

MarkScan

India | New Delhi

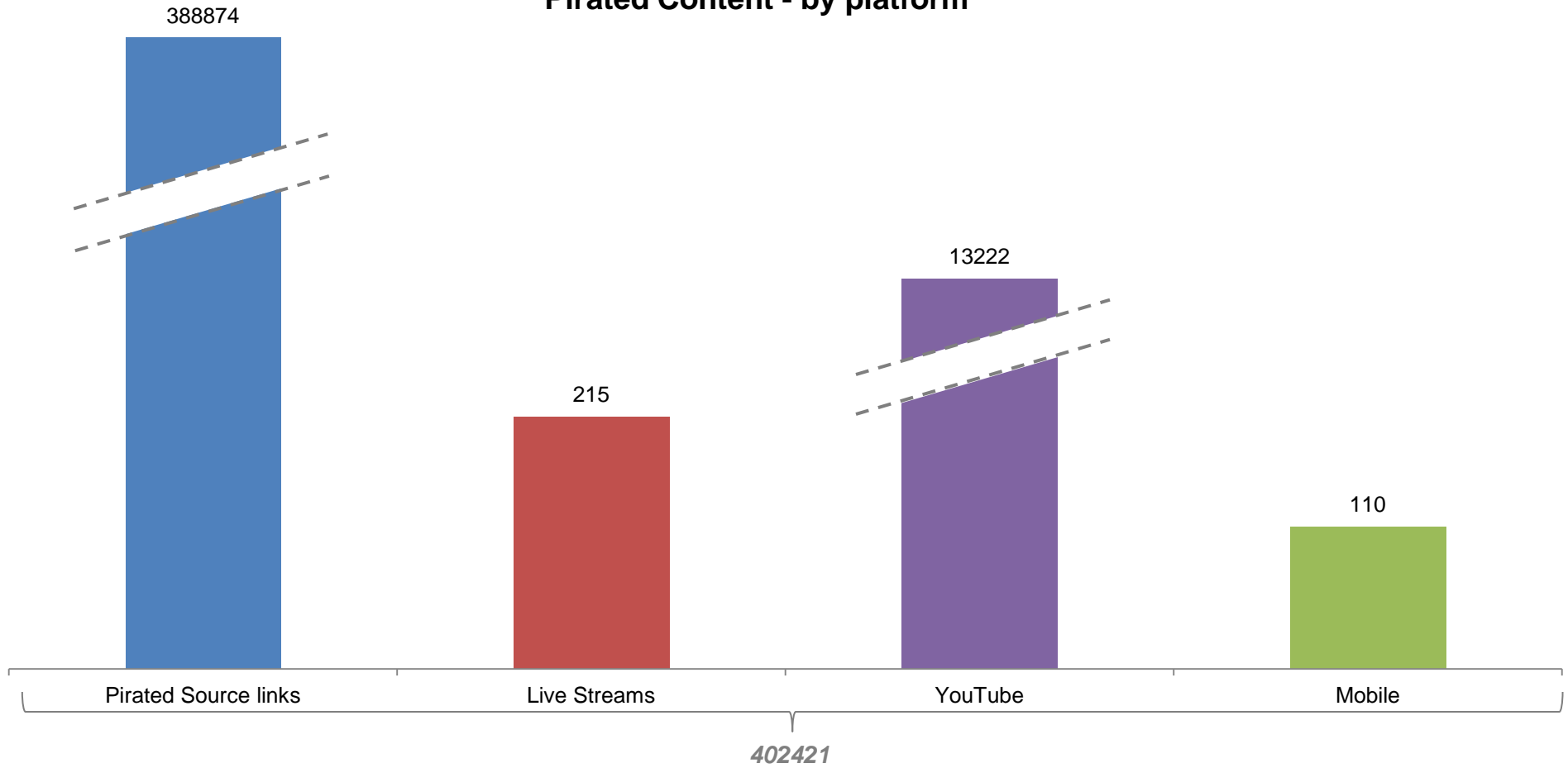


Digital Content Protection – TV

Case Study

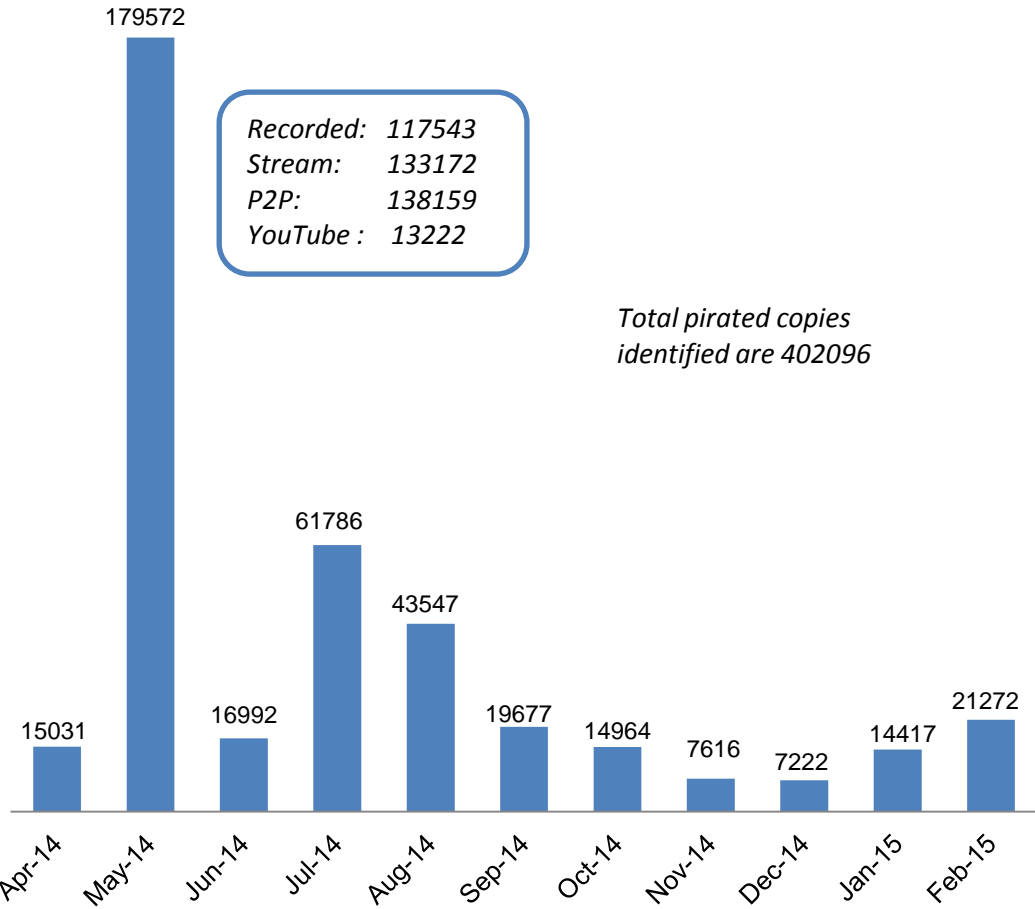
We found significant levels of piracy - >388k source links, 215 live feeds, >13k YouTube Videos and 110 mobile applications

Pirated Content - by platform



