

draft-ietf-regext-epp-eai  
“Use of Internationalized Email Addresses  
in EPP”  
Email Cardinality

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# Background

- [draft-ietf-regext-epp-eai-10](#) entered IETF Last Call on 5/27/22
  - Updates made based on GenArt, SecDir, and ART-ART feedback
  - Removed definition of the Functional Extension and changed to Command-Response Extension
  - Latest draft is [draft-ietf-regext-epp-eai-16](#)
- Open issue of email cardinality (1, 1 or 2, or 1 to many)
  - “If a non-ASCII email address is to be supported, there should be provision for an all-ASCII alternative to be provided”
- Goal of Draft
  - Support the use of SMTPUTF8 addresses in EPP

# Existing EPP Email Cardinality

- [RFC 5733: “Contact Mapping”](#) - Single required element
- [RFC 7848: “Mark and Signed Mark Mapping”](#) – Single required element for holder and issuer, and single optional element for contact. This extension poses an issue with changing the cardinality, since there needs to be a method to identify the email(s) being extended.
- [RFC 8543: “Organization Mapping”](#) – Single optional element
- [“Validate Mapping”](#) – Single optional element
- [“Email Forwarding Mapping”](#) – Single required element
- [“NameWatch Mapping”](#) – Single required element

# Approach Options

- Keep Existing Cardinality (One)
  - Server policy would determine when an SMTPUTF8 address can be used instead of an ASCII address
- Change of Cardinality to One or Two (ASCII or SMTPUTF8)
  - Support for an alternate email element (ASCII or SMTPUTF8)
  - Require one email element is ASCII when an alternate is used
  - Alternate email element used during transition period defined by server policy
- Change of Cardinality to Many (List of ASCII or SMTPUTF8 addresses)
  - Support for many email elements (ASCII or SMTPUTF8)
  - The number of email elements and types defined by server policy

# Recommendation

- “Change of Cardinality to One or Two (ASCII or SMTPUTF8)” Option
  - Provide guidance in draft for the transition period
  - Extend the create command, the update command, and the info response for an alternative email
  - Provide ability to set and unset alternative email
  - Provide indication of when an alternative email is set or not set

# Conclusion

- Looking for feedback from the WG on the best option to move the draft forward