

Online Child Sexual Abuse Imagery: Threats and Responses

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What is the IWF?

- An international hotline for reporting and removing online **criminal** child sexual abuse images and videos.
- Our vision is the global elimination of child sexual abuse imagery online.
- We offer a place to securely and anonymously report this content.



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What type of organisation are we?

- Industry self-regulatory body.
- Charity, not-for-profit organisation.
- Funded by internet industry Members and European Union (EU).
- Founder Member of the International Association of Internet Hotlines (INHOPE).
- Independent of government and law enforcement.



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What do we do?

- Actively search for child sexual abuse images and videos on the public internet.
- Work with global industry partners worldwide to remove images of child sexual abuse and stop them from being spread further.
- Share our expertise and play an active role in the UK Safer Internet Centre.

Every 4 minutes we assess a webpage.

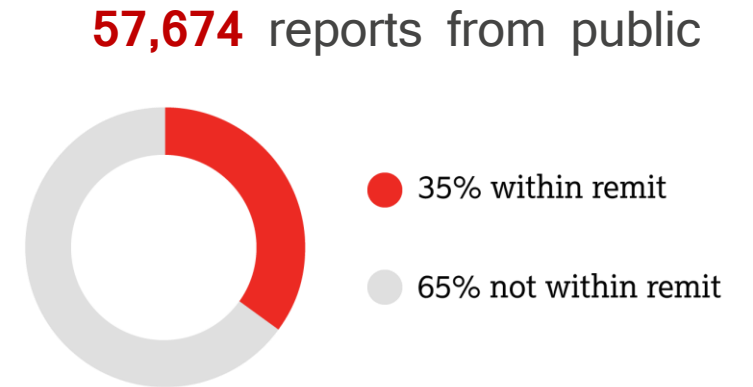
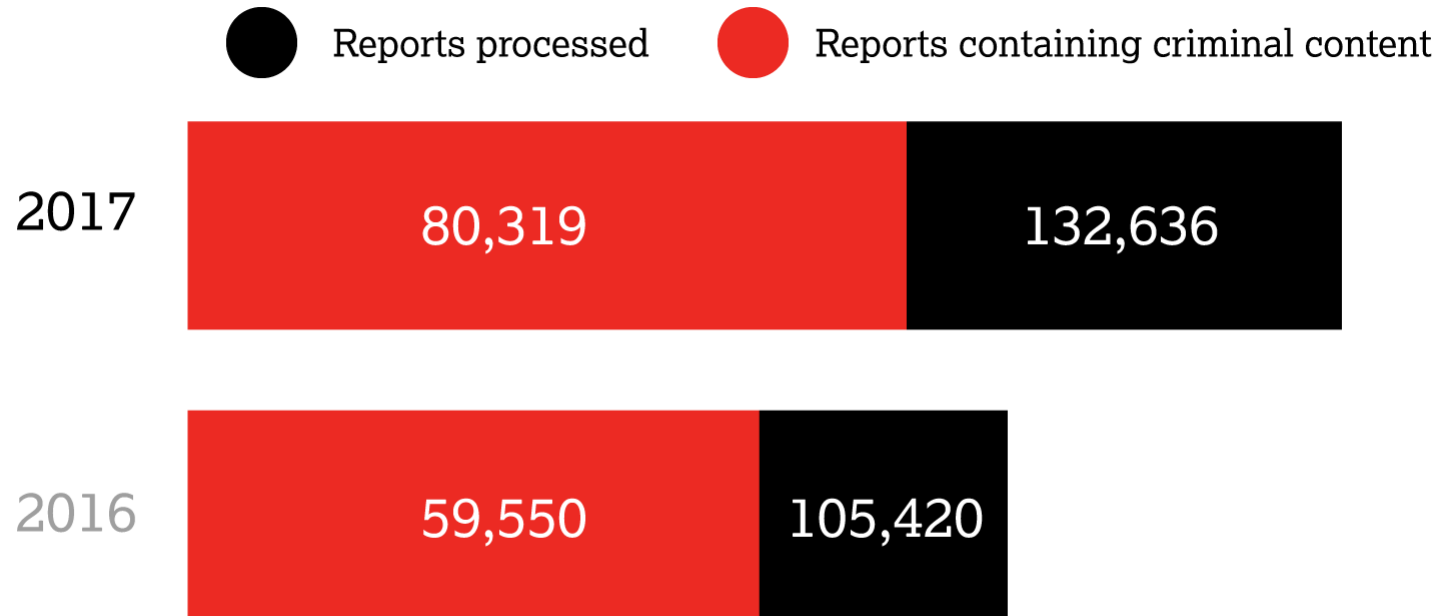
Every 7 minutes we find images and videos of children being sexually abused.



