

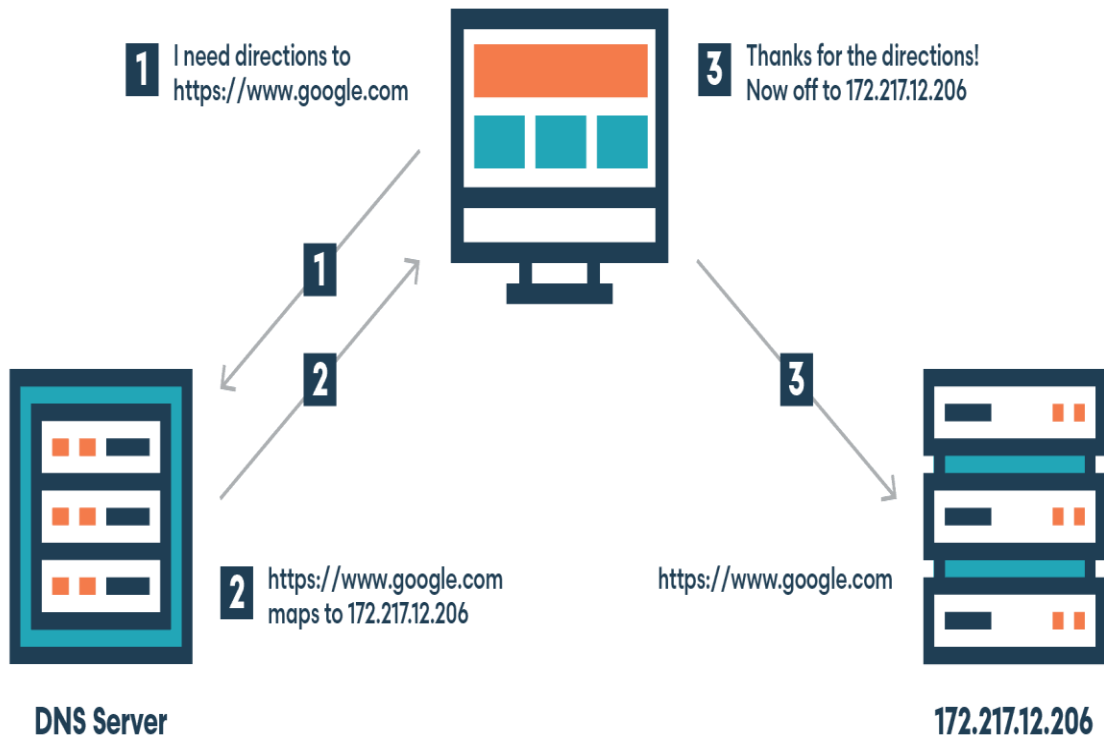


# THE ROLE OF THE DOMAIN NAME SYSTEM IN ONLINE COPYRIGHT ENFORCEMENT

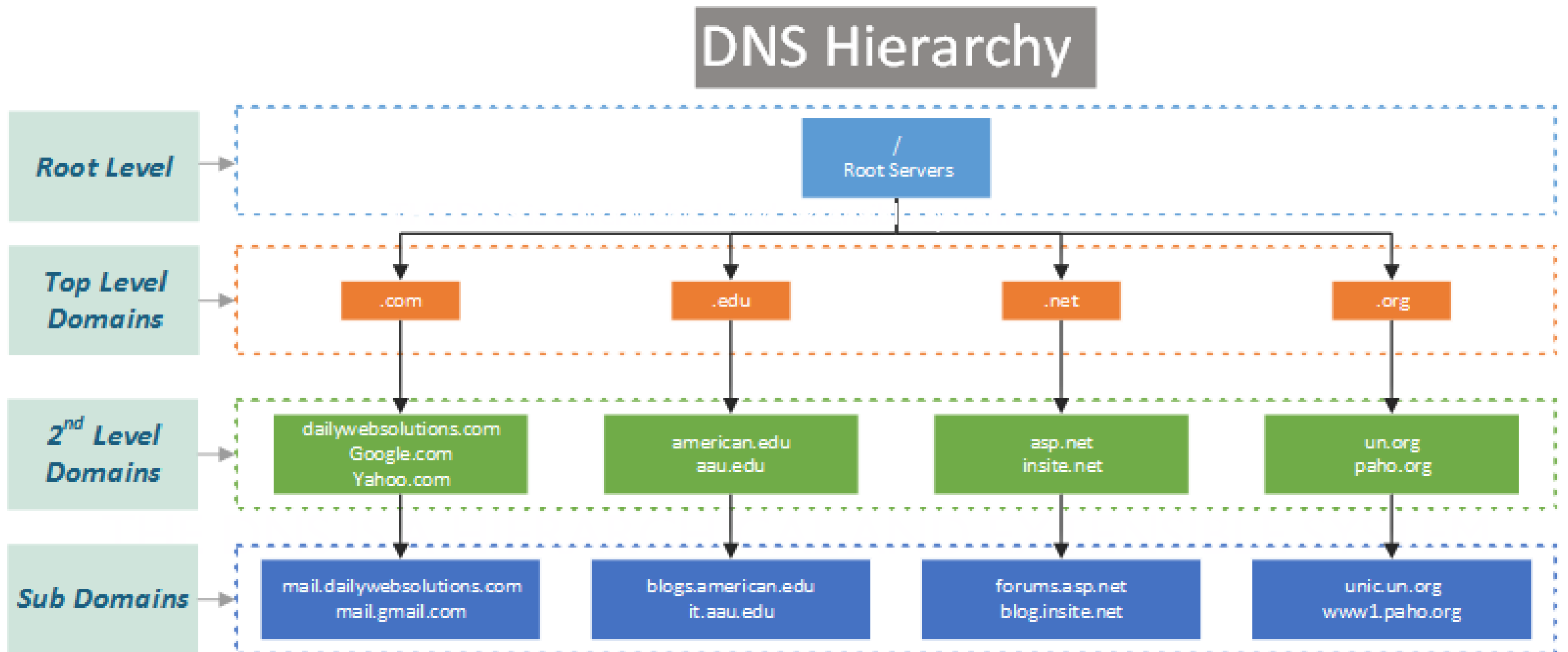
