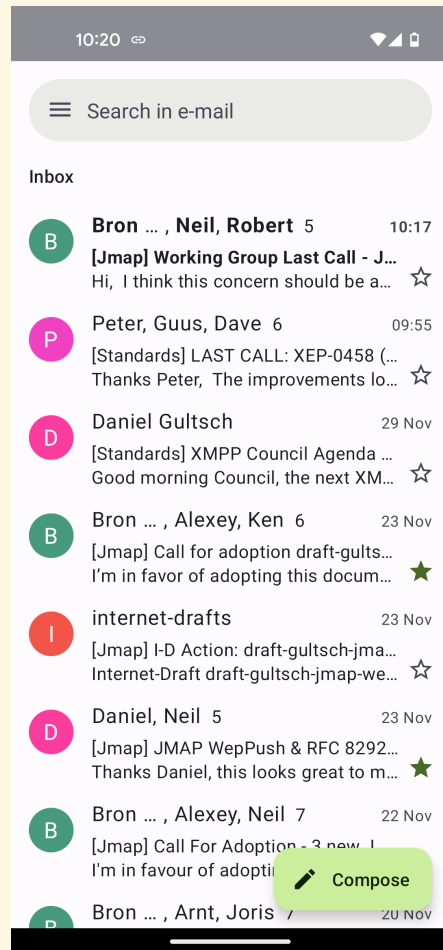


INTRO TO LTT.RS

A JMAP E-MAIL CLIENT FOR ANDROID

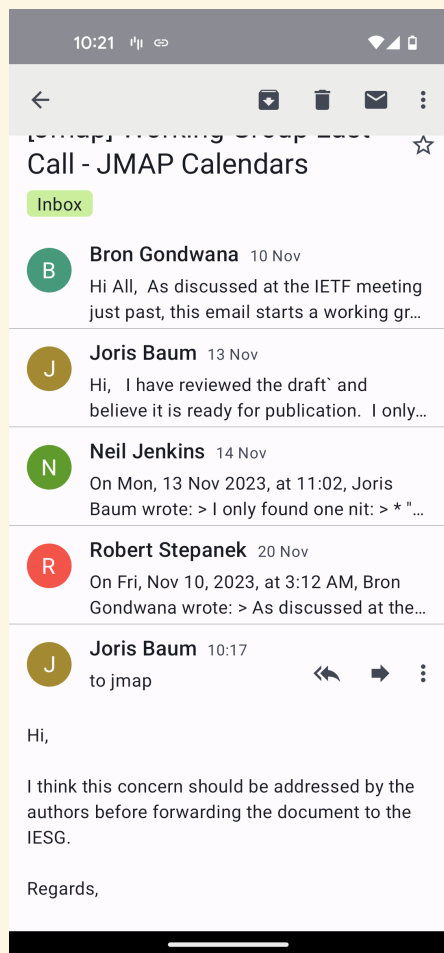
Daniel Gultsch

February 4th, 2024 @ FOSDEM



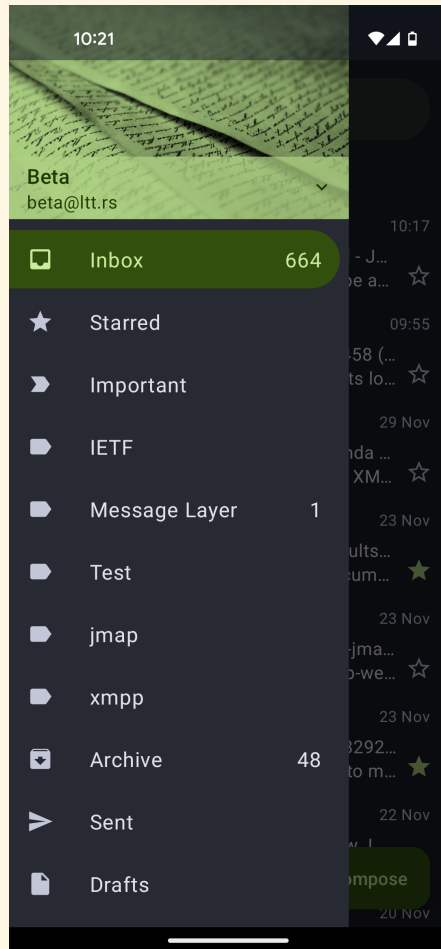
ABOUT ME

- XMPP Developer
 - Council of the XSF
 - [Conversations.im](#)
- Side project: JMAP
 - Since ~2017 (pre RFC)
 - Java library + [Ltt.rs](#)



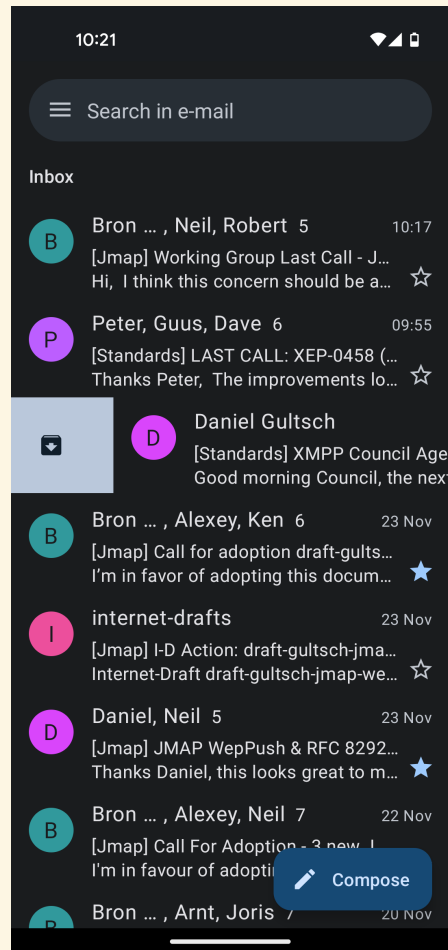
WHY JMAP?

