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The .CO Zero Tolerance Approach to combat CSAM

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Special thanks to

*The **LACTLD** community,*

*for bringing us the chance to share
this **awareness** presentation.*



I want to dedicate this presentation to my beautiful wife and children...

Because keeping the Internet Safe for them is what inspires me to do this relevant work ...



Agenda



1. **CP/CSAM? What is this? [video]**
2. How to **measure** “success” applying and being compliant with a domain’s anti-abuse policy?
3. A complex “reputational clarification” enterprise project (challenge?)
4. Lessons Learned
5. Q&A

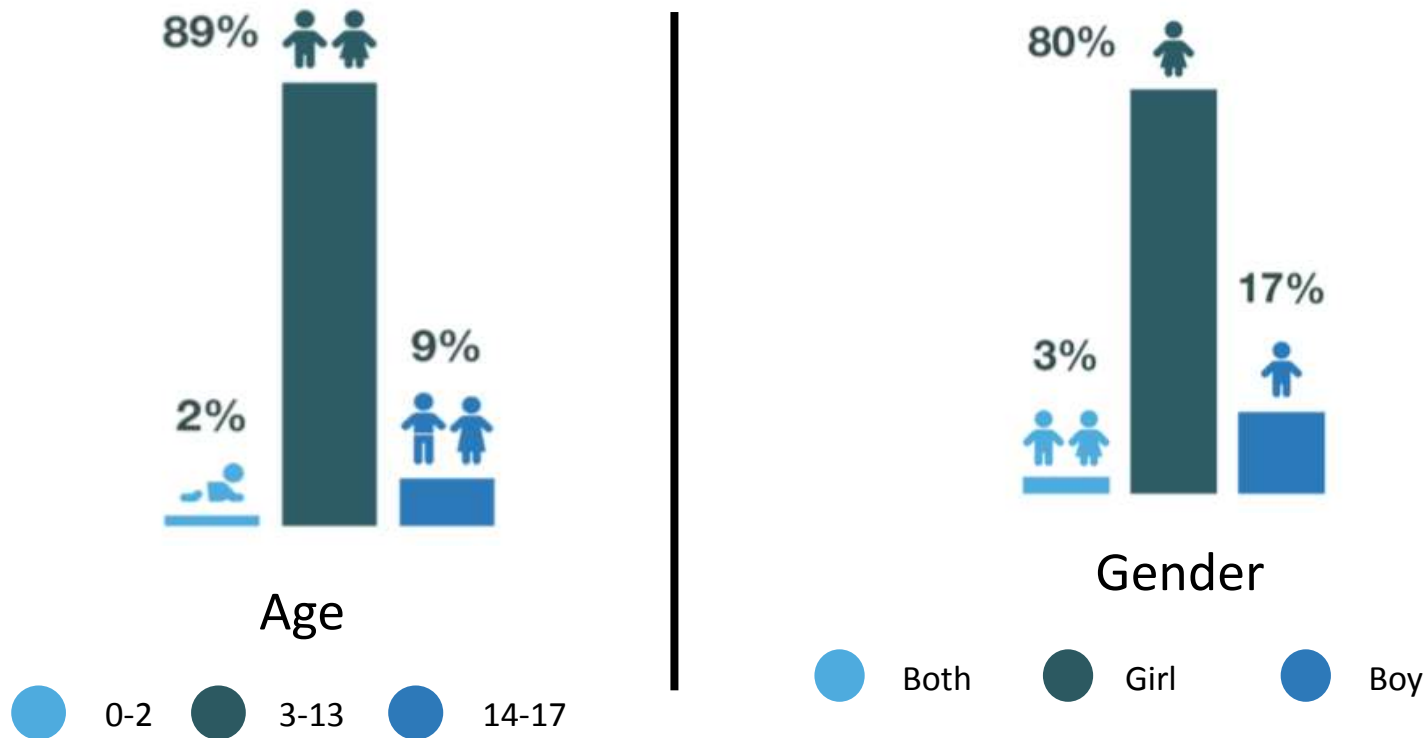
CP/CSAM



[VIDEO]

<https://www.youtube.com/watch?reload=9&v=ZSVyTJPCyH0>

Online Sexual Exploitation & Abuse



Source: International Association of Internet Hotlines
(INHOPE) – 2018 Report

Online Sexual Exploitation & Abuse

Network overview - 2018

2018 INHOPE
NETWORK

Total number of ICCAM reports forwarded

155,240

Total number of images and videos assessed

337,588

Total number of illegal images and videos

223,999

Source: International Association of Internet Hotlines (INHOPE) – [2018 Report](#)

