

RING AS A FREE UNIVERSAL DISTRIBUTED COMMUNICATION PLATFORM

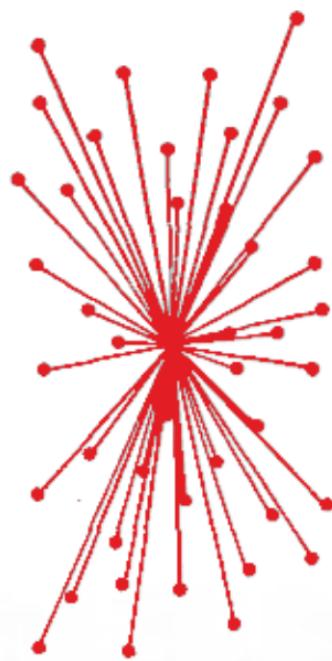
THE STATE OF THE PROJECT IN 2018

Sébastien Blin sebastien.blin@savoirfairelinux.com
Adrien Béraud adrien.beraud@savoirfairelinux.com

Ring is a free universal
distributed communication
platform which respect
privacy



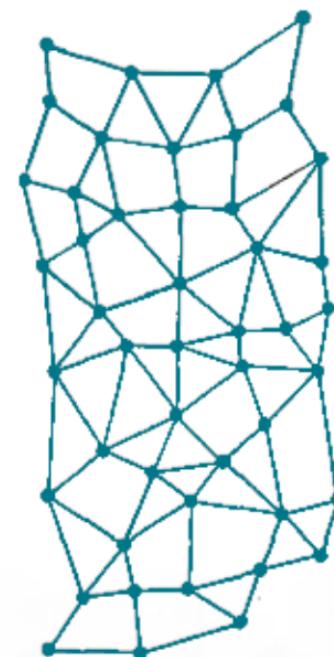
DISTRIBUTED?



Centralized

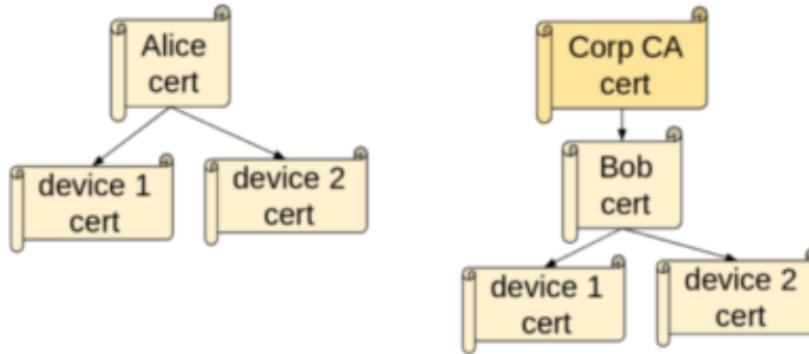


Decentralized



Distributed

GENERATE A RING ACCOUNT



- Account = RSA key pair.
- RingID = fingerprint of the public key.