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Reports



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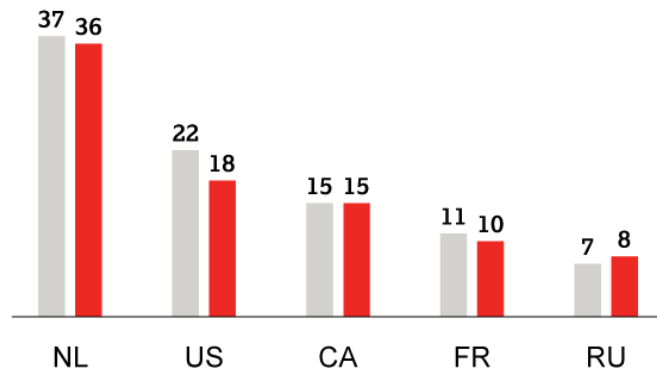


Where is content hosted?

Top five countries

Top 5 countries

● % 2016 ● % 2017

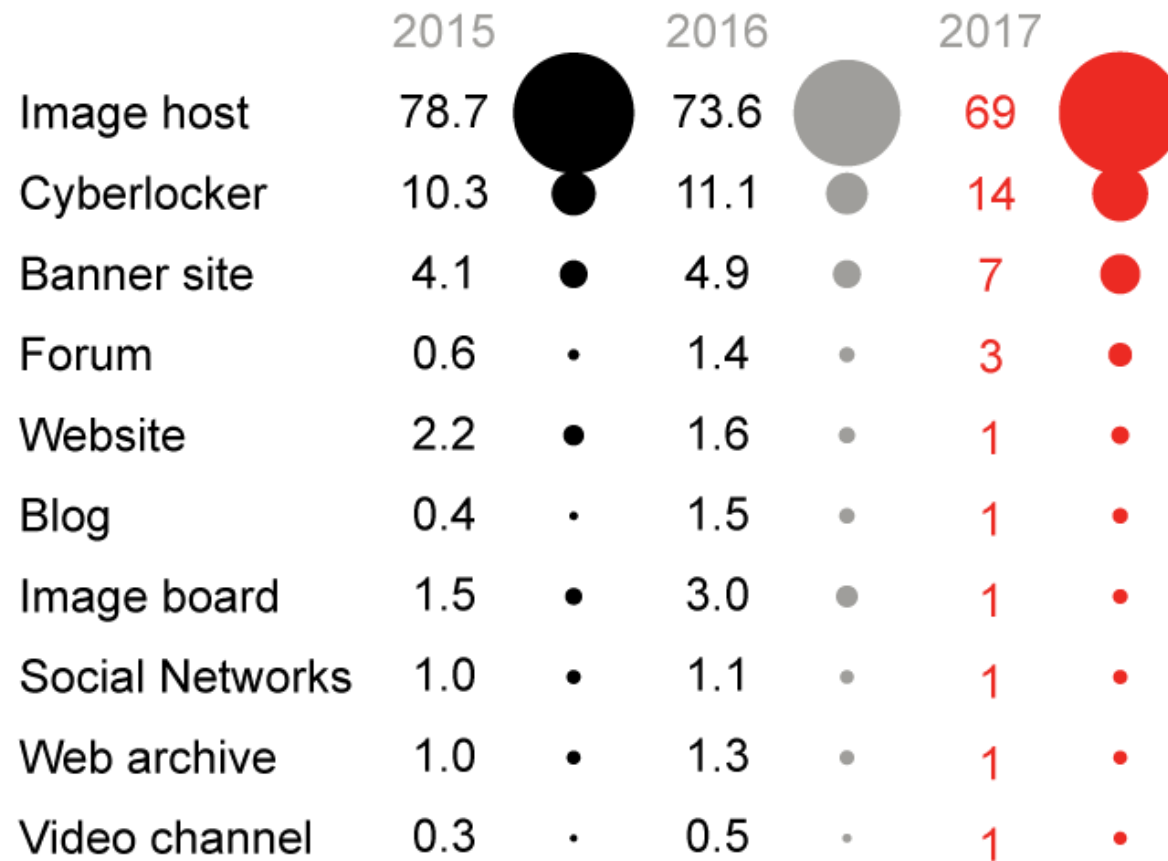