DEAN S. MARKS  
JAN BERND NORDEMANN

SEPTEMBER 1, 2022

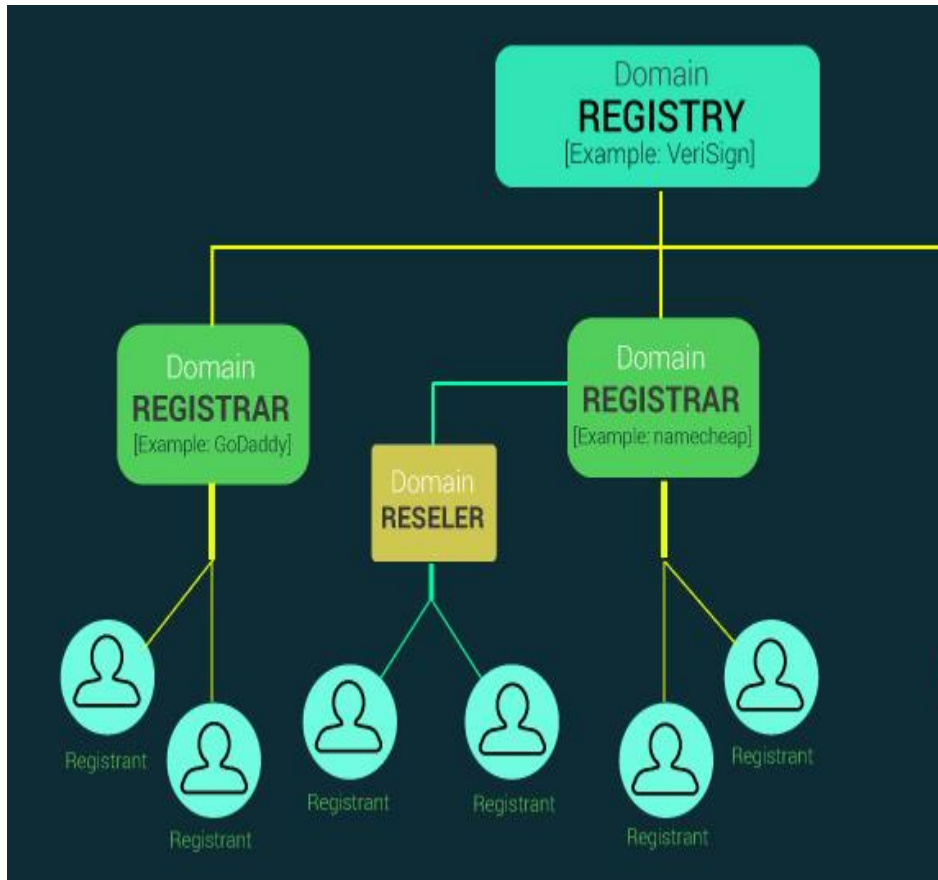
# THE DOMAIN NAME SYSTEM (DNS) AND HOW IT WORKS



