

# Use of Internationalized Email Addresses in EPP

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# Background: EAI status

EAI (Email Address Internationalization) specified in RFCs 6530-6533

Allows non-ASCII left part of email addresses

Requires explicit protocols/profiles changes

E.g. RFC 8399 Internationalization Updates to RFC 5280

# Intention: EAI in EPP

Should support EAI for all EPP objects having email address as first-class option

- RFC 5733 - EPP Contact Mapping
- RFC 8543 – EPP Organization Mapping
- Non-Standard EPP Mappings in EPP Extension Registry
  - <https://www.iana.org/assignments/epp-extensions/epp-extensions.xhtml>

# Possible implementation approaches

- Do nothing with schema (TANGO, Newstar)
  - RFC 5733 syntax formally allows EAI
- Define an EPP Extension
  - Placeholder Text and a New Email Element
    - Login Security Extension [RFC 8807] approach to override RFC 5730
    - Current draft version <https://tools.ietf.org/html/draft-belyavskiy-epp-eai-01>
  - Implicit Replacement Based on Login Services
  - Replacement Marker Element
    - `<eai:eai xmlns:eai="urn:ietf:params:xml:ns:epp:eai-1.0"/>`
- All EPP Extension options indicate support for EAI via a new XML namespace
  - `urn:ietf:params:xml:ns:epp:eai-1.0`

# Possible RFCs changes

- Treat RFC 6530 as update to RFC 5322 (here be dragons)
  - RFC 6531 and RFC 6532 language reflected an optional SMTP extension, so they didn't update RFC 5321 and RFC 5322
- Update RFC 5733 and RFC 8543
- Create EAI EPP Extension using Preferred EPP Extension Option
  - Current draft version <https://tools.ietf.org/html/draft-belyavskiy-epp-eai-01>

# Questions?

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