The majority of all child sexual abuse URLs we identified in 2017 were hosted in these top 5 countries



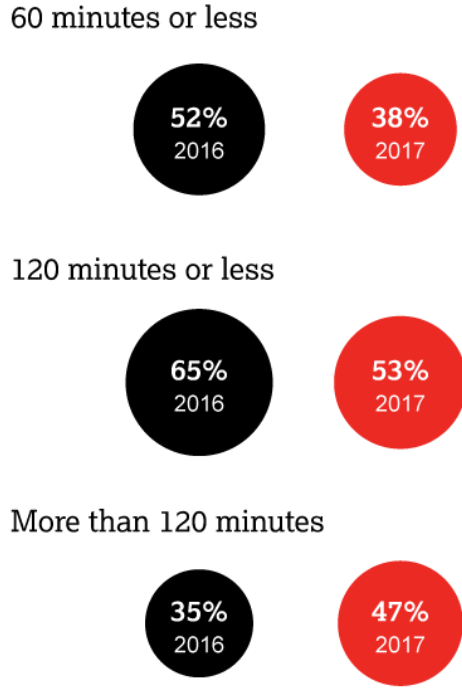
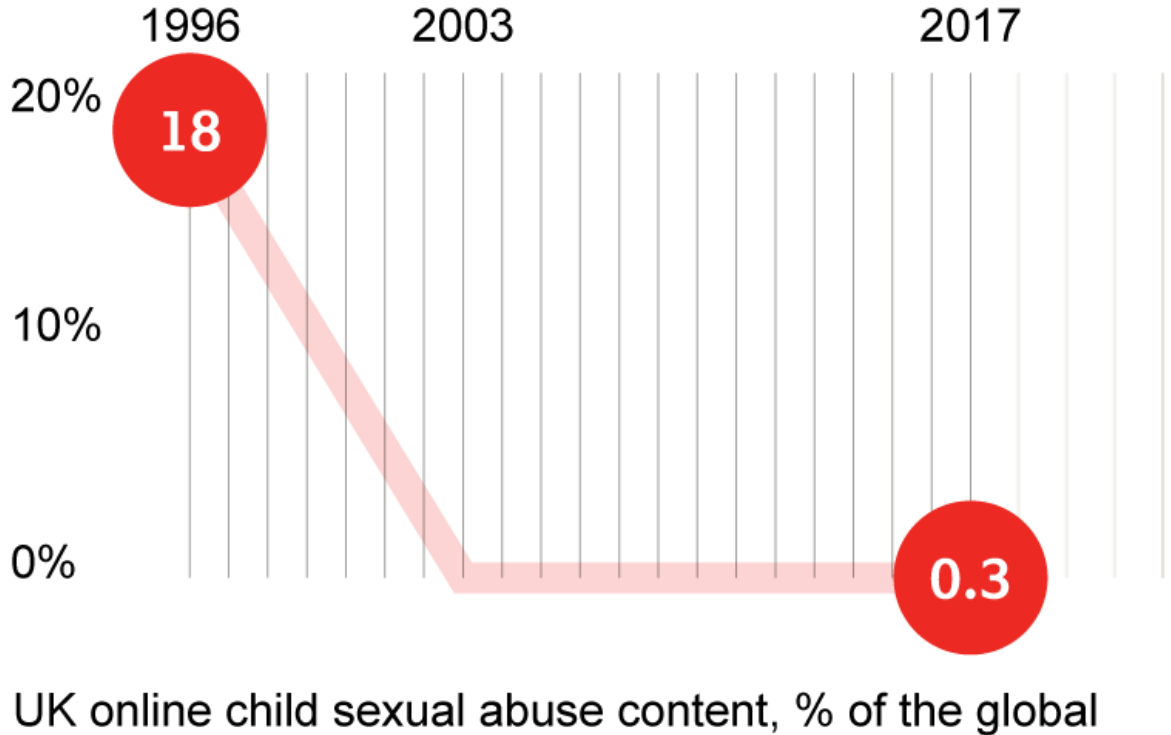
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Where is content hosted?



