RFC 4282

Oops.. i18n

Issues with RFC 4282

- I18n, first seen in Eduroam

  - henrik@straße.de *cannot* be represented

- ABNF specifies ASCII encoding for the realm

  - Punycode for i18n

  - No ABNF for UTF-8 version

  - **No standard for i18n realm names exists!**

It gets worse

- Unassigned code points are not permitted

  - This forbids new scripts

- Intermediate nodes normalize NAI

  - How? They don't know the locale!

- Realm is "IDN-unaware domain name slot"

  - i.e. No i18

- All nodes do comparisons on punycode version

  - ASCII only should have died in the 80's

It gets better

- No one does any of that ...

- UTF-8 is (mostly) used instead.

RECOMMENDATION

- Issue 4282bis that matches current practice

  - Little to no change to existing implementations

- Fix i18n issues

- Strengthen recommendations for UTF-8

  - EAP Supplicants MUST use UTF-8

  - AAA servers MUST store UTF-8 versions of names

  - AAA proxies MUST compare UTF-8 names

- Proposed draft is available

Questions?

- Which WG?

- Is anyone using punycode?