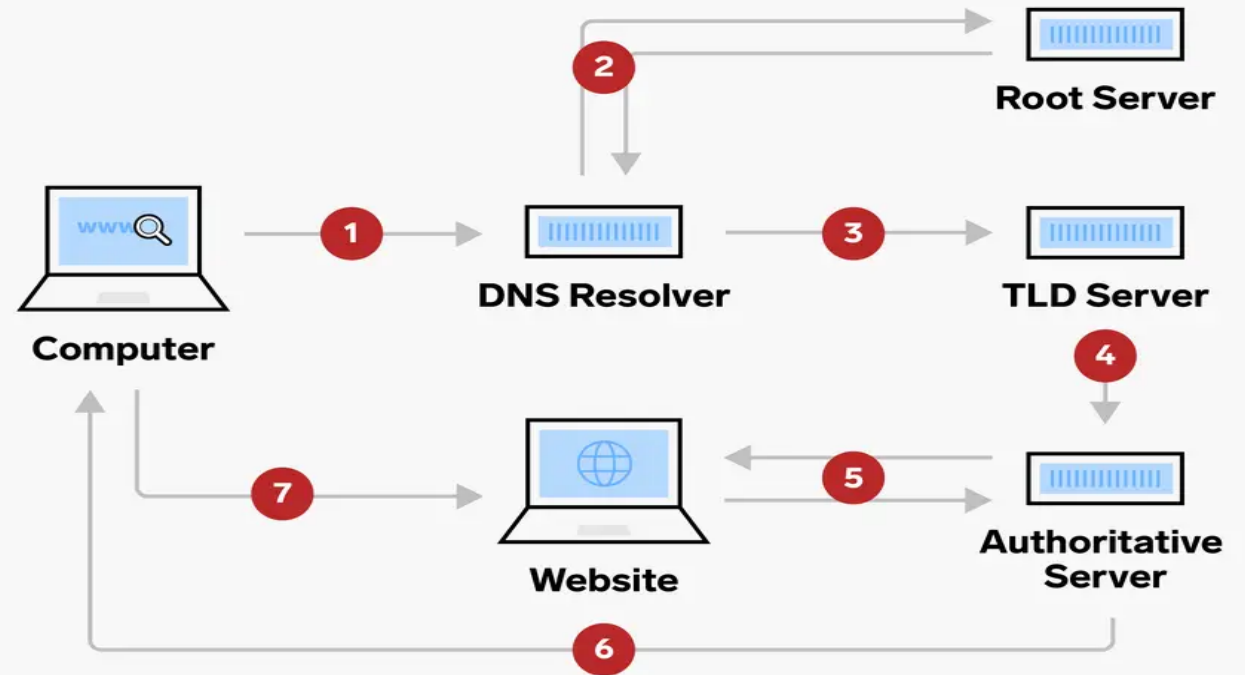
# THE DNS IS A HIERARCHICAL AND EXTENSIBLE SYSTEM



# DNS REGISTRIES, REGISTRARS, RESELLERS AND RESOLVERS



## The DNS process step-by-step



# TOP LEVEL DOMAINS: GTLDS AND CCTLDS

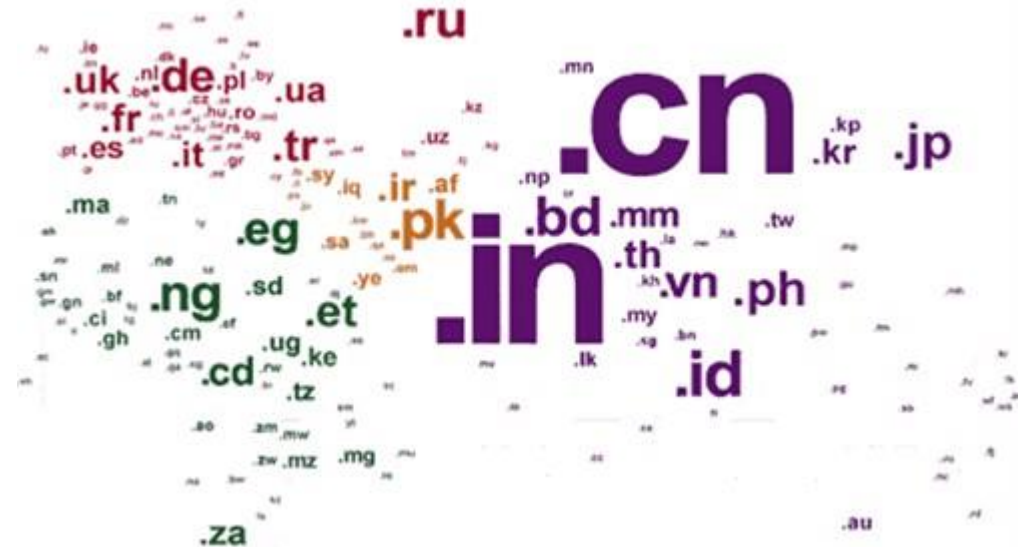
## Generic Top Level Domains (gTLDs)