ring:346297f4f3629ae554b92442cc2fde46059f5ac0

NAME REGISTRATION: ETHEREUM CONTRACT

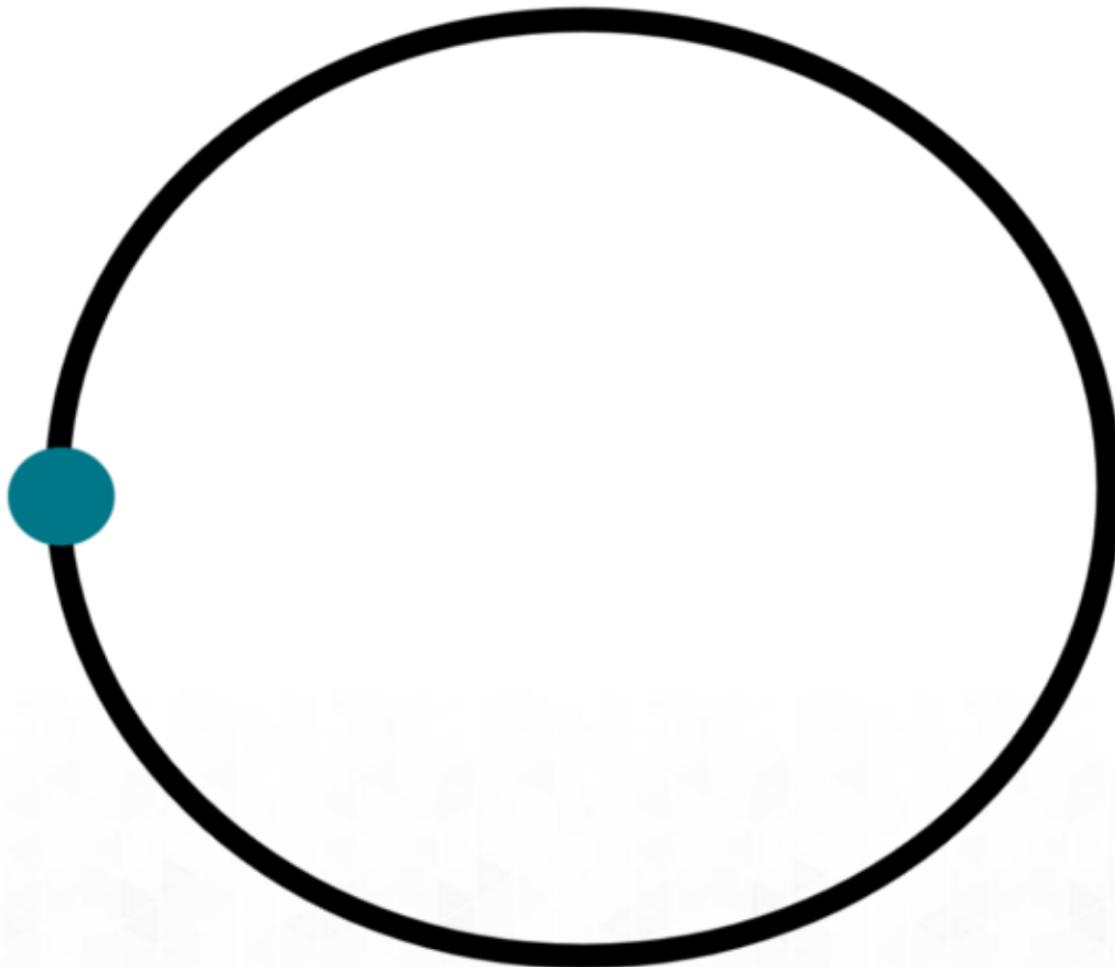


- Public distributed registrar
- Name <-> RingID mappings
- REST API
- Optional

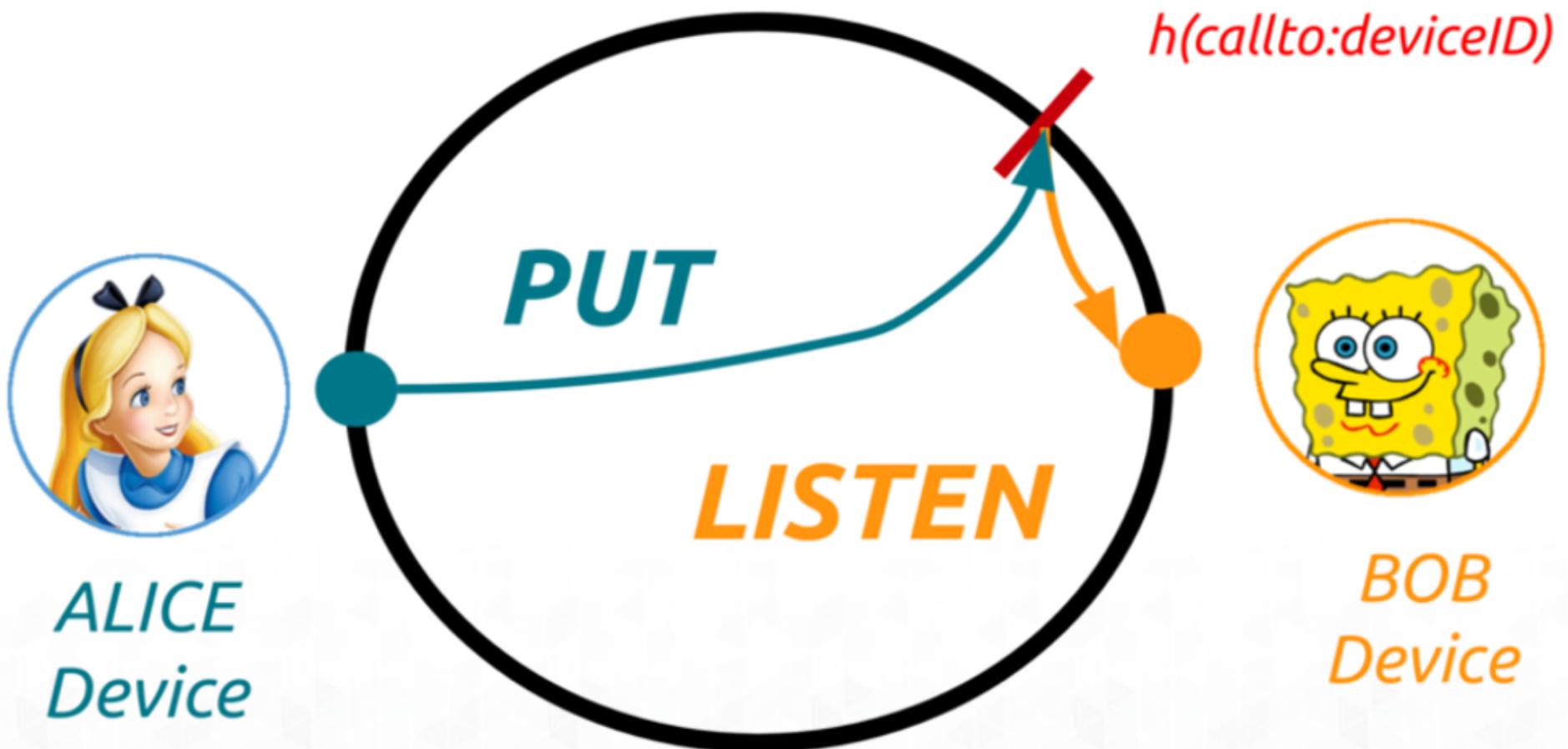
LET'S COMMUNICATE



ALICE
Device



LET'S COMMUNICATE (2)



LET'S COMMUNICATE (3)

ICE Negotiation
(RFC 5245)



*ALICE
Device*



*BOB
Device*

UNIVERSAL



IN VARIETATE CONCORDIA - NEW PLATFORMS

