SIP-XMPP Interworking

Peter Saint-Andre DISPATCH WG IETF 86, Orlando

L

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 :-)

draft-saintandre-sipxmpp-core-03

- 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

draft-saintandre-sipxmpp-presence-04

- 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.)

draft-saintandre-sipxmpp-im-02

- Mapping for pager-mode / single message only
- Stability: 9 on a scale of 10
- Question: how much do we care about pager-mode IM?

draft-saintandre-sipxmpp-chat-04

- 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-sipxmpp-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)

draft-saintandre-sipxmpp-media-02

- 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?