RING AS A FREE UNIVERSAL DISTRIBUTED COMMUNICATION PLATFORM

THE STATE OF THE PROJECT IN 2018

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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)

PUT

LISTEN

h(callto:deviceID)

ALICE
Device

BOB
Device
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
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?

Join the Ring!

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