These pirated copies were identified across 924 websites; North America was the most popular hosting location among these websites.

Source Links – Month Wise

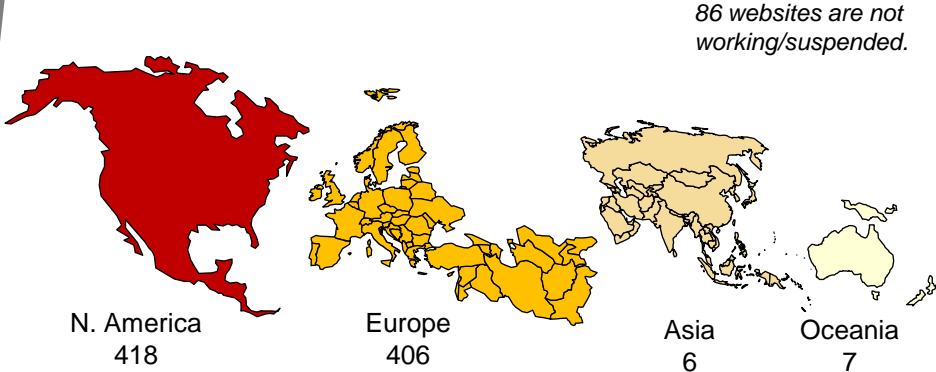


Top Properties – pirated source links

Property Name	#No. of links
	119906
	50522
	30126
	24255
	22545
	18170
	15018
	13841
	8139
	7859