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Content Removal

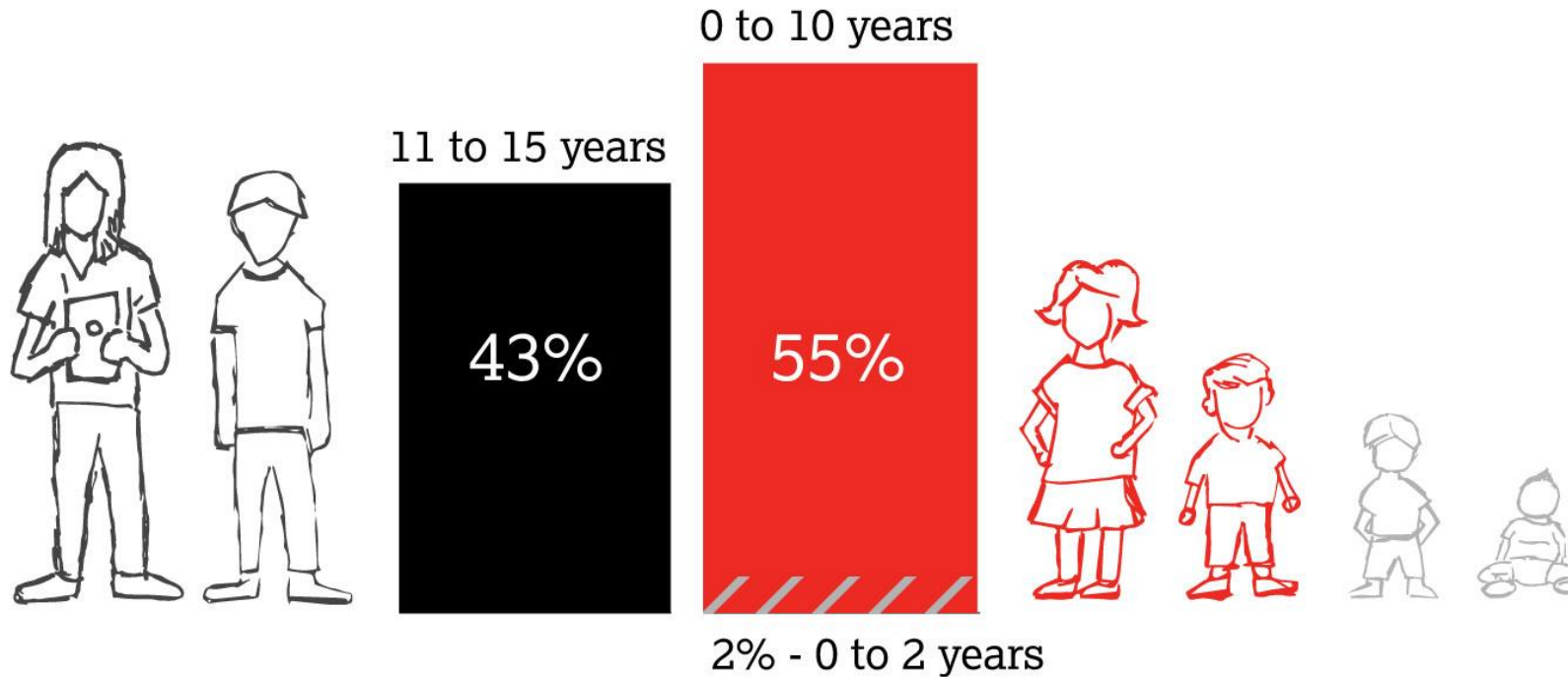


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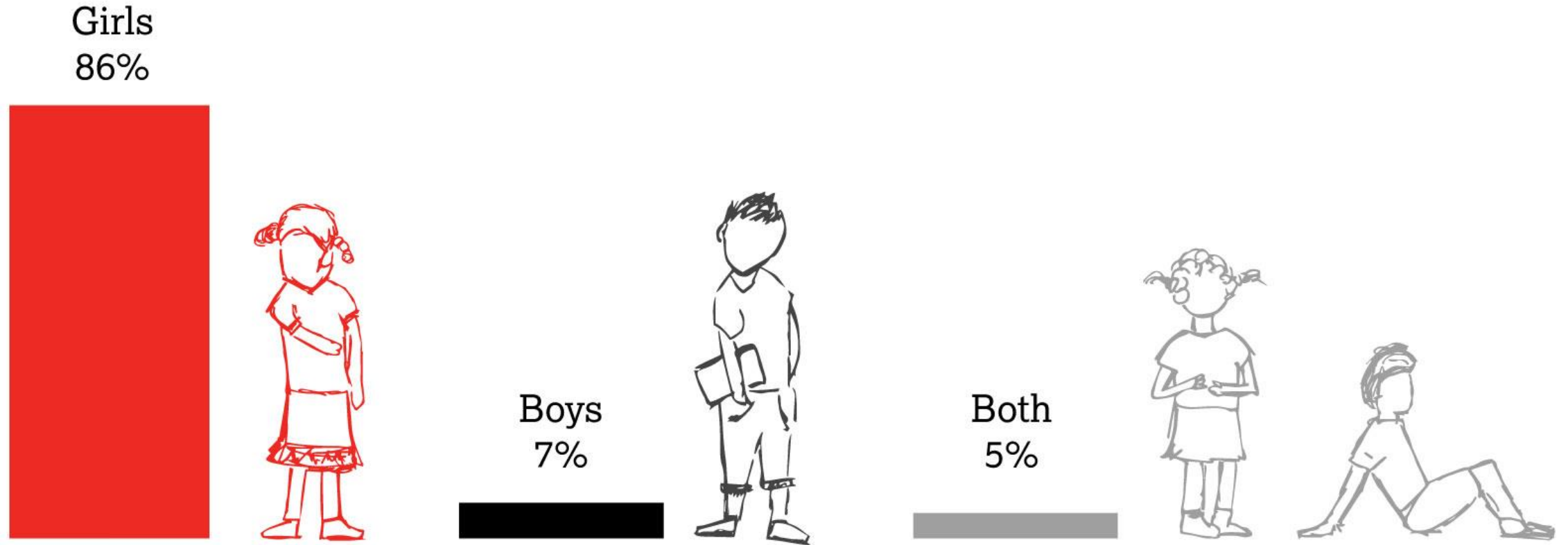
Who are the victims?

These are real children



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Who are the victims?



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Severity of abuse



Category A: penetrative sexual activity, inc. rape and sexual torture

Category B: non-penetrative sexual activity

Category C: indecent images not in above categories



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How do we respond to this?