- iOS
- Android TV
- FDroid

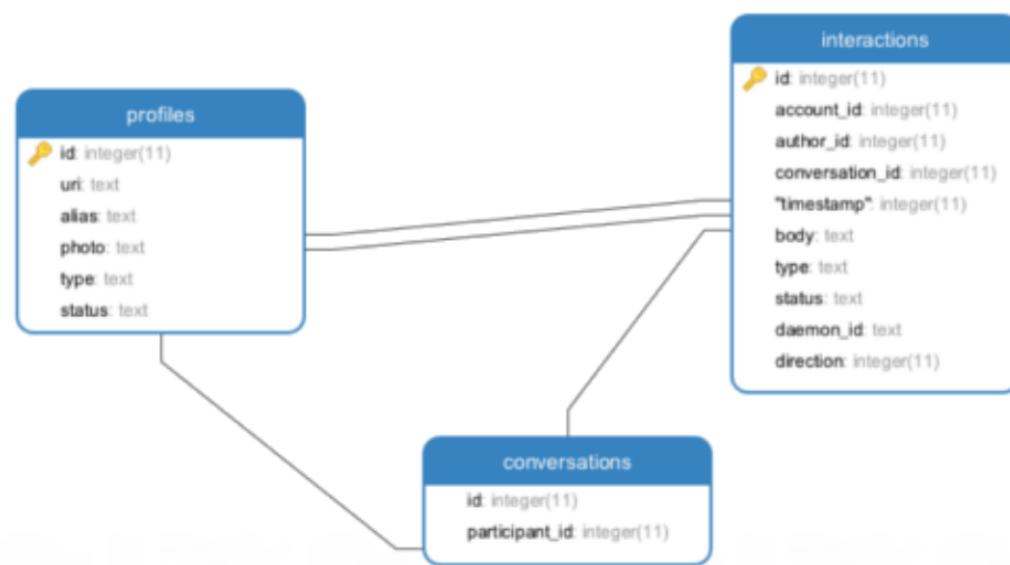
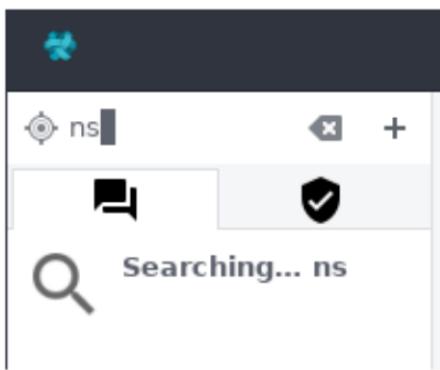


IN VARIETATE CONCORDIA - NEW FEATURES

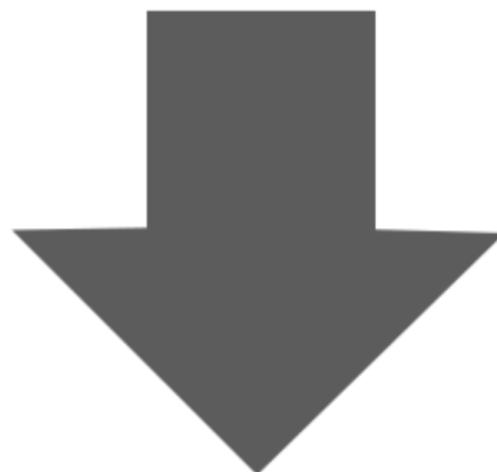
- File transfer
- Push notifications
- DHT Proxy
- Improved contact management

OTHER FEATURES

- Searching item
- Common database for each platforms
- Add the ability to change passwords
- vdpau acceleration support, etc.



