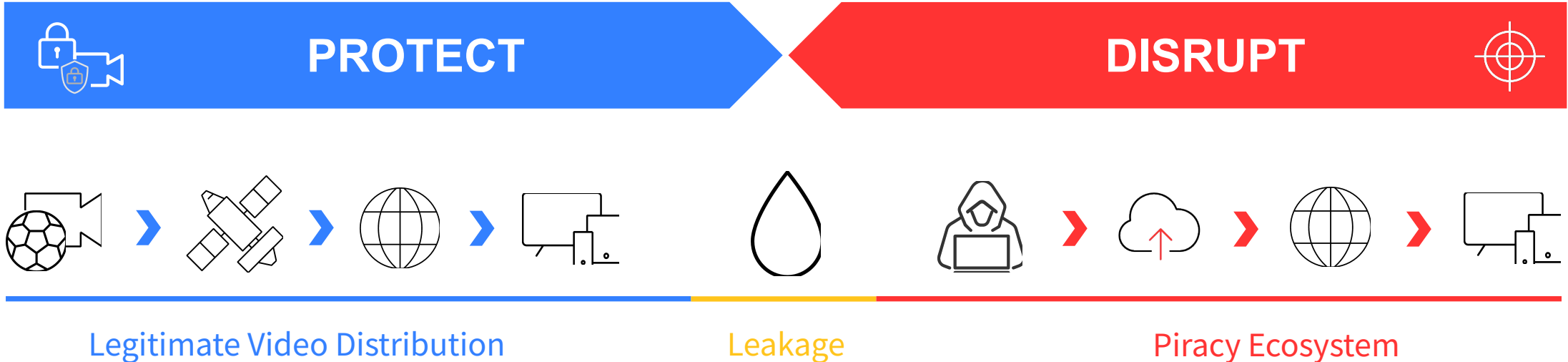
# Piracy is thriving

- COVID-19 increased TV time but also piracy
- New pirate “scripts” can access content directly from the Service Operator's CDN
- Content from CDN is at high quality (audio, subtitles, bypass client watermarking, no HW required)
- Piracy is the new competition as far as quality, latency, user experience and variety



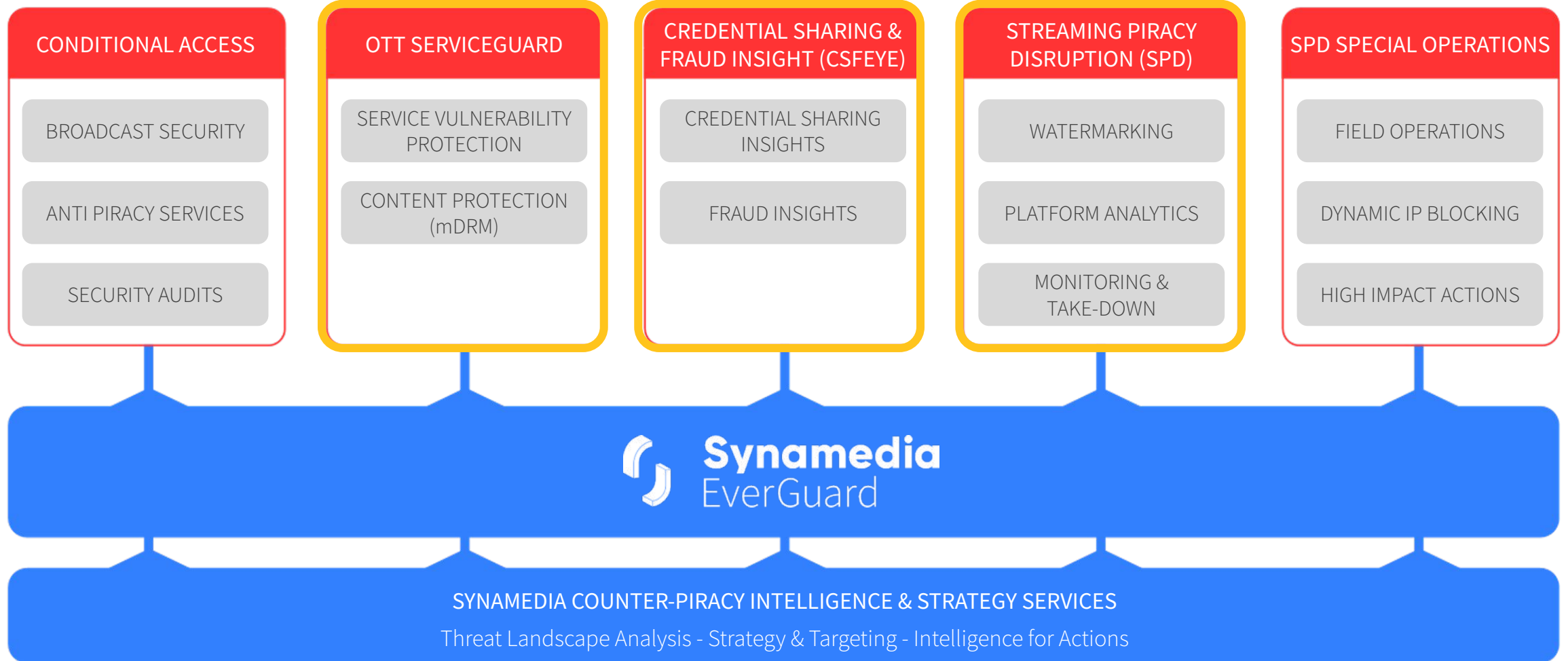
# Synamedia's Holistic Approach to Fighting Piracy