- URL List
- Image Hash List
- Takedown Notices
- Simultaneous Alerts (US only)
- IWF Reporting Portals
- Keywords List
- Domain Alerts
- Payment Brands Alerts
- Newsgroups Alerts
- Research



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Trends and research

- April 2014 – IWF Hotline granted authority to proactively seek CSAM online
- Ability to more effectively fulfil remit and vision - how to ensure effectiveness?
- Research programme to identify key challenges/opportunities
 - Recycling/redistribution of child sexual abuse imagery
 - Commercial distribution of child sexual abuse imagery
 - Self-Generated / Youth Produced child sexual abuse imagery

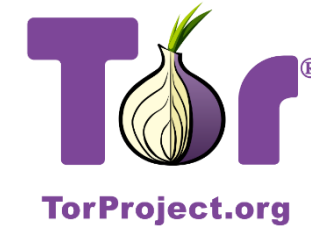


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Open Web vs “Dark Web”

- “Hidden services” (aka the “Dark Web”) - location-hidden websites in Tor proxy network
- Often dedicated forums linking to 1000’s of imagery on open-web image hosts/cyberlockers
- Imagery removed at source
- Added to hash list preventing further distribution
- Provide intel on emergent technologies/trends

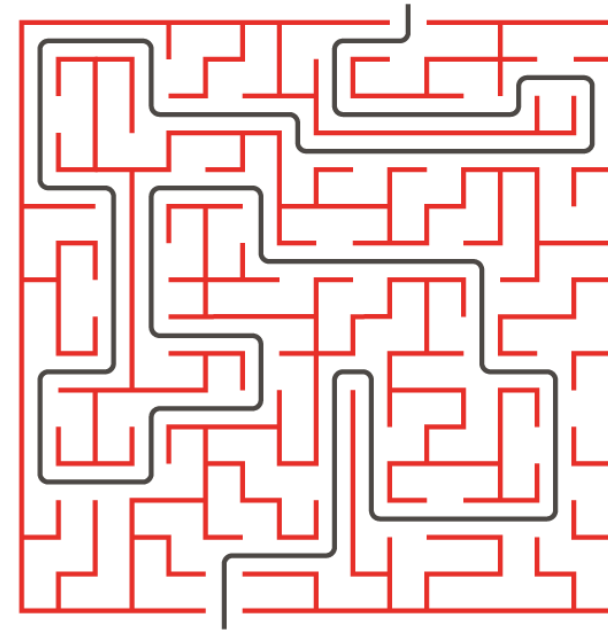


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Commercial child sexual abuse material

- Affiliate fraud:
 - URL accessed directly displays adult pornography
 - URL accessed via specific referrer displays CSAM
 - Payment page == identical URL
 - Affiliate receives payout
- Click/impression fraud
 - URL accessed directly displays adult pornography
 - URL accessed via specific referrer displays CSAM
 - Pop-unders for legitimate brands
 - “Invisible” clicks generated



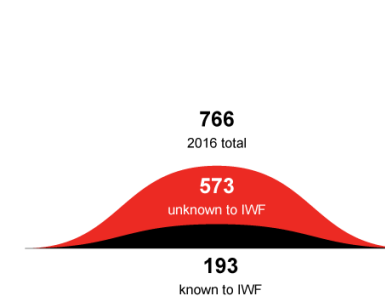
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Analysing commercial distribution

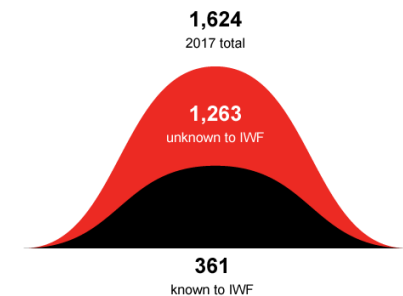
- “Whack-a-Mole” (same website, multiple URLs)
- 4,006 “brands” identified since 2009
- 8,974 commercial reports in 2017 (11%)
- 1,624 brands active in 2016 (1,263 “new”)
- “Key Identifiers” i.e. merchant accounts, contact details, Whois, hosting info, “look-and-feel”...
- <10 active “top level distributors”
- Analysis provided to Europol as intelligence