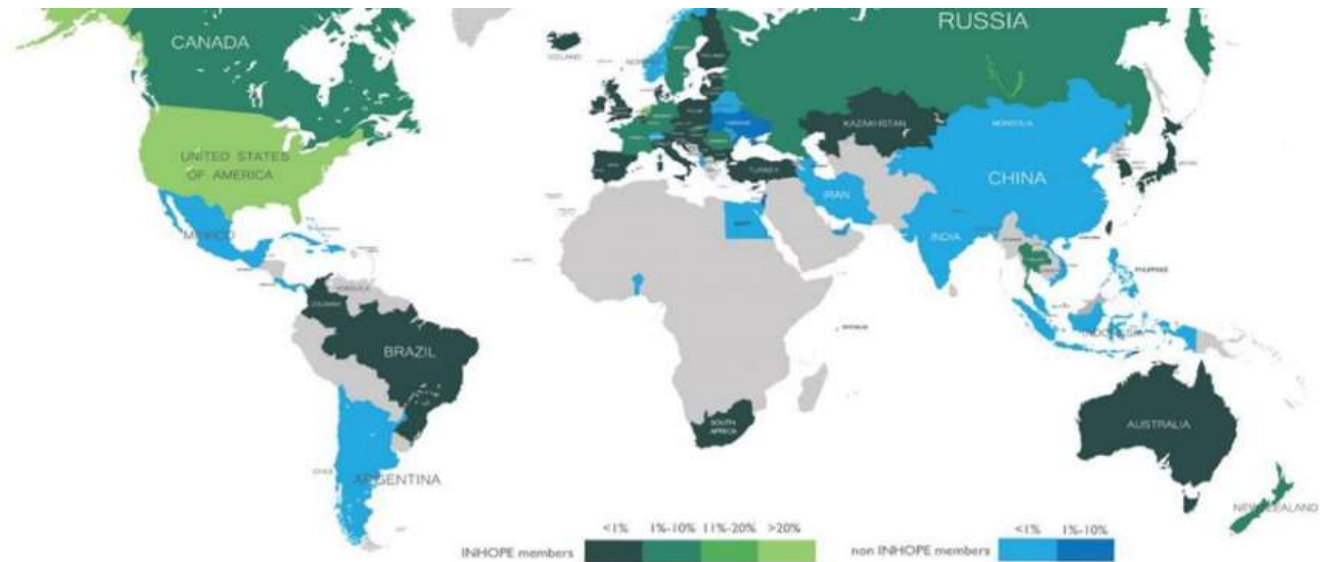
Online Sexual Exploitation & Abuse

Services being used to host CSAM



Source: International Association of Internet Hotlines
(INHOPE) – 2018 Report

Online Sexual Exploitation & Abuse



Hosting countries

-  Netherlands 44%
-  United States of America 25%
-  Russian Federation 9%
-  France 6%
-  Slovakia 5%

*How to **measure**
“success” applying and
being compliant with a
domain’s anti-abuse
policy?*



Domain's Anti-Abuse: metrics for success?



.CO Security: Our Relationship

- Identification of trustworthy **sources/feeds** and sharing information agreements with **relevant** cybersecurity **partners** and stakeholders
- **Memberships** and **Partnerships** to security related organizations
 - Anti-Phishing Working Group
 - FIRST (NEUCIRT – CO-CERT)
 - M3AAWG.ORG
 - DNS-OARC (DNS R&D)
 - **NCMEC (CP/CSAM)**
 - EU-CICILE (EU-LEA's)
 - Secure Domain Foundation
 - World Economic Forum - Resilience
 - **And many others (under NDA)**



Domain's Anti-Abuse: metrics for success?

1. Función Técnica

1.1. Gestión de la Infraestructura Tecnológica (IT)

1.1.1. Estadísticas del "Procedimiento de Cumplimiento Rápido de Dominios (RDCP)" y su "Sistema de Mitigación de Amenazas de Registro (RTMS)"

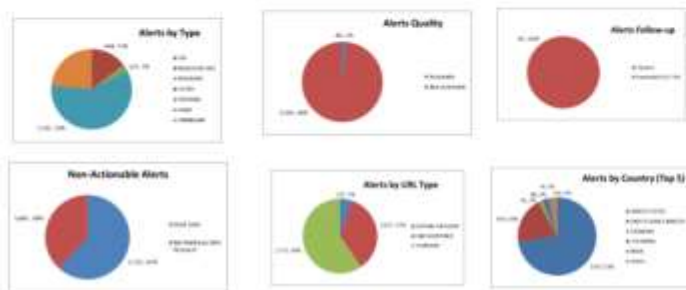
Durante el mes de **AGOSTO** de 2.019 se gestionaron, a través del sistema RTMS de **NEUSTAR** (carga matriz de **COINTERNET**), un total de **4.581** (JULIO: 5.597) **alertas** (enlaces o vínculos Web, también denominados "URL's") asociadas a **782** (JULIO: 722) **nombres de dominio** bajo ".CO", provenientes de organizaciones y empresas con las cuales se tienen acuerdos de cooperación en seguridad digital y que proveen fuentes legítimas de incidentes, así como de Equipos de Gestión de Incidentes a nivel nacional, regional y global.