### Over 1200 different gTLDs

Technical and policy aspects are administered by the Internet Corporation for Assigned Names and Numbers (ICANN)

## Country Code Top Level Domains (ccTLDs)

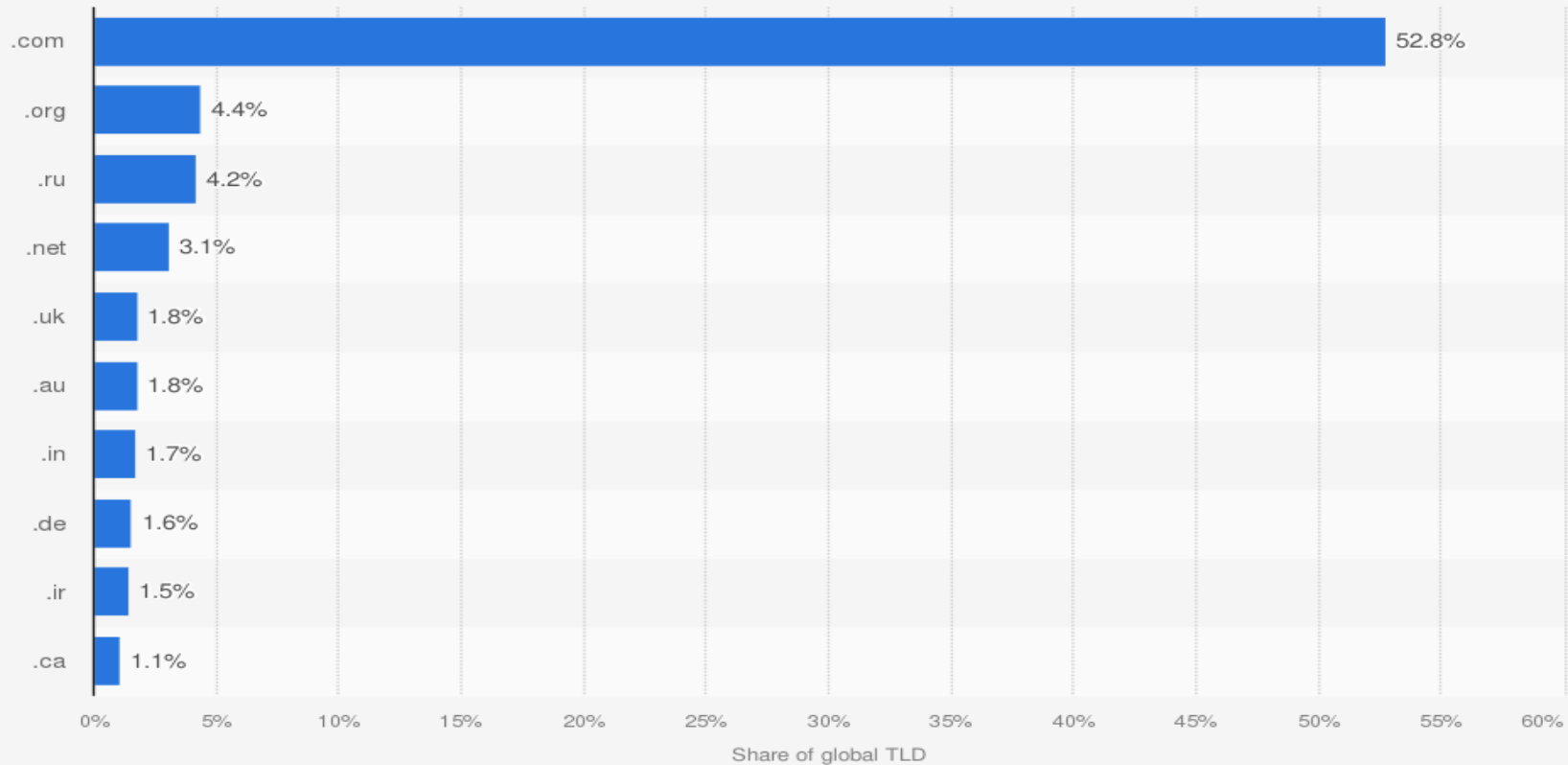


### Over 300 different ccTLDs

Technical aspects administered by ICANN (e.g., IANA root zone server) Policy aspects administered by individual country identified by ccTLD

