How we built a decentralized blogging engine with XMPP

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XMPP

PubSub

PEP

Microblogging

solutions

XMPP

- standard (RFCs 6120, 6121, 6122)
- decentralized/federated
- ▶ libre (free as in freedom)
- extensible

- ▶ jid (Jabber ID): goffi@jabber.fr/SàT
- XSF (XMPP Standards Foundation)
- XEP (XMPP Extension Protocol)

XMPP

XMPP is

XMPP is **NOT**

XMPP is **NOT ONLY**

XMPP is **NOT ONLY** about

XMPP is **NOT ONLY** about instant

XMPP is **NOT ONLY** about instant messaging

XMPP is ${f NOT}$ ${f ONLY}$ about instant messaging !

XMPP is **NOT ONLY** about instant messaging!!

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solutions!

But why?

- decentralized
 - comments
 - spam
- standard (JID, content, URIs)
 - changing software
 - import/transfer
 - URIs

xmpp:romeo@montague.lit?;node=urn%3Axmpp%3Amicroblog%3A0

- cool XMPP features
 - push notifications
 - mention
 - private blogs
 - •
- a huge playing ground, open to the world

PubSub

- ► XEP-0060
- ▶ Pubish/Subscribe
- ▶ long XEP
- powerful, huge potential

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vocabulary

- service
- ▶ node
- ▶ item

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affiliations

- owner
- publisher
- member
- none
- outcast

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access model

- open
- presence
- whitelist
- roster

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but also

- collections
- notifications filtering
- automatic nodes creations
- temporary subscriptions
- metadata
- ▶ etc

PEP

- ► XEP-0163
- simplified PubSub
- easier to implements
- events (mood, activity, music)

PEP

- ▶ 1 account (jid) = 1 service
- ▶ 1 publisher per node (owner = publisher)
- presence access by default
- notifications filtered on expressed interest
- smart defaults

Microblogging

- ► XEP-0277
- ▶ PEP
- Atom

Microblogging

- publishing/answering
- comments
- tags
- etc

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problems

- implementations not complete/not existant/issues
- development cycle
- special features
- ► RSM (XEP-0059) and MAM (XEP-0313)

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Libervia/Salut à Toi special case

- fine permissions
- new access model (publiser-roster)

solutions!

- not being dependant of the server anymore
- quick development cycle
- ▶ lot of freedom
- generic

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Namespace Delegation

- ► XEP-0355
- external implementation
- ▶ admin & client modes

XMPP

PubSub

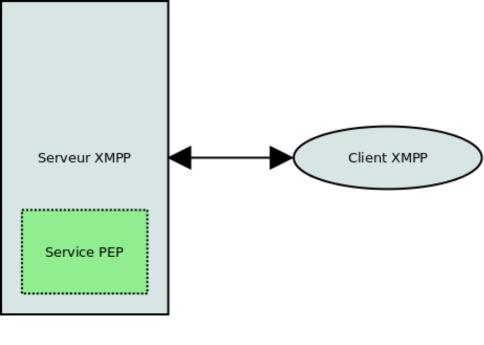
PEP

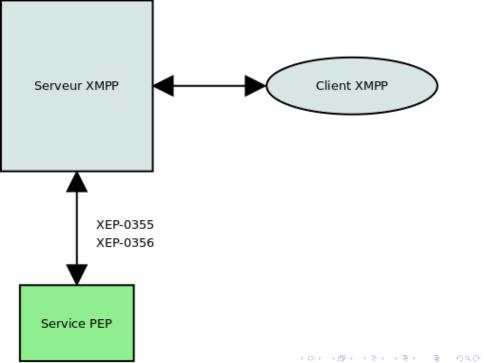
Microblogging

solutions!

Priviliged Entity

- ► XEP-0356
- roster
- message
- presence





Conclusion

XMPP rocks!

- https://libervia.org/blog/salut-a-toi
- ► https://xmpp.org
- https://xmpp.org/xmpp-protocols/xmpp-extensions/
- http://salut-a-toi.org
- http://www.goffi.org
- ▶ goffi@jabber.fr