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

- Website: 5%
- File host: 7%
- Image host: 84%
- Banner site: 1%
- Forum: 1%
- Others: 2%

Source: International Association of Internet Hotlines (INHOPE) – 2018 Report
Online Sexual Exploitation & Abuse

Source: International Association of Internet Hotlines (INHOPE) – 2018 Report
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 (RDQ)” y sus “Sistema de Mitigación de Amenazas de Registro (RTMS)”

Durante el mes de AGOSTO de 2019 se gestionaron, a través del sistema RTMS de NEUSTAR (casa matriz de .COINTERNET), un total de 4.561 (JULIO: 5.597) alertas (enlaces o vínculos Wcb, también denominados “URL”) asociadas a 782 (JULIO: 722) nombres de dominio bajo “.CO”, proveedores 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: 46.935) 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 2019:

1. 4.561 ALERTAS .CO GESTIONADAS vía – RTMS –

2. 782 NOMBRES DE DOMINIO BAJO “.CO” GESTIONADOS vía – RTMS –

Fuente: NEUSTAR – RTMS.

Revisando la información del mes de AGOSTO de 2019, 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 investigar
- 25% (1.617) de las alertas estuvieron asociado a “acortadores de enlaces” (“URL Shorteners”: T.CO [Twitter], Y.CO [Go Daddy], DPCO, LNK, LMK, CO, entre otros)
- Las países con mayor 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 \textit{SSR} and \textit{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

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: 39,937
- .net: 12,990
- .org: 5,854
- .ru: 5,576
- .co: 2,714
An Action Plan ...

- REDPAPAZ-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).
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**].
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 4,558 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 14,986,156 webpages across 2,436,110 .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 8,039 URLs in the .CO namespace that contained indecent images of children and these were notified the appropriate hosting countries. It should be noted that none of the images 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,

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.home.neustar/blog/zero-tolerance-approach-zero-percent-dotco-domains-csam

Additional References ...

- **Other sources:**
  - [https://www.interpol.int/Crimes/Crimes-against-children](https://www.interpol.int/Crimes/Crimes-against-children)
  - [https://www.unicef.org/publications/index_101992.html](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
Q & A

Thanks!