Combining technology & intelligence to counter the piracy threats to your business, subscribers and content



# Security Solutions and Services

Combining technology & intelligence to counter the piracy threats to your business, subscribers and content



# OTT ServiceGuard in 30 seconds

**For**

OTT Video Streaming Services

**Who**

want to prevent bad actors from gaining unauthorized access to their streaming service

OTT ServiceGuard

**Is**

a cloud-based service and client library protection solution

**That**

prevents pirates from taking advantage of OTT vulnerabilities, abusing your service and client devices to steal premium content and overload your infrastructure

**Unlike**

existing solutions, such as multi-DRM, which fail to address all the vulnerabilities that leave your service exposed

**Our solution**

is the only one that tackles all service theft techniques, including token duplication, bypassing concurrency controls and direct access to CDNs.

# Service Theft is Hurting Your Businesses

## Lost Subscriber revenue

Users of illegitimate services are often paying. Illegitimate services are getting so good, that some users aren't even aware their money is going to a pirate!

---

## Lost Advertising revenue

Pirates are wrapping their own advertising around the Service's stolen content, so the revenue generated is being lost by the Service Operator.

---

## Additional Infrastructure Costs

In some cases, Service Operators are paying to deliver content to illegitimate users, so the problem is impacting their costs and margin.

---

## Damage to The Brand

Some illegitimate services are so good that some users think they're using the brand's own service, damaging the brand of the legitimate service and preventing upsell opportunities.

# Addressing Common Vulnerabilities

Service Vulnerability	How vulnerability is exposed	How Synamedia OTT ServiceGuard protects
Device /app tampering	Hacked applications impersonate legitimate applications to gain access	Controls service access by identified tampered devices and applications
Authorization tokens	Service authorization tokens are duplicated	Ensures that content is only delivered to authorized devices
Concurrency mechanism	Concurrency mechanism is tricked so unlimited streams can be played	Stops widespread concurrency manipulations
CDN Access tokens	CDN access tokens are duplicated	Prevents pirates from gaining uninterrupted access to content directly from the CDN

# Common OTT Service Vulnerabilities

OTT Platforms have multiple points of vulnerability that can be hacked to gain unauthorised access

