Frequently Asked Questions about the ICANN trial allocation of a domain name with a single-character label, O.COM, in the .COM generic top-level domain (gTLD).

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[I make this comment as an individual technical expert, not in any other role.]

1. Why is ICANN conducting a trial allocation of a single-letter name in .COM?

In November 2017, Verisign (the registry operator for .COM) submitted a Registry Service request to release for registration one .COM domain name with a single-character label, O.COM. Verisign proposed that O.COM be allocated through an auction, and that the auction proceeds be disbursed toward areas of public good for the Internet community, consistent with ICANN's Single-Character Second-Level Domain Name (SC SLD) Allocation Framework. In response to this request ICANN has solicited public comment on a plan to permit Verisign to auction O.COM as a test, or trial, of the Framework.

2. Why did Verisign have to ask ICANN for permission to allocate a name in .COM?

All gTLD registries that were contracted with ICANN before 2011 were required to reserve from initial registration single-character traditional (LDH²) domain names at the second level as the result of a reserved names policy imposed in 1993 (IDN labels, which did not exist in 1993, are not subject to this policy). The registry agreement between ICANN and Verisign for .COM therefore includes, in Appendix 6,³ a requirement that all single-character labels be reserved at the second level. In order to release O.COM for registration, Verisign must obtain permission from ICANN to modify its registry agreement for .COM.

3. So this will be a test of the process for managing the auction of single-character names and allocating the proceeds as defined in the Allocation Framework. It's not a test of the technical feasibility of adding single-character names to the .COM zone.

That's right. There are no technical issues with single-character names at the second level. In fact, many TLD registries that are not required by ICANN contracts to reserve them—including ccTLDs and the new gTLDs that have been approved since 2011—routinely register single-character names with no problems, and the single-character names that were registered before the policy was adopted (including Q.COM, X.COM, and Z.COM) are in active use.

4. Then why were single-character names reserved in the first place?

No one knows for sure why Jon Postel, who in 1993 served as the Internet Assigned Numbers Authority (IANA), decided to withhold single-character names from registration in what were

¹ https://www.icann.org/resources/pages/proposed-scsld-allocation-framework-2008-06-13-en

² https://www.icann.org/resources/pages/glossary-2014-02-04-en

³ https://www.icann.org/resources/pages/appendix-06-2012-12-07-en

then all of the top-level domains of the DNS. At that time the potential value of specific second-level names was just being recognized, and some anecdotal recollections suggest that he was reserving single letters, symbols, and numbers for different reasons.

5. How did ICANN decide to change this policy?

As part of its preparation for the introduction of new gTLDs, the GNSO formed a Reserved Names Working Group to study the issue of reserved names of all kinds. The RNWG's report⁴ was published in 2007; among other things, it recommended "that single letters and digits be released at the second level in future gTLDs, and that those currently reserved in existing gTLDs should be released" and that "[t]his release should be contingent upon the use of appropriate allocation frameworks." The Allocation Framework was developed in response to this recommendation; the new gTLDs were not required to reserve single character names at the second level, and an auction process was proposed for allocating those names in the legacy gTLDs, with the proceeds to benefit the broader Internet community.

6. What about confusability? There are lots of scripts that have a letter that looks just like the Latin letter "O". Don't ICANN and the Unicode Consortium both recommend not registering names that can be easily confused with strings that look the same but use different scripts?

Yes, the ICANN IDN Guidelines⁵ and the Unicode Consortium Technical Report #36⁶ do have recommendations about names that can be easily confused with strings that look the same, but use different scripts, because of concerns that confusable strings can be used in a homograph attack⁷ to fool a user into following a link that looks legitimate but is actually something else. But confusing names can be constructed with any number of characters, and there is no reason to think that substitution of a homograph in a single-character name is any more or less confusing than substitution of a homograph (or homographs) for some or all of the characters in a multi-character name.

Responsible registries won't allow scripts to be mixed within a label, so the risk is limited to what the Unicode Consortium calls "whole-script confusables" in which two strings are confusable and each string consists entirely of characters from the same (different) script. Single-character strings can be whole-script confusable, but so can multi-character strings; the example that the Unicode Consortium gives in its Technical Standard #39 is "SCOPE" (entirely Latin characters) and "SCOPE" (entirely Cyrillic characters).

⁴ https://gnso.icann.org/en/issues/new-gtlds/final-report-rn-wg-23may07.htm

⁵ https://www.icann.org/news/announcement-2018-05-10-en

⁶ http://unicode.org/reports/tr36

⁷ https://en.wikipedia.org/wiki/IDN_homograph_attack

⁸ http://unicode.org/reports/tr39

⁹ http://www.unicode.org/reports/tr39