80% identified links only belongs to Top 10 properties

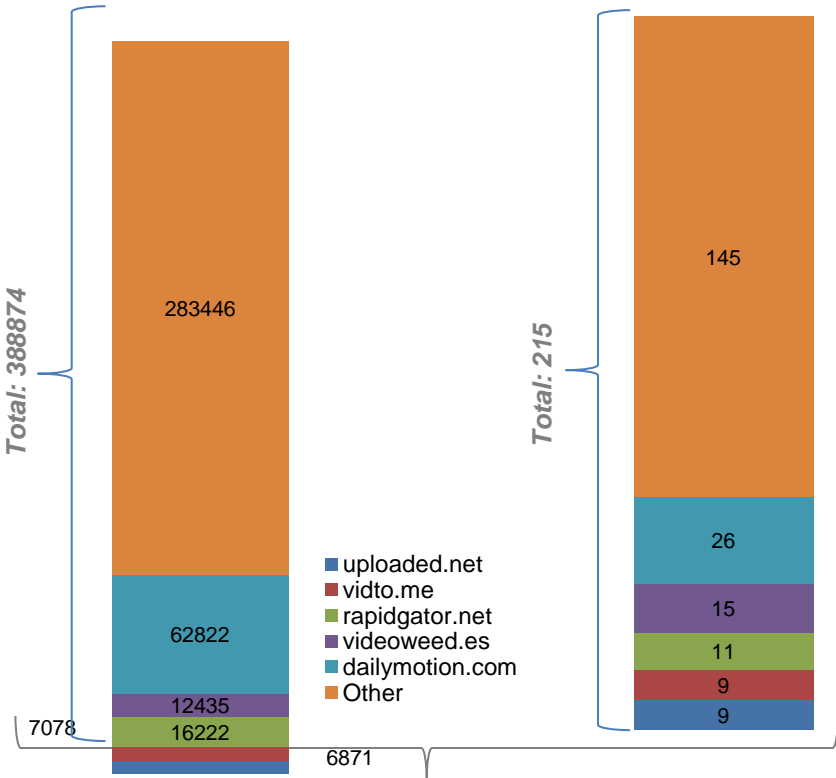
Source Websites Servers – by region



Note: Source links store the pirated copies (media files) of the properties & are capable of being embedded on to other websites to enable distribution.

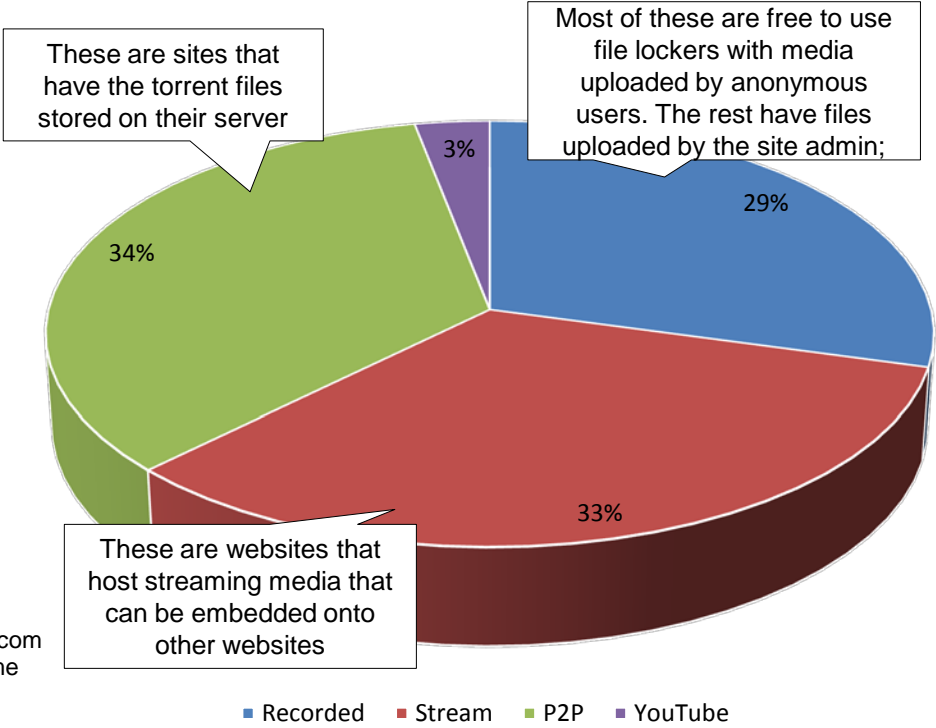
P2P format has the maximum number of pirated content while Dailymotion contain the highest number of pirated content

