

XMPP Address Format

(draft-saintandre-xmpp-6 | 22bis)

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Quick Recap

- RFC 3920: stringprep for domainparts (IDNA2003), localparts, resourceparts
- RFC 5890 (etc.): IDNA2008, no stringprep
- RFC 6122: placeholder, to be obsoleted as soon as we design a stringprep replacement
- draft-saintandre-xmpp-6122bis: in progress

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- Uses IDNA2008 (no more stringprep) and draft-blanchet-precis-framework
- Domainpart: IDNA2008
- Localpart: subclass PRECIS "NameClass"
- Resourcepart: subclass PRECIS "FreeClass"
- Note: subclassing for XMPP might cause interop challenges (e.g., email vs. JID)

Domainpart

- IDNA2008
- Mapping: fold all characters to lowercase
- Normalization: NFC (cf. RFC 5198)
- SHOULD convert A-labels to U-labels
- Bidi: the "BiDi Rule" (RFC 5893) applies
- Q: Correct steps in correct order?

Localpart

- Subclass PRECIS "NameClass"
- The usual exclusions... " & ' / : < > @
- Mapping: fold all characters to lowercase
- Normalization: NFC
- Bidi: if any RTL code point, the entire localpart is RTL

Resourcepart

- Subclass PRECIS "FreeClass"
- Mapping: no case folding
- Normalization: NFC
- Bidi: if any RTL code point, the entire resourcepart is RTL
- Q: Allow XMPP extensions to be more restrictive? Ex: groupchat (XEP-0045)

XMPP Open Issues (I)

- How to handle full-width / half-width code points?
- How to discover Unicode version...
"urn:unicode:versions:6.0.0"?
- How to handle i18n-related errors?

XMPP Open Issues (2)

- Must the client be compliant, or will only the server enforce the rules?
- Define registrar-like policies for servers?
- Do we need a migration plan?