## 1 Hacked / Jailbroken Devices

Enables the impersonation of legitimate applications and to steal access tokens

## 2 Authorization Tokens

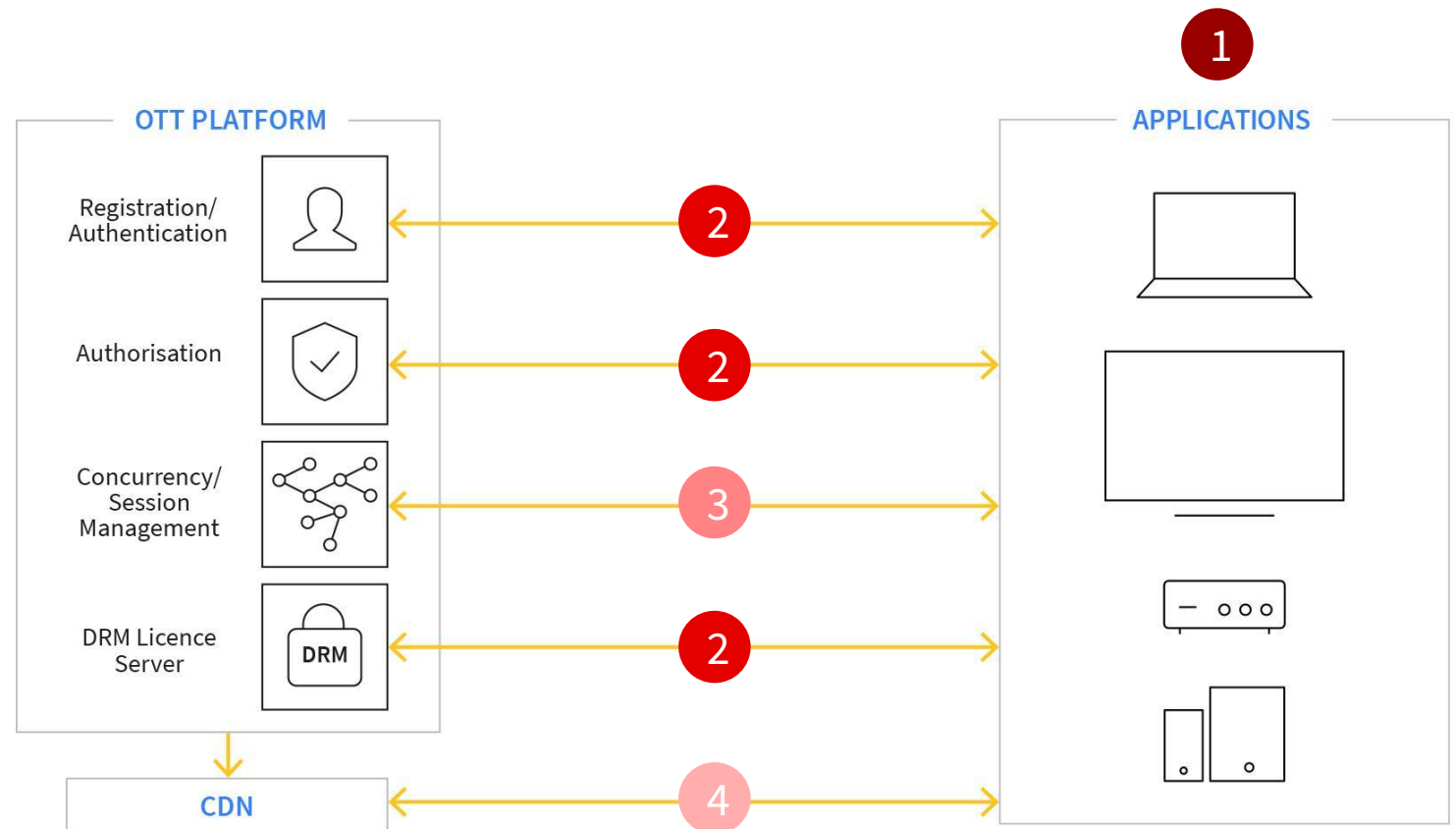
Tokens are duplicated

## 3 Concurrency Mechanisms

Tricked to allow an unlimited number of streams to play concurrently

## 4 CDN Access Tokens

CDN access tokens are duplicated to get direct access to the content





# Synamedia OTT ServiceGuard



Protect OTT Service from pirate exploits



Ensure that premium content is delivered only to authorized devices



Prevent infrastructure cost increases due to piracy activity on your OTT service



Protect against pirate direct access to content on the CDN



Integrate with any OTT platform and application

\* OTT ServiceGuard works with other mDRM implementations or can provide its own

# CSFEye in 30 seconds

**For**

Video Streaming Services