Source links – top websites Live Streaming – top websites



$388874 \text{ (Pirated Content)} + 215 \text{ (Live Stream)} + 13222 \text{ (YT)} = 402311$

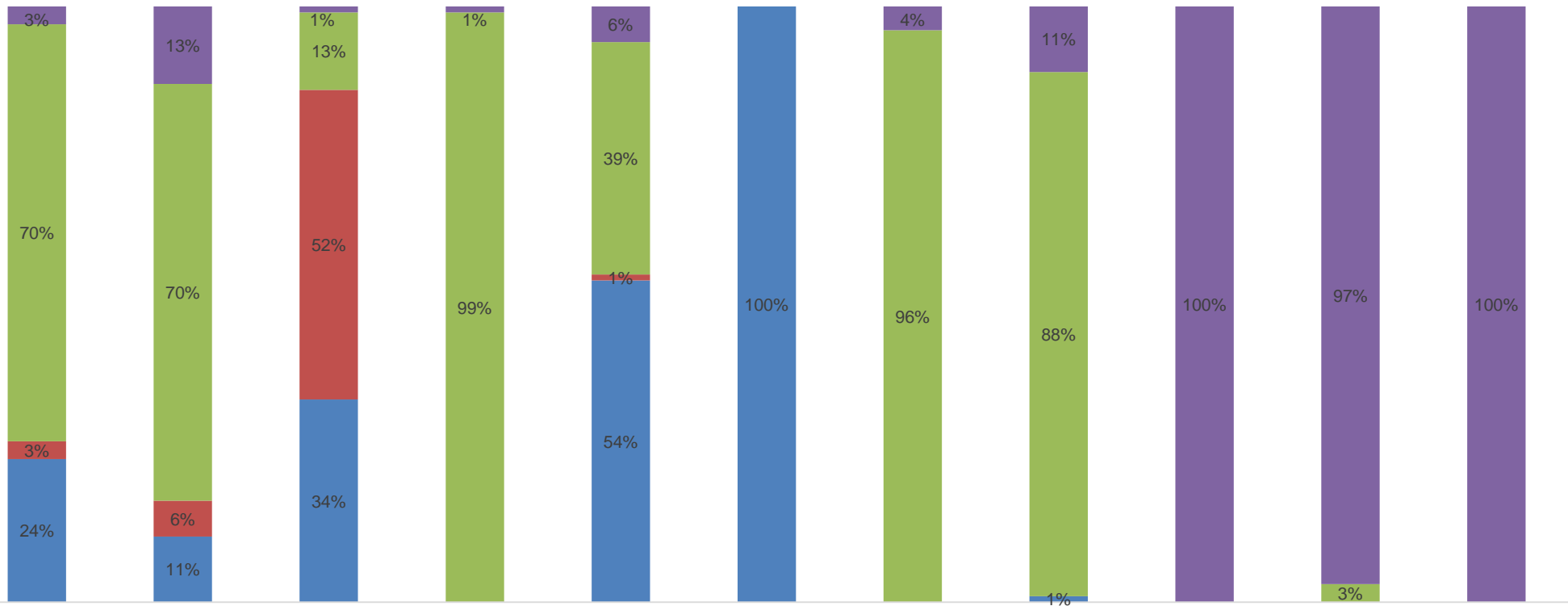
Pirated Copies – content format



Note: Analysis of YouTube users responsible for uploading pirated content has been conducted separately & the results are displayed on the next page