- No extensions (fewer?)
- Send *and* receive
- JSON parsers readily available
- No MIME parsing required
- Built-in Push Support
- See Ricardo's (omitted) slides on how weird IMAP is



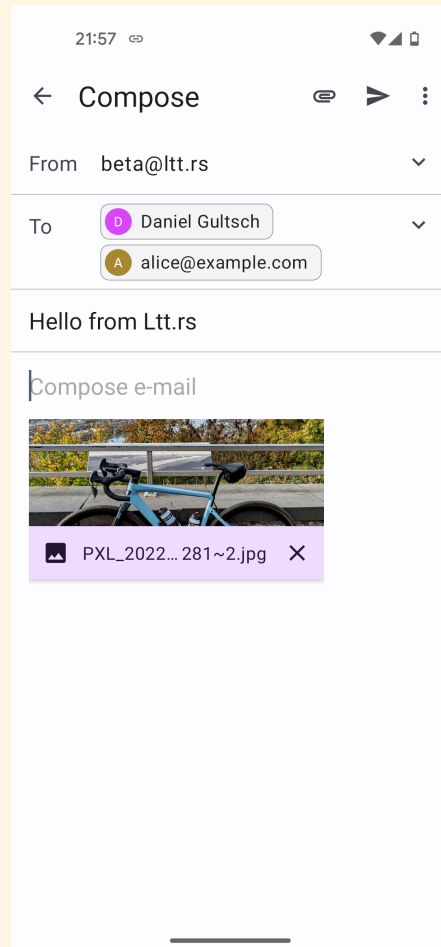
ARCHITECTURE

- Java 17
- Android Jetpack (Room, Navigation, WorkManager, ...)
- Room implementation of generic storage interface of `jmap-mua`
- Playground for new APIs (Predictive Back, Material U)



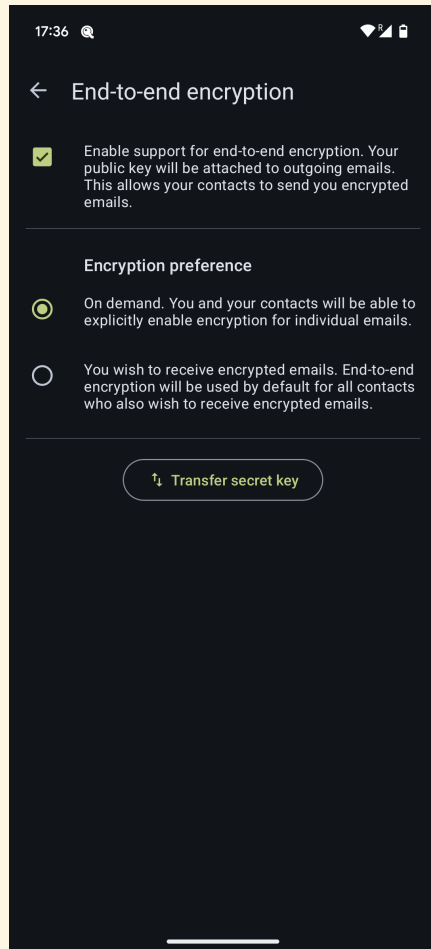
OFFLINE CAPABILITIES

- All queries cached (including searches)
- Users actions (move to mailbox, mark read, ...) persisted using WorkManager



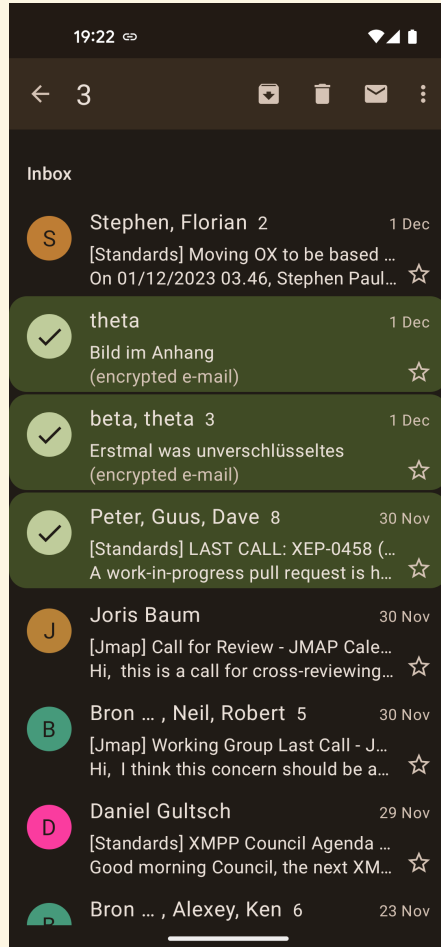
(UNIFIED)PUSH

- Foreground: WebSockets or EventSource
- Open Source WebPush
 - Firebase (requires VAPID)
 - UnifiedPush (multiple backends including Conversations)



AUTOCRYPT

- Native support; no plugin
- It just works! Lock icon in compose screen
- Key import during account setup (setup message)
- Server devs: Search arbitrary e-mail headers!



THANK YOU!

- JMAP library:
codeberg.org/inputmice/jmap
- Android Client:
codeberg.org/iNPUTmice/Ittrs-android
- Mastodon:
[@daniel@gultsch.social](https://social.gultsch.net/@daniel@gultsch.social)

Slides codeberg.org/inputmice/talks