**Who**

are looking to reduce the revenue loss, infrastructure abuse and business risk caused by credentials sharing and fraud activities.

**Is**

a cloud-based user behavior analysis service

**That**

Identifies the types of sharing or fraud activity so you can measure your revenue loss and risk added and apply a targeted response with confidence and full impact analysis.

**Unlike**

rule-based and other homegrown solutions that are less precise and therefore limited in their ability to take action with confidence

**Our solution**

Provides accurate and actionable results immediately supported by machine learning techniques for broad use case coverage, producing highly accurate results showing clear evidence displayed on a data-rich, yet intuitive dashboard.

# How are Credentials Abused?

## Casual Credentials Sharing



Family



Friends

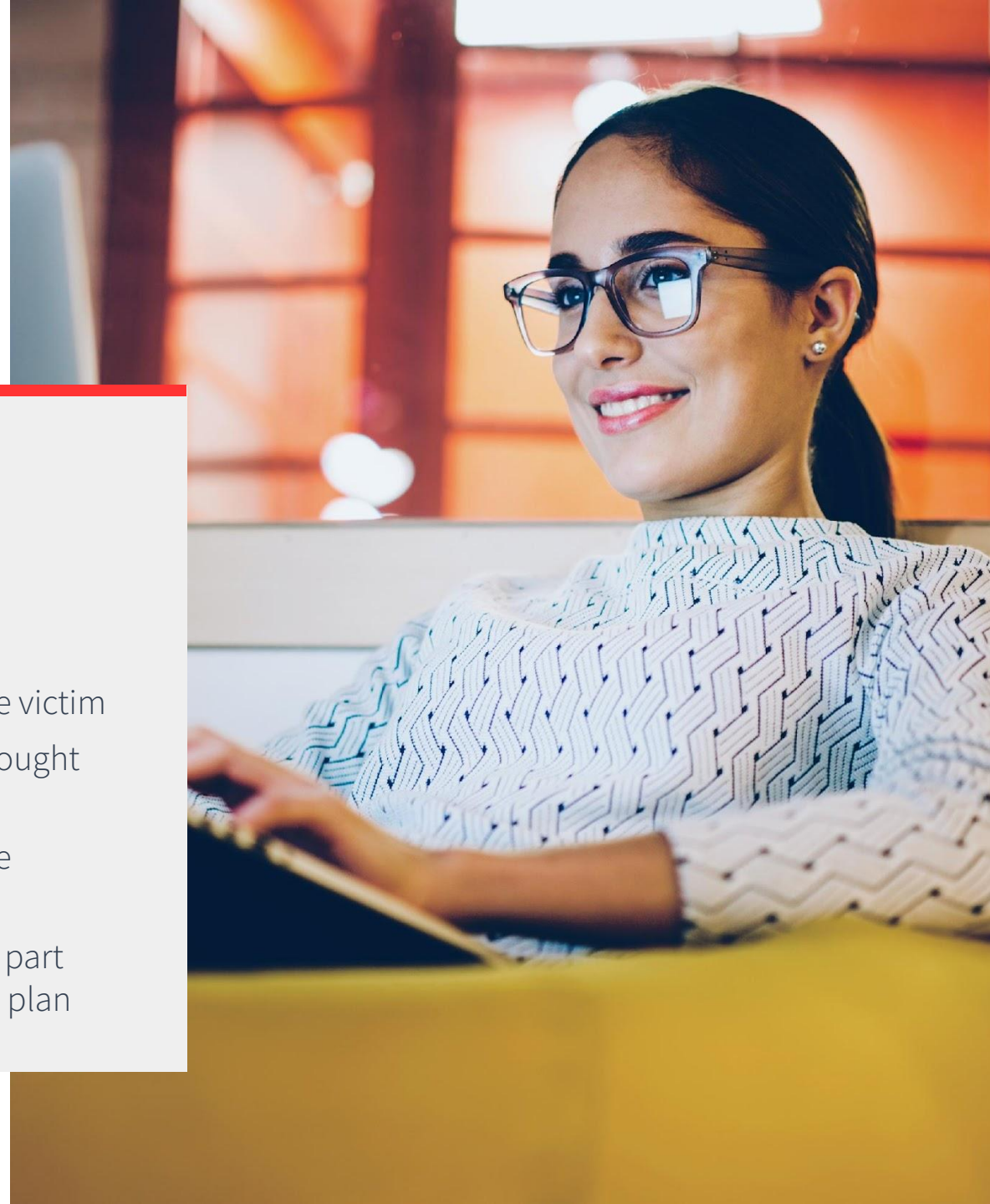
- Account owner knowingly shares his credentials
- Family & Friends
- Online credential pooling/ swapping/sharing