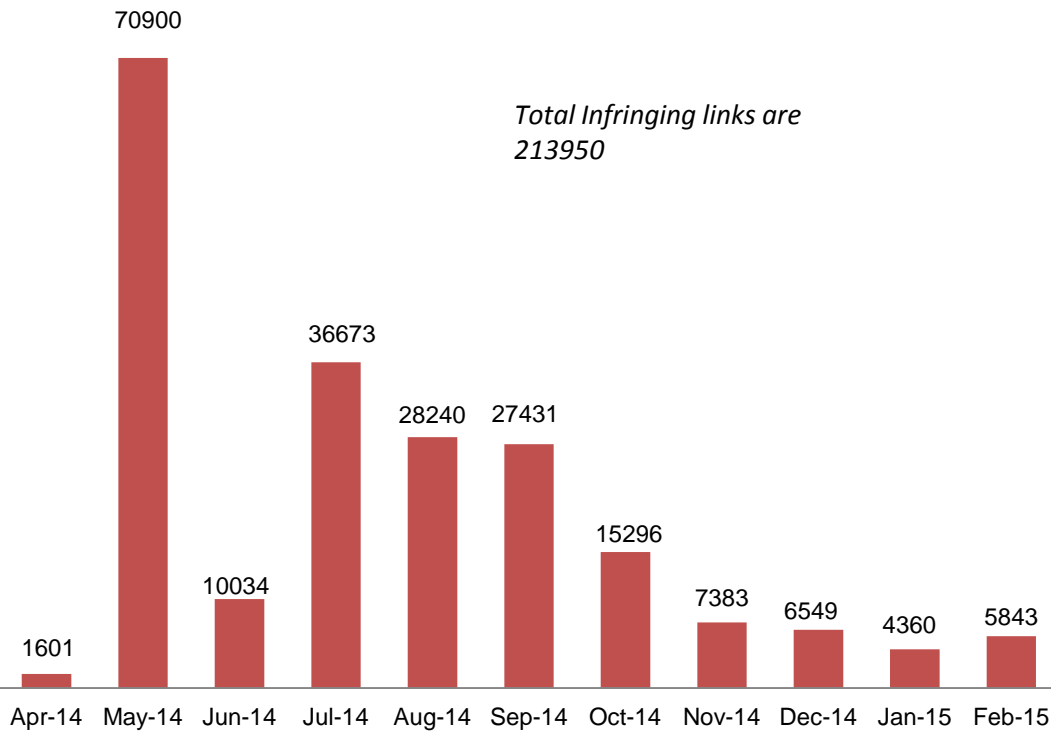
Further analysis of pirated content revealed that [redacted] content was mostly found on P2P & regional on streaming formats

Pirated Content – by content format



These pirated content were embedded across >213k infringing web pages.

Infringing Web Pages – Month Wise



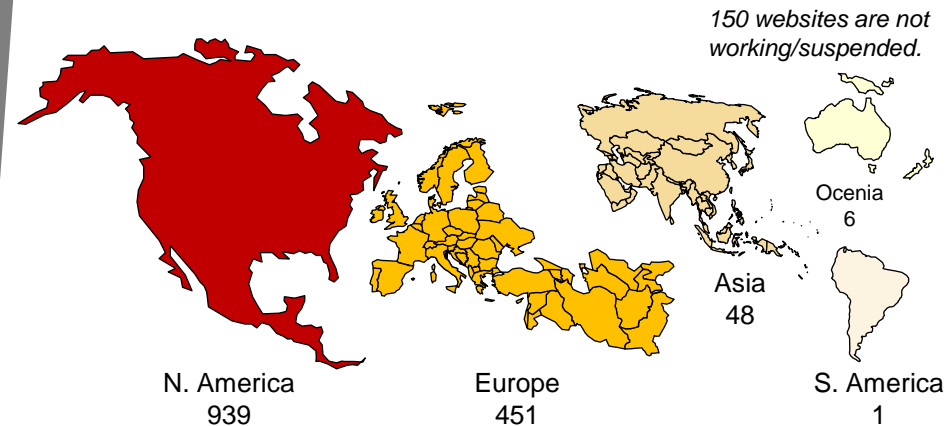
Note: Infringing links are the web pages which have been set up in a way that pirated content will be embedded onto these once available.