# MOST POPULAR TLDS

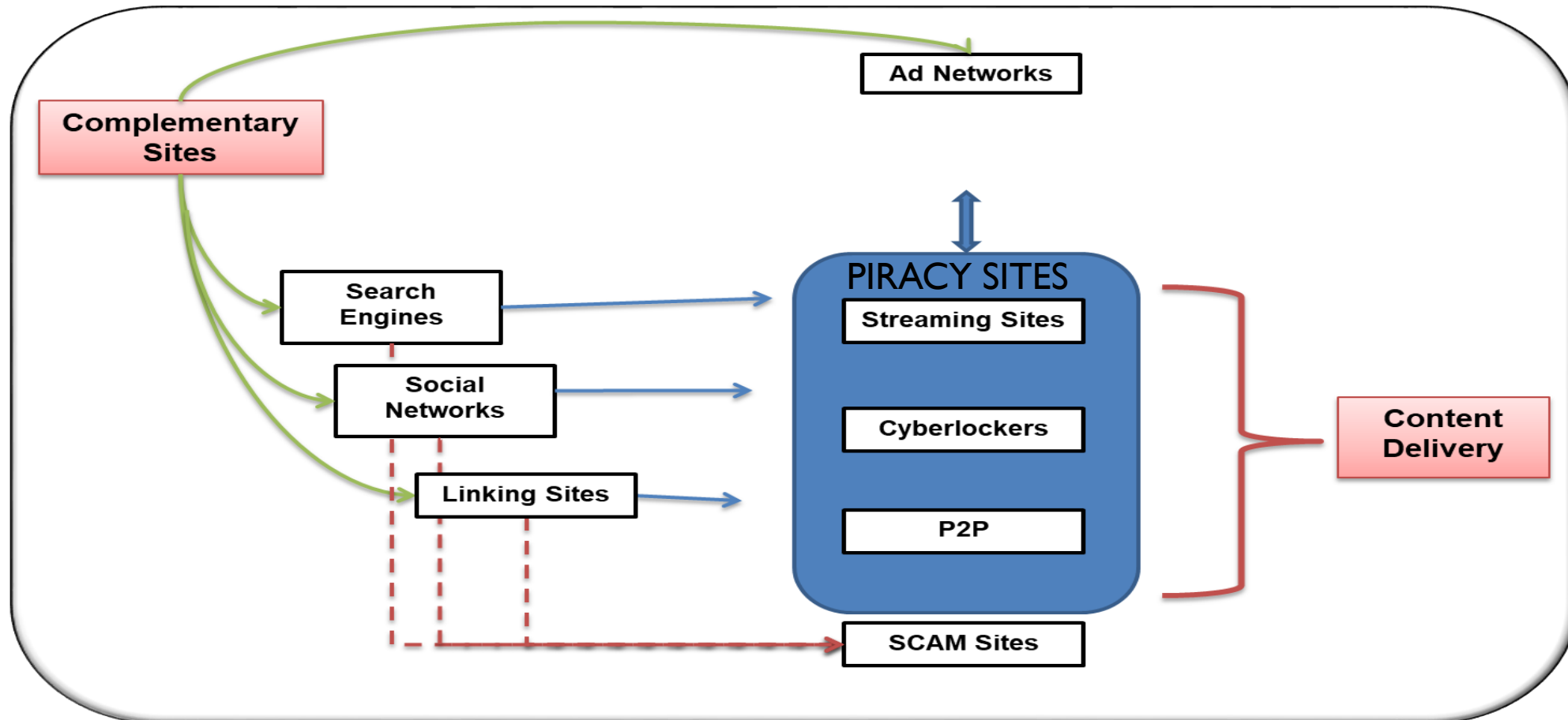
Most popular top-level domains worldwide as of June 2022



Source  
W3Techs  
© Statista 2022

Additional Information:  
Worldwide; W3Techs; June 2022; data based on top 10 million websites

