

draft-liman-tld-names

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Asbestos
suit, please?

Keeping things on track ...

- Written on request from DNSDIR.
- **Intent:** make it absolutely clear which octet value combinations are allowed in the DNS label closest to the root in the “wire format”, based on old documents, risks of misinterpretation, new requirements (IDN), and existing practise.

Keeping things on track ...

- **Result:** discussion about IP addresses, code points in Unicode, and directional problems, etc ... 😊
- **Lesson:** “crystal clear” isn’t clear enough. 😊
- **Homework:** “Do it again, do it right!” 😊

Strictly Technical Limitations

- [1..63] octets, values [0..255]
- DNS standards documents (STD 13).
- ***Does*** apply to TLD names.

- Do we agree?

Old Conventions(?)/Standards(?)

- RFC 952 DoD Internet host table specification
- Hostname specification:
 - [A-Z] [a-z] [0-9] – starting with ALPHA
- Does **NOT** necessarily apply to the TLD name, under the condition that there is no A/AAAA/ other address record with the owner name “the single TLD label”.
- Do we agree?

Traditional (ASCII) TLD Labels

- Hard to find specifications (please help!)
- RFC 1123:
 - “However, a valid host name can never have the dotted-decimal form `#. #. #. #`, since at least the highest-level component label ***WILL BE ALPHABETIC.***”
- Suggested that this text is very intentional.
- I’m quite sure we disagree ... 😊

“New” IDN TLD Labels

- Lots of problems there that really need to be discussed, but I would like to limit this document to the “wire format”, and hence make this be “Somebody Else’s Problem”.
- Focus this document on allowing IDN characters per se, not exactly which.

Proposed Way Forward

- Postulate that the text in RFC 1123 is intentional.
- Make minimal change to that to allow for IDN.
- Result: “‘alphabetical’ or ‘whatever the IDN folks say is valid IDN’”. (Pointer to IDN doc.)
- ... ehrm ... Can we agree on that?