SIP-XMPP Interworking

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A Bit of History

- SIP developed mainly for media signalling (esp. audio and video)
- XMPP developed mainly for IM, presence, groupchat, and the like
- SIP extended to IM, presence, etc. (SIMPLE)
- XMPP extended to media signalling (Jingle)
Overlap and Coexistence

• The SIMPLE and Jingle extensions are not as widely deployed as native XMPP and SIP, thus many developers make dual-stack endpoints.

• However, SIMPLE and Jingle have seen deployment, so we need to specify interworking between SIP and XMPP.
Coexistence: CUSAX

• “Combined Use of SIP and XMPP”
• draft-ivov-xmpp-cusax
• AD-sponsored (Gonzalo)
• Close to done, please provide feedback
• Not our focus in this session
Overlap: Interworking Specs

- A suite of informational documents (draft-saintandre-sip-xmpp-*) that define mappings between SIP and XMPP
- No new protocols – mappings only!
- Multiple co-authors (Avshalom Houri, Joe Hildebrand, Salvatore Loreto, Eddy Gavita, Nazin Hossain, Fabio Forno, Saúl Ibarra)
Overall Status

• Work started in 2004 (!)
• Numerous reviews over the years
• Real-world implementations
• Mostly stable and seemingly useful (details in following slides)
• Let’s finish it off already :-)

Friday, March 8, 13
• Architectural overview
• Address mapping
• Error handling (note: need to revisit a few mappings and consider some edge cases)
• Stability: 9 on a scale of 10
Mappings for both presence subscriptions and presence notifications

Subscription models are quite different, but mapping seems to work well

Stability: 8 on a scale of 10

Might need more details about availability states (away, do not disturb, etc.)
Mapping for pager-mode / single message only

Stability: 9 on a scale of 10

Question: how much do we care about pager-mode IM?
• Mapping of one-to-one chat sessions
• Session models are quite different, but mapping seems to work well
• Stability: 8 on a scale of 10
draft-saintandre-sip-xmpp-groupchat-02

• Mapping between MSRP-based groupchat and XMPP Multi-User Chat (MUC)

• Stability: 6 on a scale of 10

• Need to clarify mapping of display names and room rosters (conference-info)
• Mapping for media signalling
• Currently specifies Jingle => SIP only
• SIP => Jingle on the way
• Stability: 4 on a scale of 10
Possible Future Specs

- File transfer
- Service discovery / device capabilities
- Conferencing (à la RFC 4575 and BFCP)
- But these are out of scope for now!
Path Forward...

• Do we think this work is worth finishing?
• If so:
  • Does it belong in an existing Working Group?
  • Or: do we need a new Working Group?
  • Or: could all of these documents be AD-sponsored?