VideoGuard® Anti-Piracy Services Case Study
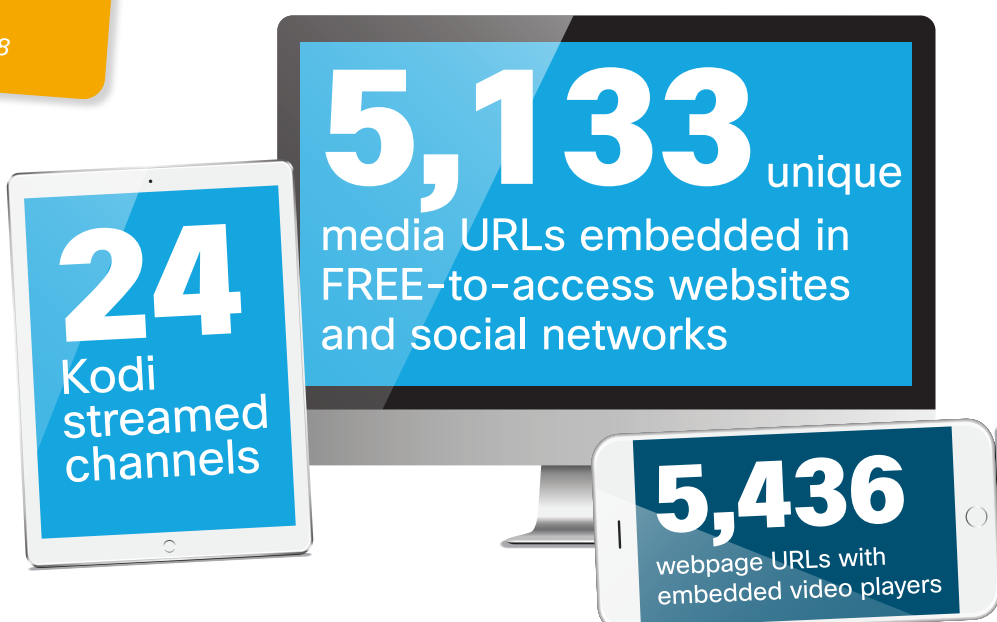
Fighting Illegal Streams

The VideoGuard® Anti-Piracy Services team was engaged by multiple pay TV operators to fight illegal streaming associated with **2018 FIFA World Cup Russia™**.

A Summer of Piracy Headlines

Telemundo Says Its World Cup Broadcasts Were Illegally Distributed
Bloomberg June 18, 2018

The Brazen Bootlegging of a Multi-billion Dollar Sports Network
NY Times, May 9, 2018

World Cup TV Rights Dispute Prompts FIFA to Attack Pirates
Bloomberg July 11, 2018

FIFA Statement Concerning BeoutQ
FIFA.com June 15, 2018

Qatar's BeIN Sports Says It Has Proof of Saudi Role in Piracy Dispute
NY Times, Aug 15, 2018

Hey, where can I watch the World Cup? Anyone?

Sure, here are a few options...

Pirated Streams Found

The piracy stats documented here relate to six sports channels for a **single pay TV** operator and a sub-set of **25 World Cup broadcasts.**

Additional pirated channels and streams NOT specific to our pay TV operator customer included:

146 other channels

104 other Kodi streamed channels

all offering illegal access to World Cup broadcasts

24 Kodi streamed channels

5,133 unique media URLs embedded in FREE-to-access websites and social networks

5,436 webpage URLs with embedded video players

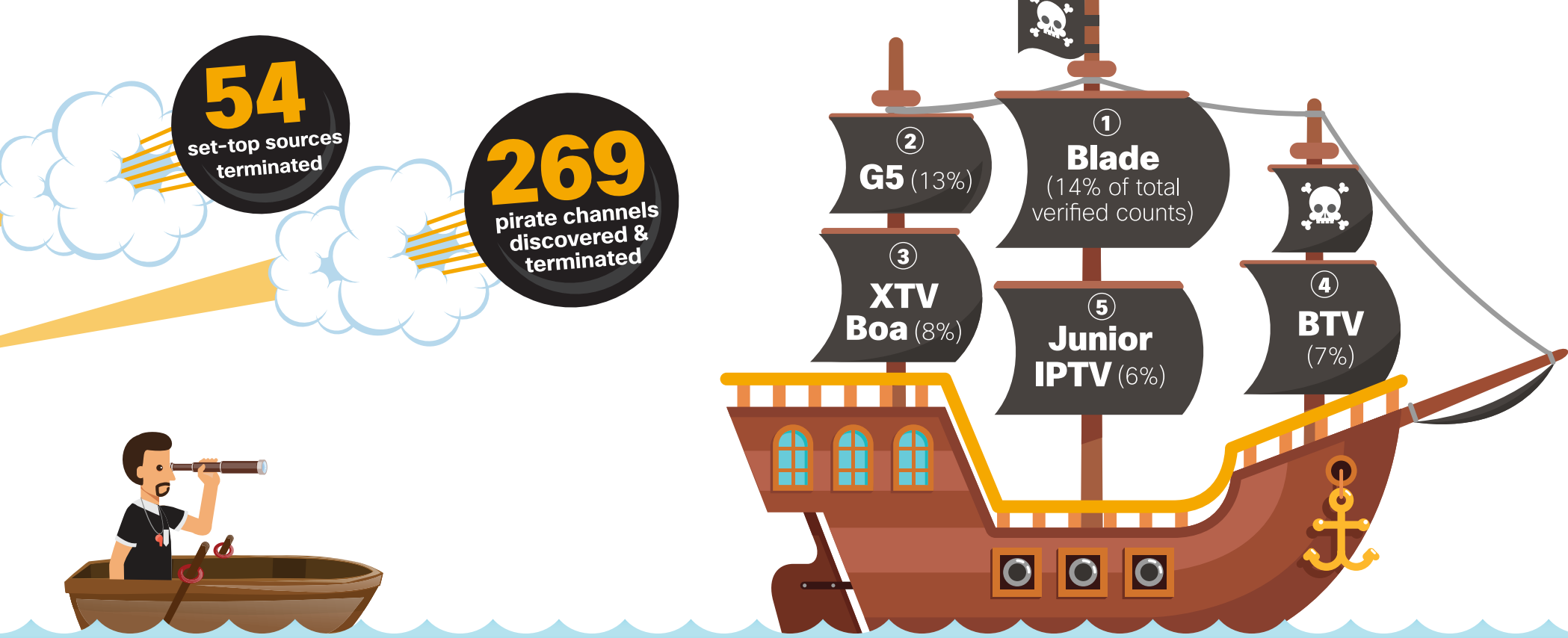## DID YOU KNOW? Fake TV is a Thing!