Top 10 Websites- by # of Infringing Links

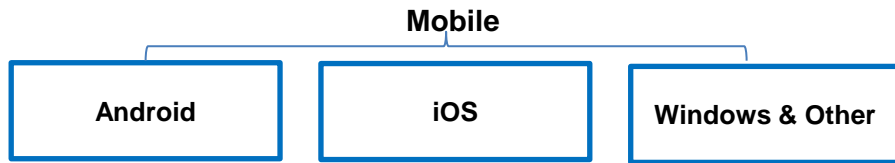
Website Name	#No of Infringing links
desitvforum.net	8702
torrentz.eu	6157
upbulk.com	5868
desinews.info	5647
desirulez.net	5446
torrentroom.com	4889
telly-serials.in	3949
torrentz.in	3260
kittu.com	3148
dailymotion.com	3084

Total Identified infringing websites are 1596

Infringing Websites Servers – by region






We found 110 mobile applications providing infringing content ,across three major mobile platforms



Most Popular App stores

- Google Play Store, i-Tunes store, Windows phone store are the most popular application stores for their respective mobile platforms.
- Most of the users only download applications from these stores.

Pirated Mobile Applications – Platform wise

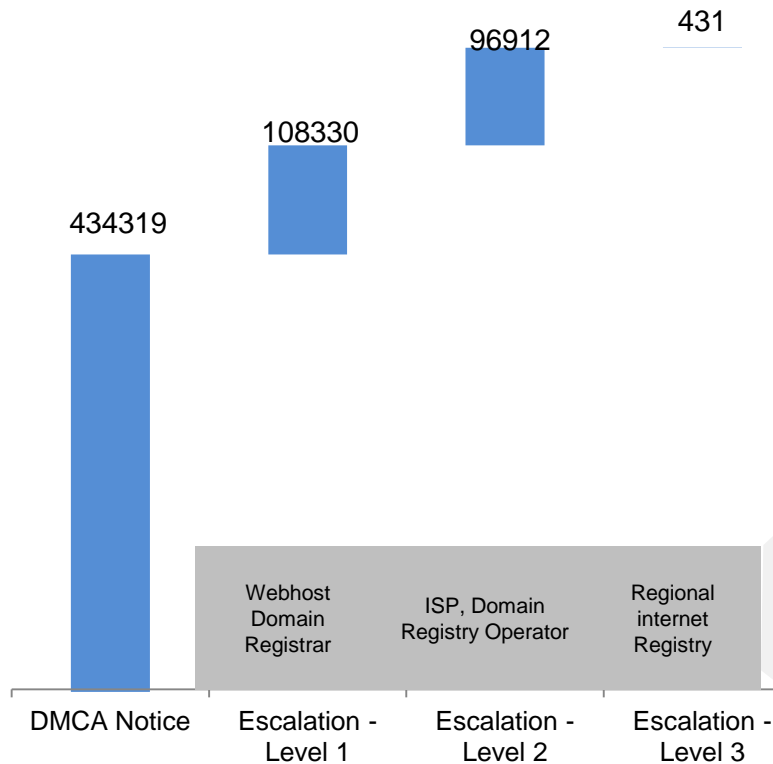
Mobile Platform	Active	Taken Down	Total
	4	2	6
	0	92	92
	0	12	12
Total	4	106	110

Note1: On cases where the apps are still active, we are rigorously following up with the respective app store

Note2: We have escalated these cases to the designated DMCA agents for each app store

To control piracy we carried out an intense exercise - ~434k DMCA notifications and ~205k escalations across the internet ecosystem