En lo que va corrido del presente año, se han gestionado un total de **44.616** (hasta JULIO: 40.035) **alertas** asociadas a **9.354** (hasta JULIO: 8.572) **nombres de dominio** bajo ".CO".

Los siguientes diagramas muestran las estadísticas del mes de **AGOSTO** de 2.019:

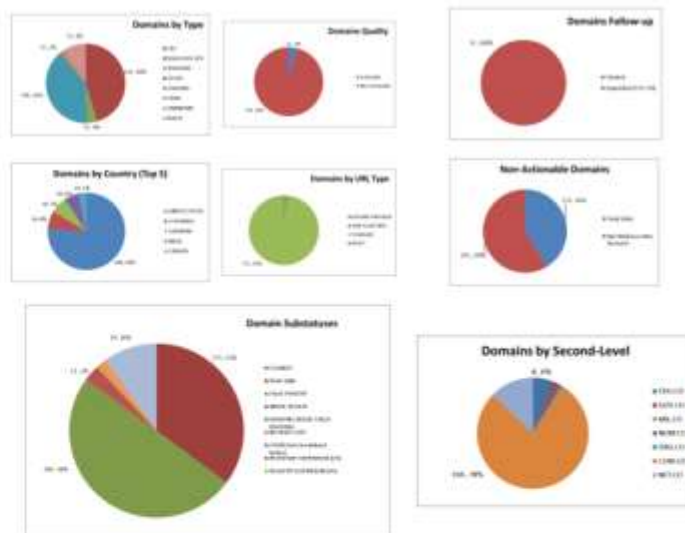
1. **4.581** ALERTAS .CO GESTIONADAS vía -RTMS-

Figura 1. ALERTAS -RTMS- BAJO ".CO"



Los detalles del RDCP se encuentran en <http://www.cointernet.com.co/proceso-de-cumplimiento-rapido-de-dominios-rdcp/>.

2. **782** NOMBRES DE DOMINIO BAJO ".CO" GESTIONADOS vía -RTMS-



Fuente: NEUSTAR - RTMS.

Revisando la información del mes de **AGOSTO** de 2.019, se destaca lo siguiente:

- 4% (31) del total de **nombres de dominio** con alertas analizadas fue "accionable", es decir, correspondió a **"incidentes"** de seguridad notificados
- 62% (2.712) de las **alertas** recibidas correspondió a "enlaces muertos" tras investigarse
- 35% (1.617) de las **alertas** estuvo asociado a "acortadores de enlaces" ("URL Shorteners"): T.CO [Twitter], X.CO [GoDaddy], IPQ.CO, LNK.CO, entre otros
- Los países con más alta tasa de **alertas** durante el mes fueron, en su orden, Estados Unidos, Emiratos Árabes Unidos (EAU), Alemania e India
- Los 133 **"incidentes"** asociados a nombres de dominio bajo ".CO" de tercer nivel, tanto "de

Domain's Anti-Abuse: metrics for success?

How many domain issues/incidences/breaches/vulnerabilities make a good-enough KPI's baseline for "success"?



Domain's Anti-Abuse: metrics for success?

*As mainly tech related people,
we're focused on ccTLD/DNS's
SSR and **performance** matters ...*



Domain's Anti-Abuse: metrics for success?

What about ccTLD's (brand) *reputational, image, trust and credibility* matters? That's not a tech –somehow- related responsibility?



**A complex
“reputational
clarification”
enterprise project
(challenge)**





2017 Annual Report



Download Report

Our [2017 Annual Report](#) (published on 18 April 2018) gives the latest data on what's happening globally to tackle child sexual abuse images and videos online.

We encourage anyone working in this area to use our statistics to help inform their valuable work.

[Visit our interactive 2017 Annual report microsite here.](#)

A summary of trends for the year is this press release:

[IWF global figures show online child sexual abuse imagery up by a third](#)

Five domains accounted for 85% of all webpages identified as containing child sexual abuse images and videos:

● com ● net ● org ● ru ● co





An Action Plan ...

- ***REDPAZ-TEPROTEJO initial dialogue/interaction***
- ***Understanding CP/CSAM context & matters (legal, LEA's, regulations, local/regional/global approach)***
- ***Meetings with local LEA's, MINTIC (EN-TIC-CONFIO program), TEPROTEJO (local hotline), ICBF (Colombian child protection entity)***
- ***Active attendance, engagement and involvement in the national child protection multiple stakeholders committee (monthly meetings).***



Línea virtual de reporte para la protección de la infancia y adolescencia colombianas





An Action Plan ...