In addition to **pirated broadcasts** available for free on the open web...

Illegally sourced channels were also available for purchase! And many subscribers unknowingly or willingly paid for access to these well-designed, professionalized but **illegal** subscription TV networks.

We detected 33 publicly available, branded, illegal subscription pay TV services in one market.

54 set-top sources terminated

269 pirate channels discovered & terminated

The Top Five Illegal pay TV Networks in Our Study (based on counts for a single operator)

① **Blade** (14% of total verified counts)

② **G5** (13%)

③ **XTV Boa** (8%)

⑤ **Junior IPTV** (6%)
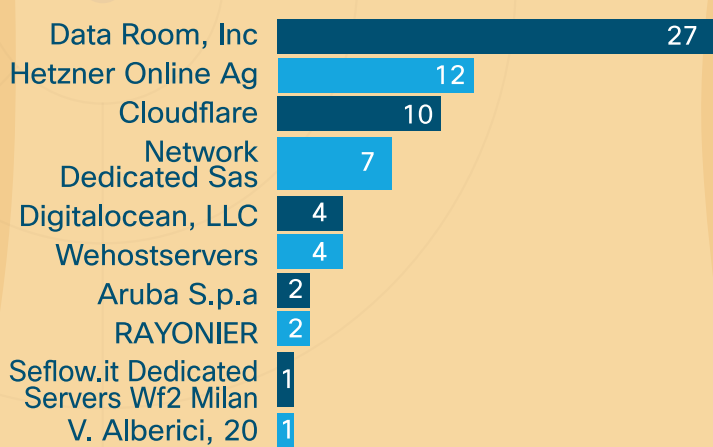
④ **BTV** (7%)

Piracy is a Hard Problem: Four Challenges

CHALLENGE	OUR SOLUTION
Crawling an ocean of fragmented endpoints to find constantly added pirate URLs	Comprehensive, AI-enabled 'listening' to webpages, streams, UGC sites, social media, P2P, Add-ons, APKs, and M3U8 links
Remaining undetected during anti-piracy operation	Clandestine, on-the-ground intel of illegal subscription TV services combined with world-class cyber-security tactics
Staying ahead of constant evasion tactics by pirates	Apply real-time counter-measures to watermark attacks and stream/channel swaps
Optimization of piracy termination and viewer messaging	Piracy-intel-based policy planning to maximize shut-down impact and/or drive conversion to legitimate streaming services

Hosting Service Source URL

Host	Count
Data Room, Inc	27
Hetzner Online Ag	12
Cloudflare	10
Network Dedicated Sas	7
Digitalocean, LLC	4
Wehostservers	4
Aruba S.p.a	2
RAYONIER	2
Seflow.it Dedicated Servers Wf2 Milan	1
V. Alberici, 20	1

Be Prepared to Take Action with Data, Insights and Evidence

In our study, these hosting services were identified and verified to be used for hosting of media URLs with illegally obtained content.

Findings and Recommendations

The Fight is Real-time. The number of open internet page URLs increased as the World Cup progressed.

Regional Knowledge Needed. There are stark differences from region to region with respect to access to piracy, enforcement options, and distribution methods.

Expect These Five Evasion Tactics

1. Watermark circumvention encoders
2. Collusion attacks on watermarks
3. Manipulate playback to skip watermarked segments
4. Channel swap-outs with alternative unsecured sources
5. Changing smart cards in real-time

2018

See VideoGuard® Anti-Piracy Services at work. Stand 1.A71
Email Anti-Piracy@Cisco.com for more information.