# ONLINE COPYRIGHT INFRINGEMENT



# INTERNET INTERMEDIARIES INVOLVED WITH STRUCTURALLY COPYRIGHT INFRINGING WEBSITES

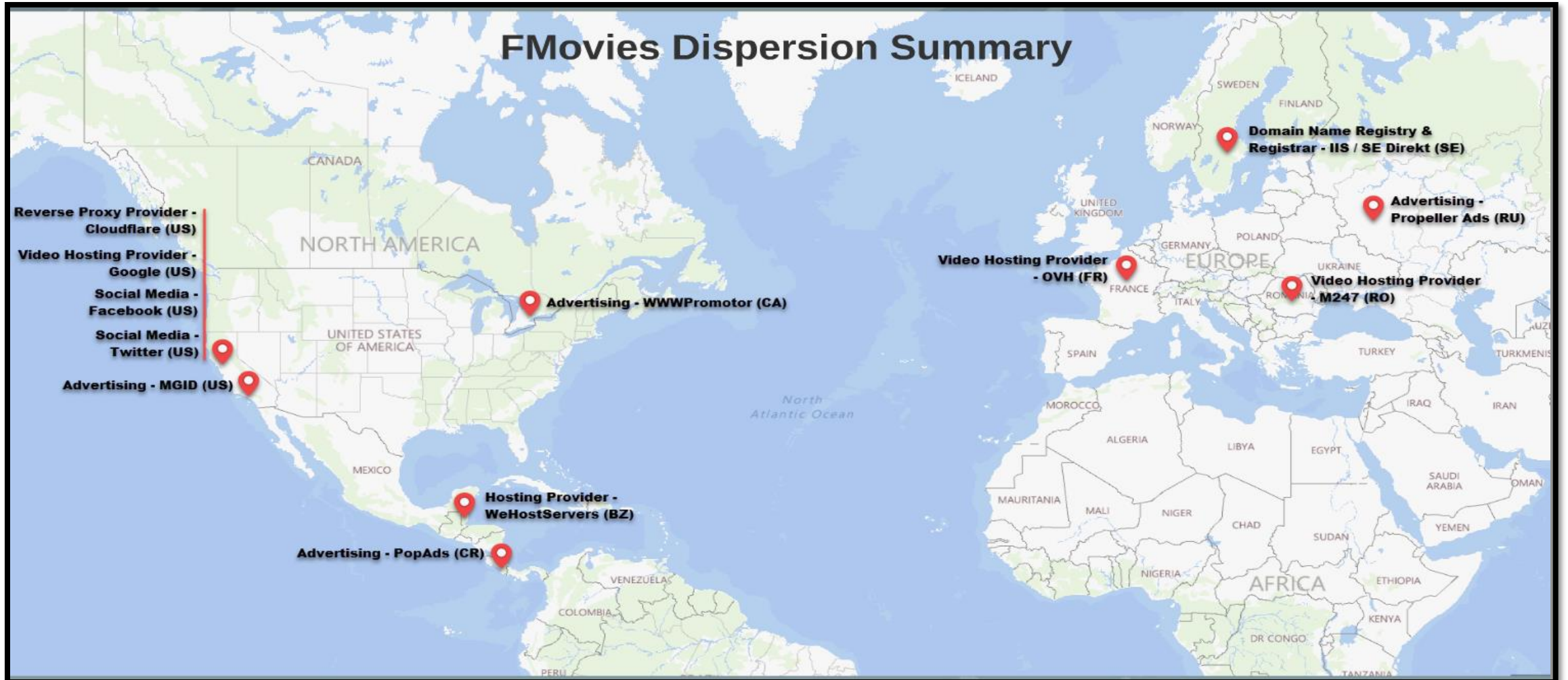




# EXAMPLE: FMOVIES.SE

The screenshot displays the Fmovies website interface. At the top, there is a navigation bar with the 'FMOVIES' logo, a search bar containing the text 'Enter keywords here', and a 'Login' button. Below the navigation bar, the page title 'MOVIES' is visible, followed by a 'FILTER' button. A pagination bar shows page numbers from 1 to 491, with page 6 currently selected. The main content area features a grid of movie posters, each with a title and a quality indicator (e.g., HD, HDrip, SD, TS). The posters include titles such as 'Justice', 'The Show', 'Merry Ex-Mas', 'Voyage of Time: Life's Journey', 'Deadly Detention', 'Smartass', 'Clowntergeist', 'Who Is Alice', 'Donald Cried', 'The Bride', 'Gun Shy', 'You Can't Have It', 'It', 'Circus Kane', 'Harvest Moon', 'The Good Catholic', 'Whitney', 'Paris Can Wait', 'Love's Last Resort', 'Atonin', and 'Basement'. The website is viewed in a browser window with the address bar showing 'https://fmovies.is/movies'. The Windows taskbar at the bottom indicates the system time as 6:02 PM on 9/15/2017.

# FMOVIES RELIES ON INTERMEDIARIES SPREAD AROUND THE WORLD



# NO INTERNATIONAL TREATY GOVERNS THE DNS

## POLICY MEANS BY WHICH DNS SERVICE PROVIDERS ADDRESS ONLINE COPYRIGHT INFRINGEMENT

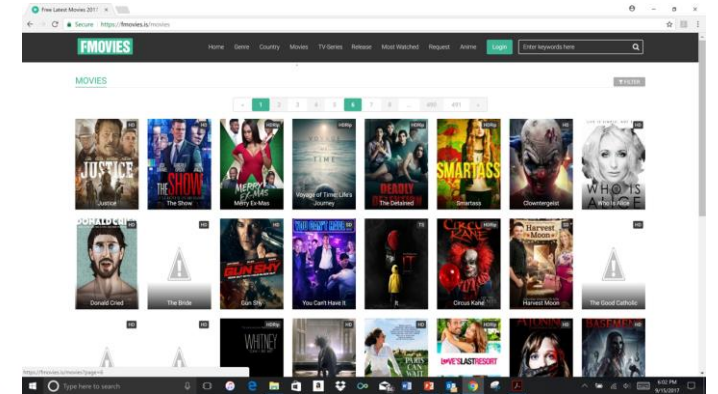
- National and regional (e.g., European Union) laws
- ICANN contracts and policies and for gTLDs
- Contractual obligations: registry → registrar → registrant
- Voluntary measures



