

Internationalized Email Addresses in X. 509 certificates

IETF96

Alexey Melnikov
Weihaw Chuang (presenting)

draft-melnikov-spasm-eai-addresses-04

[link](#)

local-part@domain

local-part: UTF-8

domain: U-label or NR-LDH

```
GeneralName ::= CHOICE {
```

```
    otherName [0] OtherName,  
    rfc822Name [1] IA5String,  
    .... }
```

```
OtherName ::= SEQUENCE {
```

```
    id-on-smtputf8Name (type-id) OBJECT IDENTIFIER,  
    smtputf8Name (value) [0] EXPLICIT ANY }
```

Design Choices- Potential Open Issues

- OtherName vs GeneralName
 - OtherName less likely to break existing code [link](#)
 - OID overhead
- smtpUTF8Name name constraint intentionally excludes similar types
 - prevent interaction
 - "duplicate" rfc822Name name constraint

Version 01 - Closed Issues

- Pick one representation (ACE and U-label)
- Minimize ACE / U-label conversions
- Specify name constraints and comparisons

Version 02/03 - Closed Issues

- Internationalization, ABNF, Unicode terminology, general language clean up
 - ACE -> A-label
- Restrict smtpUTF8Name to non-ASCII local-part
- Comparison language clean up

Version 04 - Closed Issues

- Language clean up
- Diagram added

Planned work

- Diagram clean up

Deployment Considerations

- Openssl
 - Update probably about a year- patch helps
- CA
 - Not started
 - Chrome security team can facilitate