Web brands selling sexual abuse imagery in 2016



The number of brands rose by ▲112% in 2017



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Captures of Live-Streamed Child Sexual Abuse

- Problems of terminology - “sexting”; “self generated”; “youth produced”; “sextortion” ...
- Huge increase in online distribution in recent years (including commercial)
- Regular studies to monitor trends – latest study published May 2018
- Research Questions:
 - How do the methods of creation/distribution of captures of live-streamed child sexual abuse, the characteristics of the individuals depicted and the category of the sexual activity depicted vary in relation to the age ranges depicted?
 - Where are captures of live-streamed child sexual abuse being distributed? (Which platforms/site types?)
 - What can be learned from an examination of the characteristics of the individuals depicted and/or the distribution methods of this content which may inform strategies for disruption/intervention?



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Captures of Live-Streamed Child Sexual Abuse

- “Captures of Live-Streamed Child Sexual Abuse” defined as:
“Images or videos permanently recorded from a live broadcast stream; in which the child(ren) consciously interacted with a remote other(s); and which met the IWF threshold for action as child sexual abuse material”
- A “child” was defined as *“an individual assessed as under the age of 18 years”*
 - 0-2 years
 - 3-6 years
 - 7-10 years
 - 11-13 years
 - 14-15 years
 - 16-17 years
- Children assessed as 16-17 years only included where age independently verified



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Captures of Live-Streamed Child Sexual Abuse

- Collected 2,082 images and videos from August – October 2017
- Key findings:
 - **96%** of imagery depicted children on their own, typically in a home setting such as their own bedroom.
 - **98%** of imagery depicted children assessed as 13 years or younger. (**28%** aged 10 or under)
 - **96%** of the imagery featured girls.
 - **40%** of the imagery was Category A or B.
 - **100%** of the imagery had been harvested from the original upload location and was being redistributed on third party websites.
 - **4%** of the imagery was captured from mobile-only streaming apps.
 - **73%** of the imagery appeared on 16 dedicated forums with the purpose of advertising paid downloads of videos of live-streamed child sexual abuse.



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Captures of Live-Streamed Child Sexual Abuse

- Several scenarios identified during course of study
- Case Studies:
 - 7 year old “Sophie” – desperate for “likes”
 - 9 year old “Marie” - tricked into thinking she was chatting to a child
 - 12 year old Zoe – believed she had a secret boyfriend.
- Younger children seemingly unaware of nature of acts coerced to perform or that they were being recorded



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Captures of Live-Streamed Child Sexual Abuse

- Implications:
 - Younger children becoming vulnerable to this form of abuse.
 - Challenges common perception of “live distant child sexual abuse”.
 - Loss of control over content – all harvested from original broadcast service.
 - Children blackmailed and coerced to produce more severe material.
 - Lack of awareness of possible permanence of imagery captured from live streaming apps.
 - Increased commercialisation of captures of live-streamed child sexual abuse...

