

Unicode 6.0 versus IDNA2008

Apps Area Meeting – IDNA 79

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IDNA2008

Designed to be Unicode Version-independent

- Special “backward –compatibility” provision in case Unicode makes an incompatible change that affects IDNA
- WG expected this provision would never, or almost-never, be used

Unicode 6.0

- Code tables now complete, book text being polished
- Three incompatible changes of properties that alter validity of characters for IDNA
- These really are corrections – the prior classifications were wrong.
- The characters are *almost* certainly not in DNS use today. But we can never prove that.

IETF Choice about IDNA

- Two characters move from **DISALLOWED** to **PVALID**
 - Almost certainly ok to just let the categories change
- One character moves from **PVALID** to **DISALLOWED**
 - Very bad idea in principle
 - In practice, this one is safe

Choice 1: Do nothing

- Character **DISALLOWED** in Unicode 6-conforming implementations, **PVALID** in Unicode 5.2-conforming ones
- Probably no registrations actually affected
- IDNA practice aligns with correct classifications

Choice 2: Modify IDNA

- Preserve old behavior, keep character valid
- Adds clutter and opens up a class of special cases we hoped to not use
- Likely to upset community whom we promised stability once they went to IDNA2008
- Misalignment with accurate classifications

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How to Decide?

- This is actually the only hard question
- The answer may not make much difference this time
- But the next time may be important

The Nasty Surprise

- It is now clear that any IETF protocol that
 - Needs to compare Unicode strings
 - Needs to match Unicode strings to user expectations
- Will need to deal with this type of change
 - The problem is not just theoretical
- The “Unicode Instability Considerations” section of future protocol specs?