## Credential Fraud



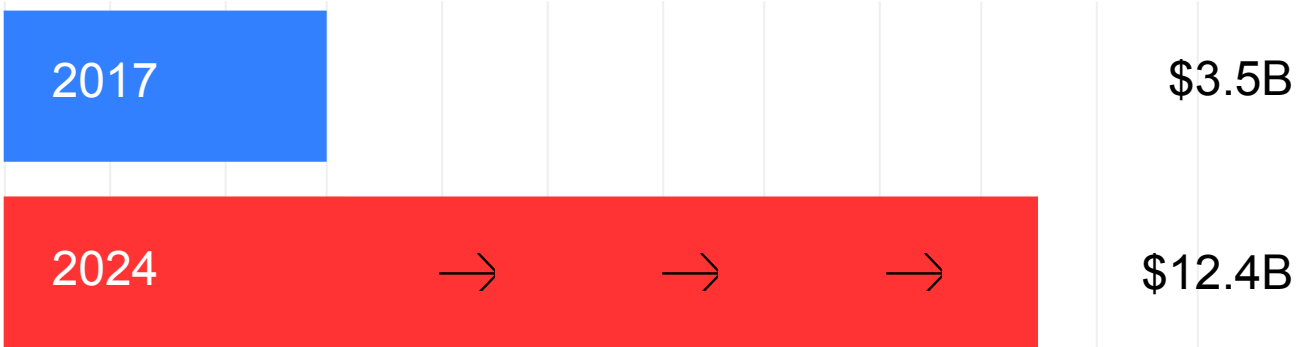
Fraudsters

- Account owner is the victim
- Use of credentials bought from leaked records
- Account owner is the fraudster
- Account owner sells part of their subscription plan



# Market Stats

Revenue loss due to sharing



More than **7.9 billion\*** records leaked in 2019

[\\*Parks Associates](#)



“There’s lots of extra streams, there’s lots of extra passwords, there’s lots of people who could get free service.”