Notifications & Escalations

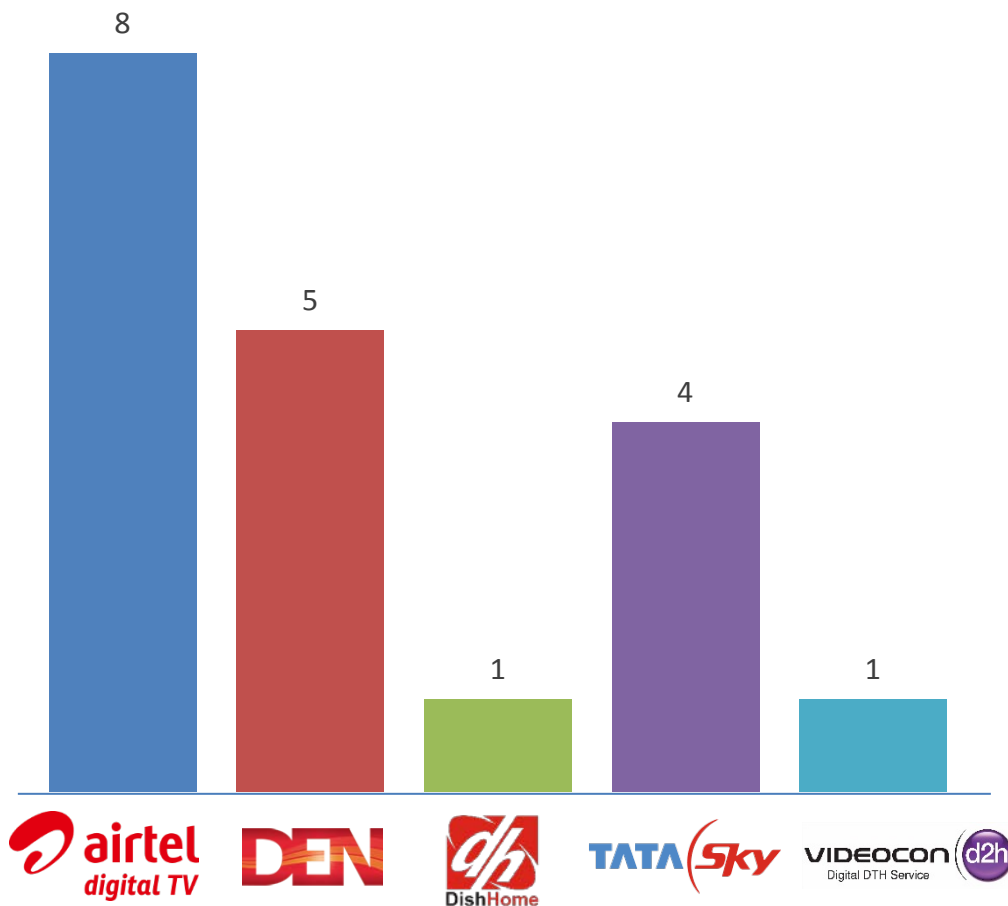


Breakup of Escalations Level 1,2 &3

Escalation Type	Name of Entity	# of Communications
Level 1	Netbrella	40662
	ENOM	18045
	Others	49623
Level 2	Netelligent	25131
	TONIC	22056
	Others	49725
Level 3	RIPE	220
	ARIN	196
	Others	15
<i>Total</i>		205673

Since *November 2014*, total 19 DTH fingerprints were identified from pirated videos.

