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Subject: Universal Acceptance Issues with .TUBE, ASCII and IDN Domains   October 12. 2023

Dear ICANN Board,

I am writing on behalf of Latin American Telecom LLC, the Registry Operator of the .TUBE Top-Level Domain (TLD). We want to bring to your attention a pressing issue related to Universal Acceptance, and the challenges we have faced in getting .TUBE domains to linkify[1] correctly in popular messaging apps, especially WhatsApp -- the world's most popular messaging app with over two billion users. What we thought was an isolated issue that affected only .TUBE turned out to be the tip of a giant iceberg.

Linkification in Android OS

In 2022, we developed a specialized short link creator for videos under the .TUBE TLD, to provide added value for our clients. However, we encountered a very significant problem. When .TUBE URLs were sent via WhatsApp, they were not linkifying. This issue persisted despite the TLD being delegated by ICANN almost eight years ago.

We made numerous attempts to address this problem with Meta, Inc., the parent company of WhatsApp, and with ICANN's Universal Acceptance team. Those attempts yielded disappointing results for almost a year. We only received generic responses from Meta and ICANN, with ICANN persistently directing us to contact Meta. ICANN refused to do anything at all, despite its many promises and substantial budget to address Universal Acceptance of new gTLDs.

With no support from ICANN we took further independent action and opened a GitHub thread[2] to gather support from the developer community. Through our efforts, we discovered a much deeper-rooted problem. The Android operating system, relied upon by many apps, contained a hard-coded list of valid TLDs that had not been updated since November 24, 2015. This meant that any TLD delegated after that date would not validate correctly, causing linkification issues beyond just WhatsApp. In fact, more than one third of the new gTLDs were not on that list, and thus would not linkify in WhatsApp, or be recognized in countless other applications.

While we applaud Android's recent update to its domain database on September 11, 2023, the problem still persists as it will take considerable time for this update to reach all Android devices. Unlike Apple, which controls both its OS and hardware, Android's updates depend on individual device manufacturers to deploy them across their product lines. This presents a lengthy timeline for resolving the issue.

Linkification in Other Platforms

Moreover, many serious issues still persist with many other platforms. Example, Apple simply does not appear to linkify any nTLD except for .XYZ and .ONLINE, and even for those the linkification is dependent upon the version of WhatsApp being used. Apple ought to be encouraged by ICANN to update the list of

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[1] To "linkify" means to convert a piece of text to a hyperlink. *See, e.g.,* Android Developers Reference: https://developer.android.com/reference/android/text/util/Linkify.
[2] https://github.com/publicsuffix/list/issues/1807

TLDs that they recognize in Apple applications, and to regularly update that list in the future. We also know that X (fka Twitter) is not linkifying .KIDS nor .MUSIC gTLDs delegated in 2021. We are researching whether Microsoft has similar issues, but all of these efforts are draining our corporate executive time and resources, to do a job that should have been done by ICANN years ago. We have collected evidence and reference materials for ICANN and the community's consideration and posted them at our drive.[3] Despite its knowledge of this linkification problem, and despite the significant ICANN resources already allocated to deal with so-called "Universal Acceptance", almost a decade into the new TLD program, **the two operating systems used by 98% of all the telephones in the world are not fully UA compliant.**

Problematic Issues, and Solutions ICANN Could Implement

The crux of the problem lies in three issues, each of which could be largely solved with only a modest amount of effort from ICANN. First, while IANA maintains a canonical list of TLDs, there is no RFC nor any guidance from ICANN as to clear best practices for the use of such a list in software applications. As the guardian of the DNS, ICANN first should establish and publish guidance for the developer community to refer to IANA's list (or other recognized PSL's) and emphasize that it is updated from time to time as new TLDs are delegated. In particular, ICANN should encourage the developer community to periodically refer to the list and update their applications so that all ICANN-delegated TLDs are recognized and linkified correctly -- without the need for additional prefixes like "http://" or "www." Longer term, ICANN should work to promote an RFC that incorporates this guidance. The current situation provides an unfair competitive advantage to older TLDs, at the expense of newer TLDs, which is directly contrary to ICANN's mandate to promote fair competition among TLD registry operators.

The second issue is the complete disconnect between ICANN and the developer community. In a utopian world, there would be a place for developers within ICANN's MSM, like a "software developer stakeholder group", however the current ICANN multi-stakeholder model has no specific place for developers. Nor is it very attractive for developers, who search for quick solutions, to get entangled in ICANN's enormous, lethargic policy-making bureaucracy. This disconnect is clearly a contributing factor to the Universal Acceptance challenge. At minimum, ICANN could expend modest resources to specifically target the software development community with outreach, encouraging them to engage in ICANN policymaking within the Business Constituency or otherwise. Longer term, ICANN could consider and encourage a specific constituency for software developers within the GNSO, because that community is so critical to the DNS, and vice versa.

The third issue is the Universal Acceptance Steering Group (UASG). Unfortunately their focus has been predominantly on encouraging facilitation of Internationalized Domain Names (IDNs), which represent only a very small percentage of registered domain names. It is crucial to allocate substantial resources and attention at least equally to ASCII domains, which are used by over 95% of internet users. A more balanced approach or even separate groups for ASCII and IDN domains may be necessary. Facilitating the Universal Acceptance of ASCII domain names already registered and in use (low hanging fruit) will benefit also IDNs and increase the likelihood of being more widely used in the future.

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[3] Tube Shared Files and Materials

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ICANN is making very little practical effort to elevate awareness for developers of the need to update their TLD lists, or best practices to incorporate regular updates to their products and explain UA to developers. Where is ICANN at developer conferences? Where are ICANN's posts in popular developer forums? We encourage ICANN not only to foment a presence at developer conferences, but also to publicly recognize and award individual programmers or companies that make their software UA compliant. UA compliance will be reached not with "UA Days" in different geographies hoping developers show up, but by showing up where developers are. UA is not a marketing issue but a technical issue as this linkification problem proves.

Conclusion

We urge ICANN to take a proactive role in resolving critical and ongoing Universal Acceptance issues such as the linkification issue that we have struggled with. Establishing and providing clear guidelines for developers, addressing the divide between ICANN and the developer community, and creating a balanced approach between ASCII and IDN domains all would be important steps in the right direction. We believe that Universal Acceptance should address the critical issues facing ASCII domains and engage deeply with the developers and programmers.

Finally, before ramping up the process of new rounds that will expand the universe of gTLDs, ICANN needs to assure that those new TLDs actually will function as consumers have come to expect from older TLDs and right now ICANN cannot guarantee that. And for proof, just type "nic.com nic.tube' on your whatsapp, click send and see for yourself the magnitude of our failure. Pursuant to its Bylaws mandate, ICANN must work to ensure that all existing TLDs are treated with fairness and equality and that is clearly not the case today.

We appreciate your attention to this matter. We hope that ICANN will take the necessary steps to ensure the universality and acceptance of all ICANN-delegated domain names, regardless of the date of delegation of the TLD, or the TLD's character set.

Sincerely,

Rami Schwartz
CEO
Latin American Telecom LLC