Tom Rutledge, CEO of Charter Communications

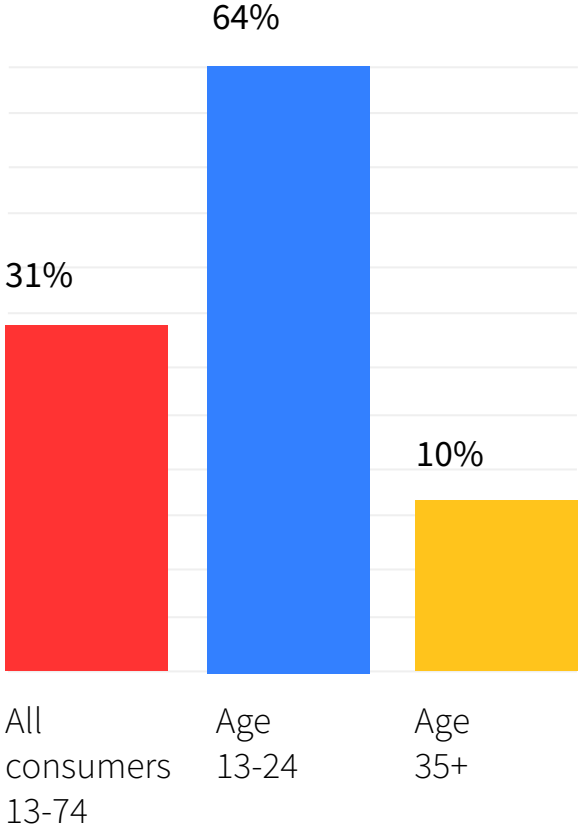


“The more the practice is viewed with a shrug, the more it creates a dynamic where people believe it’s acceptable. And it’s not.”

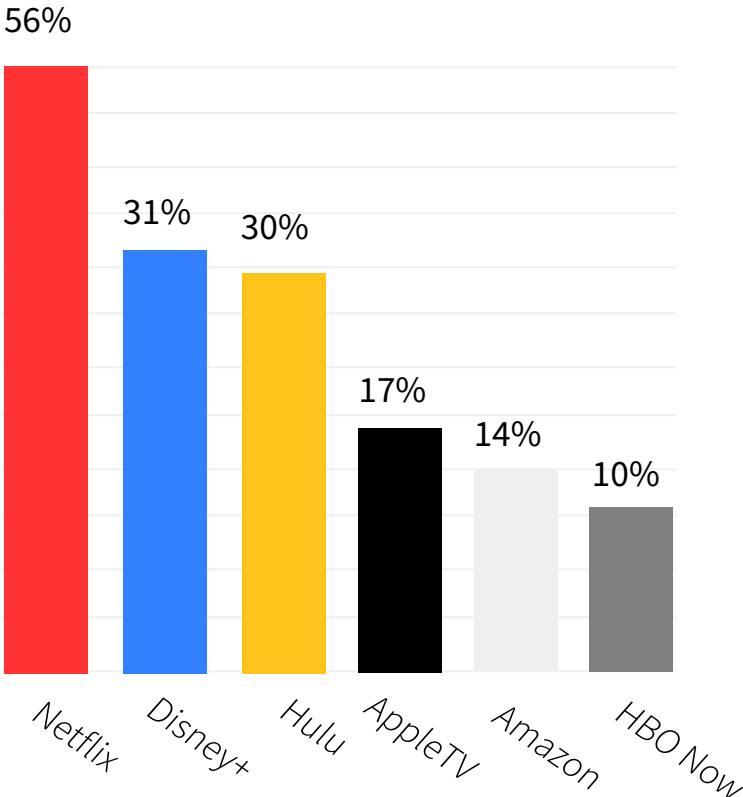
Justin Connolly, EVP of ESPN and Disney

# Credential Sharing: Market Trends

Have you ever given online service logins to, or used logins from, a person who doesn't live with you?



Have you ever given your login information for these services to a person who doesn't live with you?



**Jam!** sign in

**Binge more. Pay less.**  
**With friends! 🥰**

Stop texting your friends for logins.

**Get access to services your friends pay for,** instantly and securely.

Don't miss out on anything. Start **Jamming** in our **free** private beta!