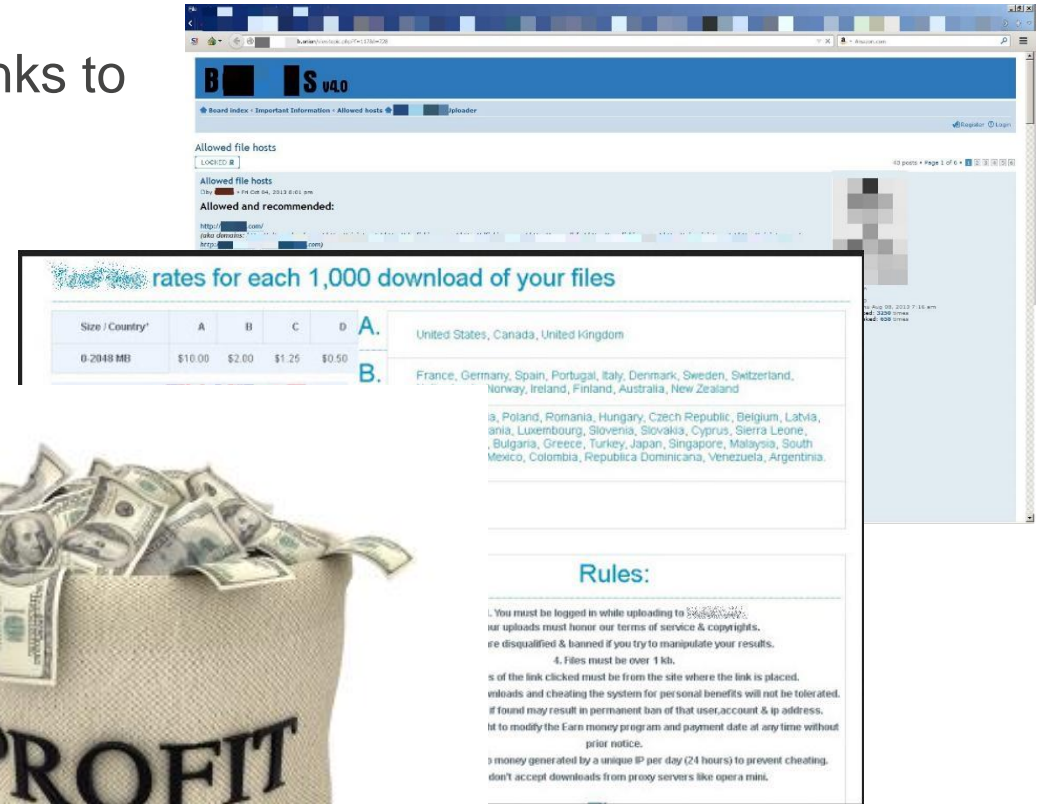


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Captures of Live Streamed Child Sexual Abuse

- Dedicated forums with thousands of images and links to third party cyberlockers
 - “Affiliate” schemes pay uploaders for files downloaded...
 - Cyberlocker may be unaware
 - Payment processors unaware
 - Uploader profits for distribution



rates for each 1,000 download of your files

Size / Country	A	B	C	D
0-2048 MB	\$10.00	\$2.00	\$1.25	\$0.50

Rules:

- You must be logged in while uploading to [Sv4.0](#).
- Our uploads must honor our terms of service & copyrights, or you will be disqualified & banned if you try to manipulate your results.
- Files must be over 1 kb.
- Links of the link clicked must be from the site where the link is placed. Cheating and cheating the system for personal benefits will not be tolerated. If found may result in permanent ban of that user, account & ip address.
- You are not allowed to modify the Earn money program and payment date at any time without prior notice.
- Money generated by a unique IP per day (24 hours) to prevent cheating. don't accept downloads from proxy servers like opera mini.



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Captures of Live-Streamed Child Sexual Abuse

- Key recommendations:
 - Recognition of the need for awareness raising programs aimed at educating children and those in a parental role about the risks of live-streaming services;
 - Wider implementation of tools to tackle online distribution of child sexual abuse imagery by service providers;
 - Development of new services including video hashing technology to detect duplicate captures of live streamed child sexual abuse which have been redistributed online;
 - Recognition of legal loopholes facilitating distribution of child sexual abuse imagery and elaboration of policy proposals that can influence positive change.



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Captures of Live-Streamed Child Sexual Abuse

- Resources for parents and carers
 - NSPCC “Talking Pants” (<https://www.nspcc.org.uk/preventing-abuse/keeping-children-safe/underwear-rule/>)
 - Safer Internet Centre (<https://www.saferinternet.org.uk/advice-centre/parents-and-carers/have-conversation>)
 - Childnet - Age appropriate resources for children and parents and carers (<https://www.childnet.com/young-people/primary>)
 - Self-reporting portal for older children – Childline/IWF (<https://contentreporting.childline.org.uk/>)
- Further resources and full report available at <http://www.iwf.org.uk>



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Thanks for listening

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