문화체육관광부

# REACTIVE MEASURES DNS SERVICE PROVIDERS CAN TAKE TO ADDRESS COPYRIGHT INFRINGING WEBSITES

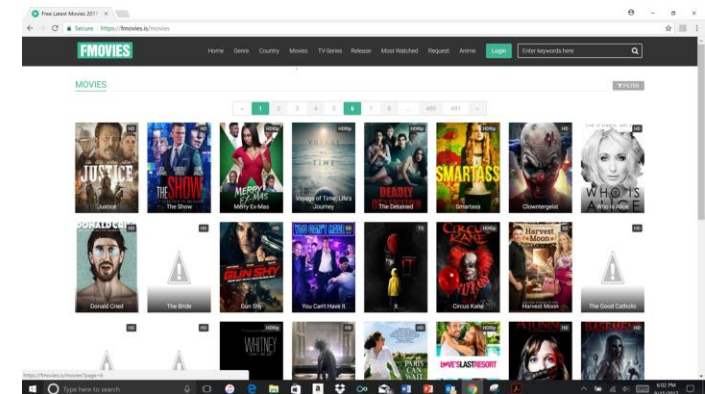
- Registries, Registrars and DNS Resolvers **cannot remove individual pieces** of content or pages from websites
- Registries and Registrars can **suspend/disable** the domain name of a website
- Registries and Registrars can **freeze** the domain name to prevent it from being transferred and to prevent the registrant/WHOIS data from being modified
- DNS Resolvers can prevent the domain name from **resolving**



For Structurally Copyright-Infringing Websites

# THE LEGAL FRAMEWORK FOR DNS PROVIDERS TO ADDRESS COPYRIGHT INFRINGING WEBSITES

- Where registries, registrars, or DNS resolvers serve **structurally copyright infringing websites**: The legal frameworks and case law lack a clear picture at international and national levels.



Structurally Copyright-Infringing Websites

# THE LEGAL FRAMEWORK FOR DNS PROVIDERS : SECONDARY LIABILITY FOR COPYRIGHT INFRINGEMENT?

- Case law mainly discusses liability as **secondary infringers** if DNS providers serve structurally copyright infringing websites. This usually requires **intent**, which could be established by a notice.
- “**Safe harbors**” from electronic commerce legislation sometimes may apply.

# THE LEGAL FRAMEWORK FOR DNS PROVIDERS: NO-FAULT INJUNCTIONS?

- There are court remedies not based on liability (i.e., **no-fault injunction orders**).
- Such no-fault remedies are based on the idea that intermediaries are **in a good position to help**. They have proved successful in many countries and could be considered in the case of DNS service providers, depending on national law.

# THE LEGAL FRAMEWORK FOR DNS PROVIDERS: NO-FAULT INJUNCTIONS?

- For non-fault injunctions, the **principle of proportionality** needs to apply. It is necessary to balance-out the conflicting fundamental rights: right to property (copyright holder), right to conduct a business (DNS service provider) and the right to access information (Internet user).
  - Examples: website blocking, hosting take down, delisting of search results.
- **Duties to suspend/disable and freeze** domain name are possible for registries and registrars.
- **Duties not to resolve** domain name are possible for DNS resolvers.



# THE LEGAL FRAMEWORK FOR DNS PROVIDERS: NO-FAULT INJUNCTIONS?

- High Court of New Dehli:



***“[S]upporting website blocking for sites dedicated to piracy does not make one an opponent of a free and open internet . . . [and] advocating limits on accessing illegal content does not violate open Internet principles.”***

UTV Software Communication Ltd. v. 1337X.To and Ors (2019)

# DNS SERVICE PROVIDER CONTRACTUAL OBLIGATIONS THAT ADDRESS COPYRIGHT INFRINGEMENT

- gTLD registries and registrars must enter accreditation agreements with ICANN
  - Must prohibit registrants from copyright infringement (among other illegal activity)
  - Registrars must have an abuse contact and respond appropriately to any reports of abuse
- All registries—whether gTLD or ccTLD—have contractual agreements with registrars
- Registrars enter into contracts with domain name registrants
  - Typically prohibit registrants from engaging in illegal behavior, including violating third-party rights
- **KEY: registries and registrars reserve the right in their contracts to suspend/disable domain names and to freeze domain names to prevent transfer**