---

Your first name

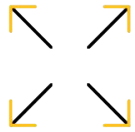
Your personal email

**Add me to the list!**

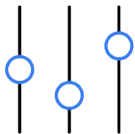
# Cloud-Based Credentials Sharing and Fraud Detection Platform



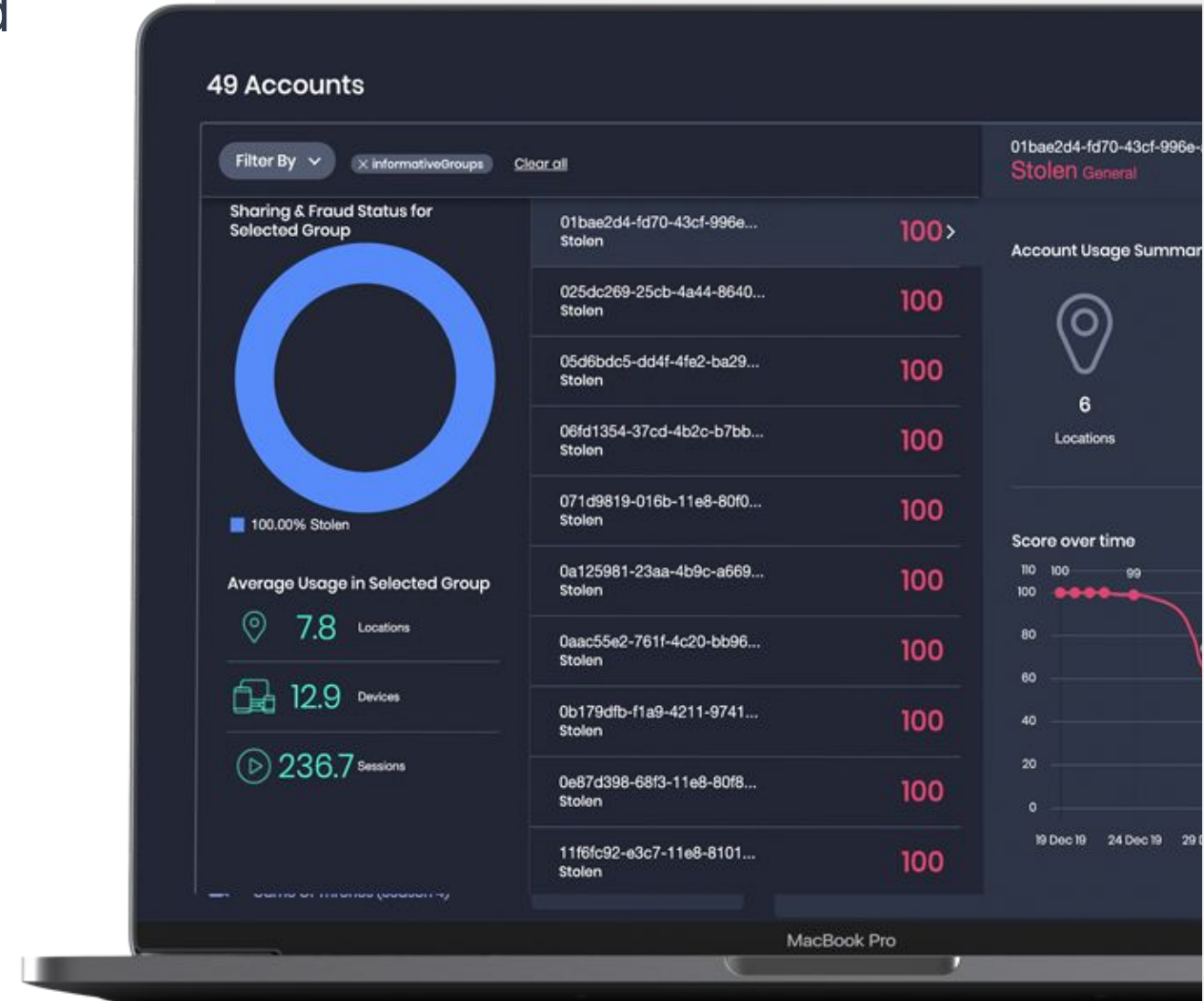
A single cloud-based solution for both fraud and credentials sharing