- **Partnership with IWF and Police**



- **Real-time .CO Alerts to competent LEA**
- **Same-day *feedback* and official request from competent LEA**
- **Notification to .CO RR's based on local LEA request**
- **Weekly –stats- *follow-up* from IWF and LEA**
- **Enterprise's Public Relationship (PR) & Communication's *sustained* and *aggressive* campaign**
- **Answers to clarifications and actions official inquiries from Presidency and Ministry instances [*LETTER*].**

IWF's letter to .CO



Mr. Eduardo Santoyo
Neustar - VP Corp Affairs
General Manager
.CO Internet SAS

Monday 29 July 2019

Dear Eduardo,

You have requested an up to date audit showing the status of child sexual abuse material (CSAM) we have detected on the .CO TLD.

As of Friday 26 July 2019, we can confirm that there are currently zero URLs with the .CO TLD on our live URL List service, out of 4,568 URLs listed at 12.00noon today.



We are pleased to confirm that over the course of our partnership working in 2019, the volume of criminal content identified on the .CO TLD has been significantly reduced to negligible levels and can be directly attributed to our combined efforts to combat criminal content and the abuse of the .CO domain space. By comparison hosting numbers in January 2019 to compared to July 2019* have been reduced by 99.7% and monthly identified numbers are now typically reduced to single figures as set out in the weekly update reports provided to Neustar. *July dates are calculated from 1 July 29 July.

As part of our joint enterprise we have scanned over 14,288,196 webpages across 2,426,118 .CO domains in a bid to identify and remove criminal images using the IWF crawler and image hashing technology. This activity was carried out proactively to further degrade the ability for the domain space to be abused.

At the end of 2018, the IWF identified 9,339 URLs in the .CO name space that contained indecent images of children and these were notified the appropriate hosting countries. It should be noted that none of the imagery was hosted in Colombia. This made it more difficult for us to reach out to local law enforcement and the Colombia Hotline. Problem domains were identified, targeted and suspended, effectively ending the cycle of abuse where non-compliant or ineffective interventions by the site owners and hosts were identified.

We have been very impressed with the way Neustar & .CO Internet have taken a zero-tolerance approach to CSAM on the .CO TLD. We look forward to working closely with Neustar and .CO Internet throughout the year to monitor and continue to maintain this fantastic progress.

We applaud the proactive, approach you have taken in the fight against criminals who attempt to distribute child sexual abuse material online. We are confident that in our 2019 Annual Report, Colombia's .CO namespace will be a role model for other domain registries around the world and invite other domain registries to follow this best-practice approach.

If you need us to speak to anyone within Colombia, be they law enforcement or government departments then please let us know.

Kind regards,

A handwritten signature in black ink, appearing to read "Chris Hughes", written over a light blue horizontal line.

Chris Hughes
Hotline Manager



“Zero-Tolerance” to CP/CSAM on .CO



Lessons Learned ...

- ***KEY: proactive collaboration/cooperation strategy in place***
 - ***Multiple actors involved***
 - ***Continuous feedback and follow-up***

Lessons Learned

- **A CP/CSAM case related to *one* URL within *one* .CO domain could negatively impact the**
 - ***image, reputation, credibility and trust***
- **of the .CO ccTLD and hence put RR's, Registrants and netizens (child community) in risk.**

Additional References ...

- **.CO and CSAM matters:**

- <https://www.cointernet.com.co/noticias/comunicados/co-internet-neustar-e-iwf-se-unen-para-proteger-a-los-ninos/>
- <https://www.home.neustar/blog/neustar-iwf-partner-protect-children-adolescents-digital-environments>
- <https://www.home.neustar/blog/zero-tolerance-approach-zero-percent-dotco-domains-csam>
- <https://computerworld.co/colombia-certificada-en-la-lucha-contra-sitios-web-asociados-a-abuso-infantil/>

Additional References ...

- **Other sources:**

- https://www.consumer.ftc.gov/blog/2019/09/youtube-pays-big-tracking-kids?utm_source=govdelivery
- <http://www.inhope.org/>
- <https://www.interpol.int/Crimes/Crimes-against-children>
- <https://www.ecpat.org/wp-content/uploads/2018/07/ECPAT-International-Report-Trends-in-Online-Child-Sexual-Abuse-Material-2018.pdf>
- <https://www.longdom.org/open-access/cyber-criminology-algorithmic-vs-heuristical-approaches-for-analysis-within-the-human-trafficking-domain-0976-4860-1000146.pdf>
- https://www.unicef.org/publications/index_101992.html

Additional References

- ***Other related videos:***

- <https://www.youtube.com/watch?v=EzAaElaOaVE>

- <https://www.youtube.com/watch?v=9S2QvFCaNME>



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Q & A

Thanks!