Fingerprints – Provider Wise

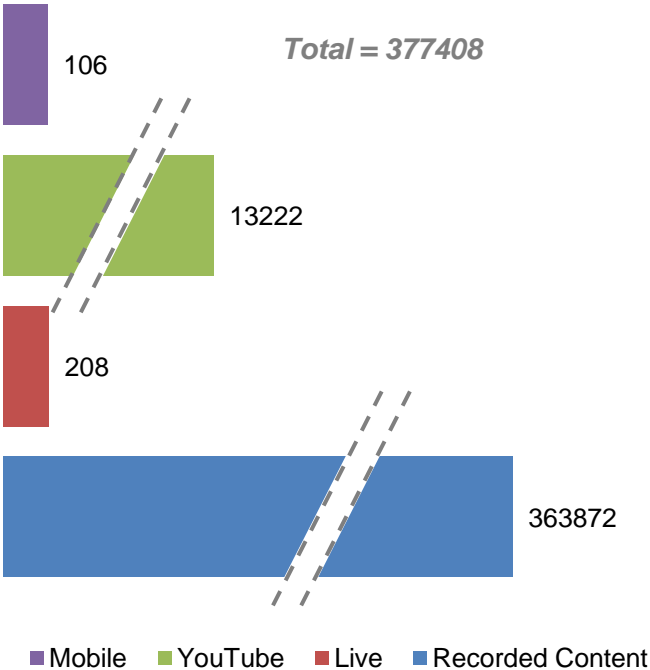


Identified Fingerprints

S No	Identification Date	Fingerprint	Provider
1	10-Nov	0129CCF3	Airtel
2	10-Nov	003A1FF2	Tata sky
3	10-Nov	KKHLOLORPSQ	Den
4	11-Nov	0C00016A6f	Dish Home
5	13-Nov	010501D8	Airtel
6	17-Nov	009280B6	Tata sky
7	19-Nov	0120A980	Airtel
8	16-Dec	IFKJFJRQTQ	Videocon
9	23-Dec	0120A980	Airtel
10	26-Dec	00E8E02f	Tata sky
11	14-Jan	FGGJHMMQSTT	Den
12	22-Jan	hhfkkononsq	Den
13	17-Jan	FGKGOKPPNSQ	Den
14	24-Jan	00639467	Tata sky
15	23-Jan	0120A989	Airtel
16	5-Feb	0041EC24	Airtel
17	3-Feb	0041EC1B	Airtel
18	3-Feb	0120A954	Airtel
19	10-Feb	020E4A81	Airtel

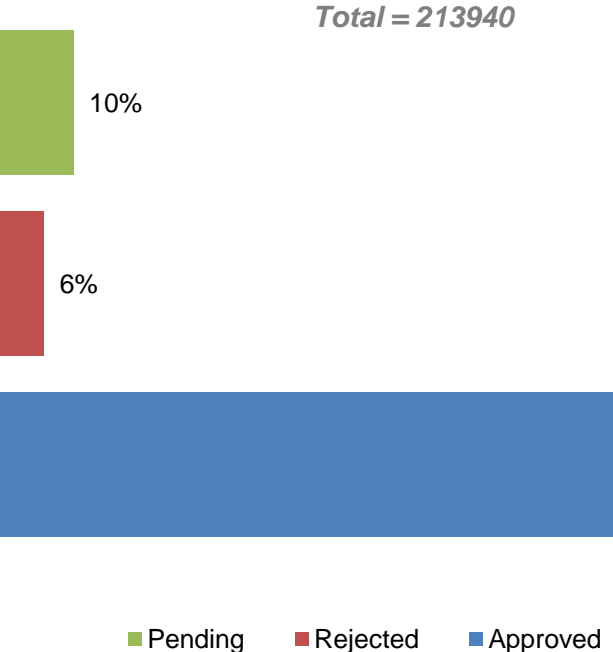
We ensured takedown of 94% of pirated content and 84% of the results from Google, reducing the overall access to content by 91%

Pirated content taken down – by platform

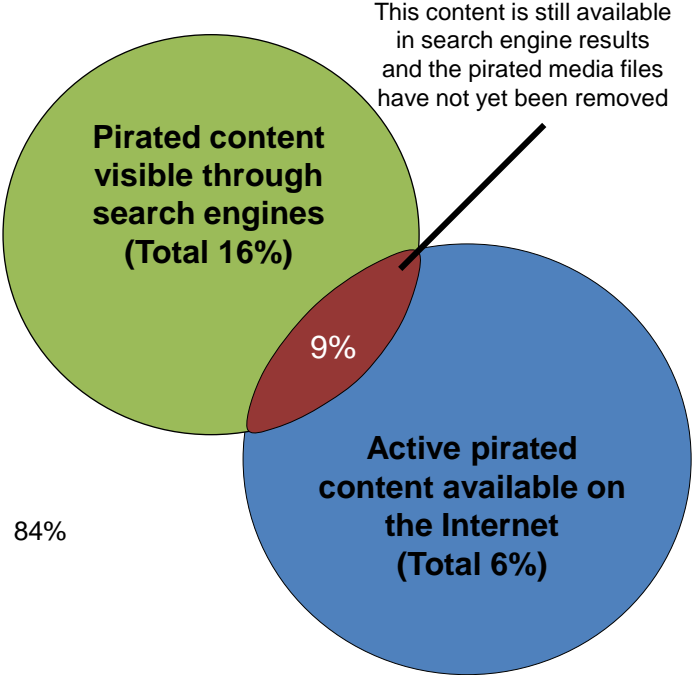


Note: Takedown on YouTube refers to the implementation of applicable policy

Google Search Removal Results



Impact on User Access



Note: This calculation was done, assuming that active pirated content not reachable through search engines is inaccessible for the end user