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?