Extensive coverage – detection a wide array of use cases



Automated machine learning analysis based on multiple indicators for improved detection and early alerts



# Cloud-Based Credentials Sharing and Fraud Detection Platform



Intelligence based SaaS solution – leveraging research and data from multiple resources

- Improve ML capabilities
- Improve detection accuracy
- Eliminate false positives



Automated controlled response

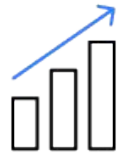
- Risk based Authentication
- Security actions such as password resets
- Marketing opportunities (upsell, promotions etc.)



Improving the experience of legitimate users and minimizing subscribers' churn



# Synamedia CSFEye



## Grow your revenue stream

- Uncover hidden revenues
- Leverage instant detection of sharers with upsell
- Avoid customers' churn with improved user experience



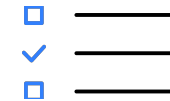
## Reduce Costs

- Early and accurate detection of fraud attempts
- Eliminating freeloaders using your network and hosting resources



## Lower risk to your reputation

- Avoid customer churn
- Avoid negative media coverage



## Compliance

- Reduce the risk of fines
- Facilitate response and readiness with reports
- Meet GDPR and other privacy requirements



## Protect Legitimate Subscribers

- Early detection of ATO
- Secure privacy, data and assets
- Avoid account abuse
- Encourage checking others accounts for signs of compromise



# Streaming Piracy Disruption (SPD) in 30 seconds

**For** Video Streaming Services

**Who** Are looking to protect their content from piracy and to comply with rights owners' requirements

**The** Streaming Piracy Disruption

**Is** An intelligence-based leakage detect & disrupt service using watermarking

**That** provides robust identification and access revocation of live and VOD leakage sources without affecting the quality of OTT service, and enables anti-piracy team to track their content leakage across piracy types on an ongoing basis or during events

**Unlike** **watermarking** that is vulnerable to piracy evasion tactics, or require doubling the encoding resources, and piracy **monitoring** vendors who are limited to viewer access

**Our solution** **Watermark** protects against advanced pirate evasion techniques, adjusting to current infrastructure w/o doubling encoder resources; **Monitoring** with greatest IPTV piracy coverage in EMEA/NA; Piracy trend insights from **combining** their results

# We are unique

Headend Watermark inserted in compressed domain saves backend operational costs

Patent pending anti-collusion for watermark

Broad and deep IPTV monitoring in EMEA & North America

EverGuard intelligence-based platform for managing, tracking and insights

# Streaming Piracy Disruption

Detect & Disrupt Leaks Across Your Broadcast & OTT Services

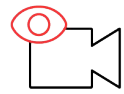
		B2C VIDEO SERVICES		CONTENT OWNERS
		Need to identify leakage source: Compliance Already have monitor	Need to extensively identify & disrupt leakage sources of pirate services to protect my content investment	Need a standardized solution for removing my content from platforms that enable piracy
<b>WATERMARKING</b>	Identify source of leakage using covert signal in video, and revoke its access	✓	✓	
<b>MONITORING</b>	Locate customer content on pirate services		✓	✓
<b>LEGAL TAKEDOWN</b>	Issue legal notices (e.g. DMCA) to platforms that carry pirate streams			✓

# Synamedia SPD Key Advantages



## Support for all content types

- Linear
- VOD



## Full monitoring coverage

- Social Networks
- Pirated Websites
- Subscription-based Pirated Networks



## Combining Intelligence and technology

- Digital fingerprinting
- Watermarking
- Human and Tech intel
- Anti-collusion



## Data-led Analysis

- Pirate behavior profiling
- Environment data
- Overcome pirate evasion tactics



## Effective disruptions and take downs

- Based on piracy insights
- Disrupt leakage with message
- Terminate account access
- Legal takedown



# Synamedia