At-Large's Subsequent Procedures Scorecard: Security & Stability

CPWG SubPro Small Team

Post At-Large Consolidated Policy Working Group (CPWG) Call Wednesday, 27 May, 19:00 UTC



APPLICATION EVALUATION/CRITERIA

Topic/Area:	[27] SECURITY	AND STABILITY [2.7.6]	Priority:	HIGH	Settled On:	28.05.2020	
Related:		on Rates se mitigation [2.4.3] – algorithmic checking of TLDs against RZ-LGRs and ASCII string requirements					
Key Issues:		What is a safe rate of delegation of new gTLDs into the root zone? Banning of emojis as TLDs					
Policy Goals:	 In respect of Delegation Rates: The New gTLD Program should be introduced in an ongoing, orderly, timely and predictable manner New gTLDs should be delegated into the root zone in a manner that minimises risk of harming operational stability, security and global interoperability of the Internet 						
Assigned CCT-RT Rec's:	None	ne					
References:	Working D	01. SubPro Security & Stability – CPWG consensus building, 24 May 2020 Working Document_SubPro Draft Final Recommendations, 24 May 2020 SubPro WG Application Evaluation/Criteria_Summary Document, 7 January 2020					
What has SubPro PDP WG concluded?		What will/might SubPro PDP WG recommend?			ceptable? Wh ne and by/wit		
		 Affirmation (1): WG affirms Principle A from the 2007 policy, which states: "New top-level domains (gTLDs) must be introduced in an orderly, time predictable way." WG affirms Recommendation 4 from the 2007 policy, which state "Strings must not cause any technical instability." 	nely and	Yes.			

- 1. Be conservative in adding new gTLDs to RZ
- 2. Focus on rate of change in RZ
- 3. Early warning systems to monitor delegation rates desirable SAC100
- 4. Support RSSAC & SSAC recommendations
- 5. Role for and action by CTO

Recommendation (2):

- ICANN must honor and review the principle of conservatism when adding new gTLDs to the root zone.
- ICANN must focus on the rate of change for the root zone over smaller periods of time (e.g., monthly) rather than the total number of delegated strings for a given calendar year.

Implementation Guidance

- The number of TLDs delegated in the root zone should not increase by more than approximately 5 percent per month, with the understanding that there may be minor variations from time-to-time.
- ICANN should structure its obligations to new gTLD registries so that it can
 delay their addition to the root zone in case of DNS service instabilities.
 Objective criteria should be developed to determine what could be
 classified as a "service instability."
- ICANN should investigate and catalog the long term obligations for root zone operators of maintaining a larger root zone.
- OCTO should consult with PTI, the RZ Manager, the root operators via RSSAC, and the larger DNS technical community on the implementation of these recommendations.
- ICANN should continue developing the monitoring and early warning capability with respect to root zone scaling.

WG's Rationale

• In delegating new gTLDs, WG agrees with the RSSAC that "trouble free access to the root zone is one of the very few things that are critical for all Internet users," and therefore, ICANN should honor the principle of conservatism when adding new gTLDs to the root zone.

Yes.

	WG	
	 WG supports both the RSSAC and SSAC advice that an overall cap of 1,000 annually is not the appropriate measure of stability, rather, it is the rate of delegation (adding names to the root). – RSSAC031 & SAC100 WG recommends that further work be done on establishment of an appropriate rate of delegation from a technical standpoint. Although WG discussed operational and community concerns about the ability to evaluate new gTLDs it noted that the recommendations in this section relate only to the technical concerns of rating or capping the adding new gTLDs to the root zone, from a Security and Stability risk assessed perspective. WG supports the recommendations proposed by the SSAC that ICANN should structure its obligations to new gTLD registries so that it can delay their addition to the root zone in case of DNS service instabilities. WG also agrees with the SSAC recommendation that ICANN should investigate and catalog the long term obligations of maintaining a larger root zone. In addition, WG recommends that OCTO consult with PTI, the Root Zone Manager, the root operators via RSSAC, and the larger DNS technical community on these recommendations. With respect to an early warning system, WG notes the ICANN Org comments that the ICANN OCTO is researching the design of an "early warning system" that could monitor several aspects of the root server system. ICANN Org noted that It is possible, though not assured, that such a system could monitor for possible signs of stress on various aspects of the root server system that could result from increased size of the root zone WG notes that ICANN Org emphasized that this research is in a very early, exploratory stage, and the design of any possible "early warning system", 	
6 With respect to Empire in	as well as its capabilities, are still unknown.	Voc
6. With respect to Emojis in DNs	Recommendation (3): In connection to affirmation of 2007 policy's Recommendation 4, Emoji in domain names, at any level, must not be allowed.	Yes.

Implementation Guidance

- The application submission system should do all feasible algorithmic checking of TLDs, including against RZ-LGRs and ASCII string requirements, to better ensure that only valid ASCII and IDN TLDs can be submitted.
- A proposed TLD might be algorithmically found to be valid, algorithmically found to be invalid, or verifying its validity may not be possible using algorithmic checking.
- Only in the latter case, when a proposed TLD doesn't fit all the conditions for automatic checking, a manual review should occur to validate or invalidate the TLD.

WG's Rationale

- WG supports the SSAC position that emoji in domain names at any level should not be allowed - WG noted that recommendations relating to already registered emoji SLDs would not be in its jurisdiction.
- WG agreed that the application submission system should do all feasible algorithmic checking of TLDs –
 - ICANN Org agreed that from a system development perspective, automation could be built into the application system to check appliedfor gTLDs against specific lists, such as the Reserved Names list, ISO-3166 list, and the Root Zone LGR.
 - ICANN Org noted that some level of algorithmic checking of applied-for gTLDs is also possible, though the availability of a deterministic list of labels and whether the RZ-LGR is defined for the scripts of these labels would determine the complexity of the implementation of algorithmic checks.

Main Positions of Concern:

None. All in order.