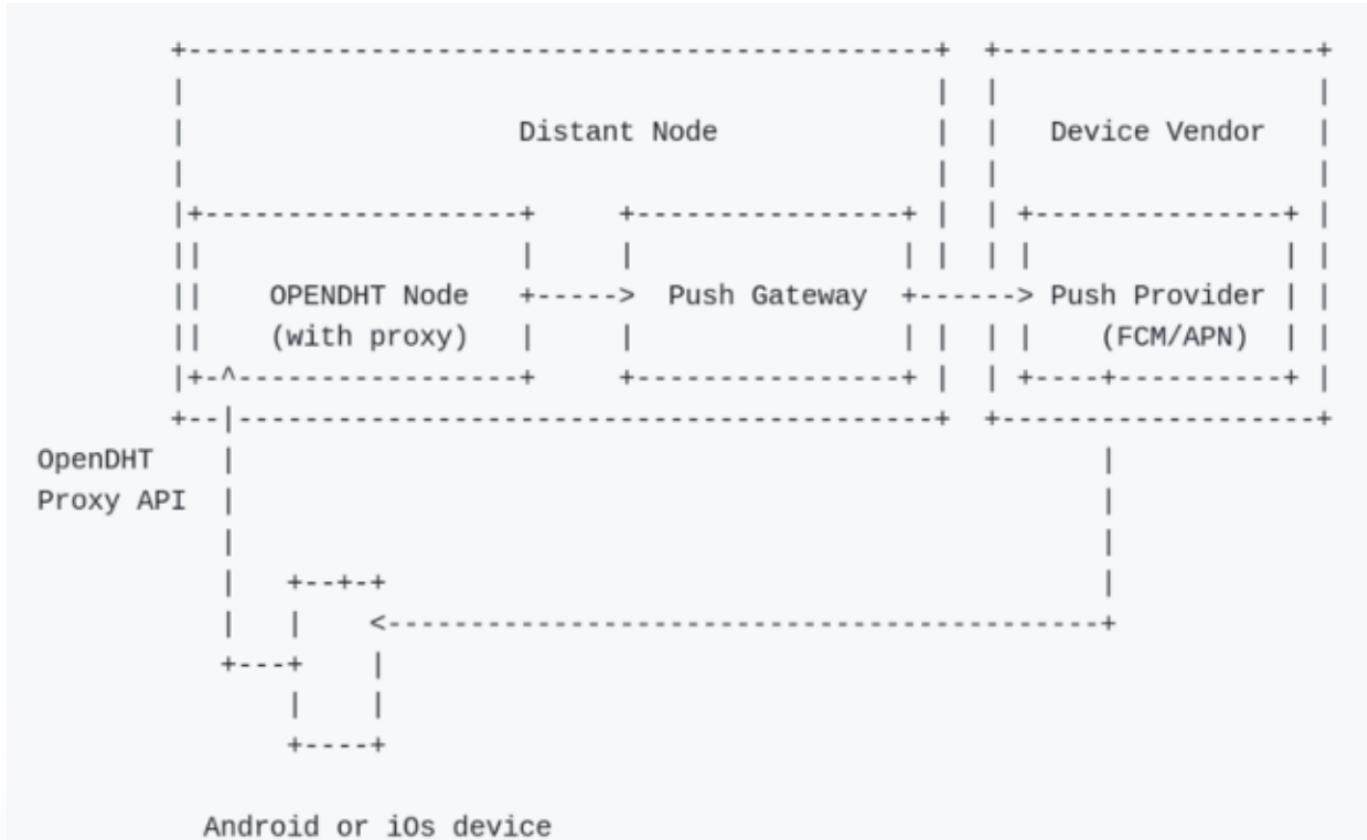
FILE TRANSFER



OPENDHT PROXY

- Use a trusted node as a proxy to LISTEN the DHT
- Usable via a REST API (see OpenDHT wiki)
- Avoid synchronization on the device
- Messages still decrypted by the device, not by the proxy

PUSH NOTIFICATIONS



See [https://github.com/savoirfairelinux/opendht
/wiki/Push-notifications-support](https://github.com/savoirfairelinux/opendht/wiki/Push-notifications-support)

2018 IN SHORT (1)

- Auto video quality: Optimizing the auto video quality algorithm (RTCP/RTSP feedback)
- A p2p file transfer implementation
- Improve the Telepathy Client
- Connect Ring to Matrix as well as possible
- Ring as a WebRTC client

2018 IN SHORT (2)

- Packaging, translation, build scripts, support, testing, design, security verification.
- ML, IRC, tuleap
- GSoC

THANK YOU! QUESTIONS?



Ring
A GNU project

Join the Ring!

<https://ring.cx>

<https://tuleap.ring.cx/plugins/mediawiki/wiki/ring>