# PROACTIVE MEASURES DNS SERVICE PROVIDERS CAN TAKE TO PREVENT COPYRIGHT INFRINGING WEBSITES

- Ensure accuracy of and verify registrant data (WHOIS data)
  - Name, email address, physical address, phone number
- Limit or prohibit use of privacy/proxy services
- Block/delete all registrations by abusive registrants
- Implement algorithms to identify and prevent abusive domain name registrations
- Verification of WHOIS data *“can even be more efficient and less burdensome than requesting the deletion of single domains for IP-infringing activities, as failure to comply with one verification request may result in the deletion of all the domain names of a specific domain name holder [registrant].”*



**EUIPO, Domain Names—Discussion Paper March 2021**

# VOLUNTARY REACTIVE MEASURES DNS SERVICE PROVIDERS CAN TAKE TO ADDRESS COPYRIGHT INFRINGING WEBSITES

- **Trusted Notifier / Trusted Flagger Arrangements**

- **Voluntary** arrangements with no monetary consideration
- Notifier is an organization with **expertise** in identifying structurally copyright infringing websites
- Notifier engages in **human review** of website
- Notifications are in writing with **attestation**
- Arrangement can be made with registries and registrars
  - Examples: Motion Picture Association with Donuts (now Identity Digital) and Radix



# SUCCESS OF TRUSTED NOTIFIER PROGRAM FOR ONLINE COPYRIGHT PIRACY

## Statement from Registry Donuts in June 2016

*As we said in February, this is a landmark development in the continuing battle against pervasive illegal online piracy. Donuts has been extremely careful in balancing the rights of its end-user customers along with those of copyright holders. We continue to believe this is a useful and efficient manner for addressing blatant online piracy, and we encourage others in the domain name community to follow suit with similar programs. Our hope is that this program will be a pre-cursor to a more streamlined industry-wide process that all interested parties can develop collaboratively.*

# SUCCESS OF TRUSTED NOTIFIER PROGRAM FOR ONLINE COPYRIGHT PIRACY



 MOTION PICTURE ASSOCIATION

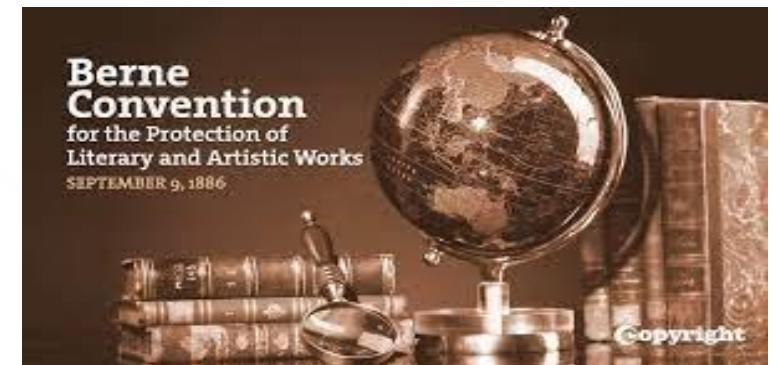
## Initial Results Demonstrate Effectiveness of Partnership with Donuts on “Trusted Notifier” Program

JUNE 22, 2016

We share Donuts’ enthusiasm and positive evaluation of the constructive and cooperative voluntary relationship that we are building together. Furthermore, we share the same hope for future collaboration with more operators of domain name registries and registrars. Last month, we announced a [similar agreement with Radix](#), a Dubai based domain name registry operator, and we look forward to exploring additional opportunities with other potential partners in this space.

# “CONTENT REGULATION” ARGUMENTS

- Many DNS Service providers **decline to take action** on the domain names of structurally copyright infringing websites absent a court order in their relevant jurisdiction directing them to do so.
- They argue that they should not engage in “content regulation” or evaluate speech.
- Failure to recognize that copyright infringement is illegal activity that is globally recognized
  - Overwhelming majority of world’s countries are signatories to the Berne Convention for the Protection of Literary and Artistic Works



# CONCLUSIONS

- Structurally copyright infringing websites should be addressed by DNS providers.
- Legal frameworks for DNS providers and copyright infringement still in a state of development.
- **“No fault” injunctive legal remedies** could serve as effective and balanced tools. DNS providers in a good position to help. Registries and registrars **suspend/disable, freeze**; DNS resolvers **no resolution**.
- **Proactive measures** by DNS providers to discourage online infringement and other illegal activity should be adopted, such as ensuring accuracy of registrant/WHOIS data.
- **Voluntary reactive measures**, such as trusted notifier arrangements, should be encouraged.





**Advisory Committee on Enforcement**  
**Fifteenth Session August 31 to September 2, 2022**

The views expressed in the foregoing slides are those of the authors and not necessarily those of the Secretariat or of the Member States of WIPO

THANK YOU

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