XMPP Address Format
(draft-saintandre-xmppp-6122bis)

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IETF 81
[draft of 2011-07-15]
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
6122bis

- Uses IDNA2008 (no more stringprep) and draft-blanche-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 (1)

• 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?