

# 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



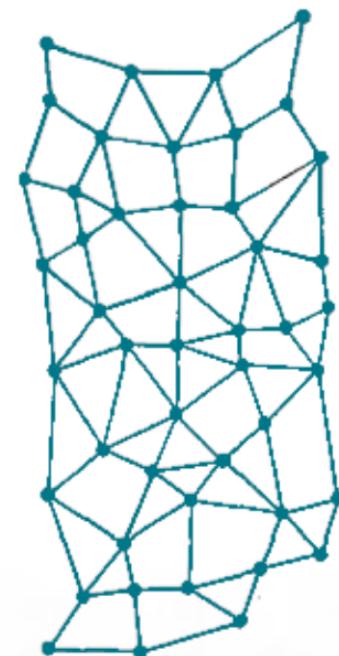
# DISTRIBUTED?



Centralized

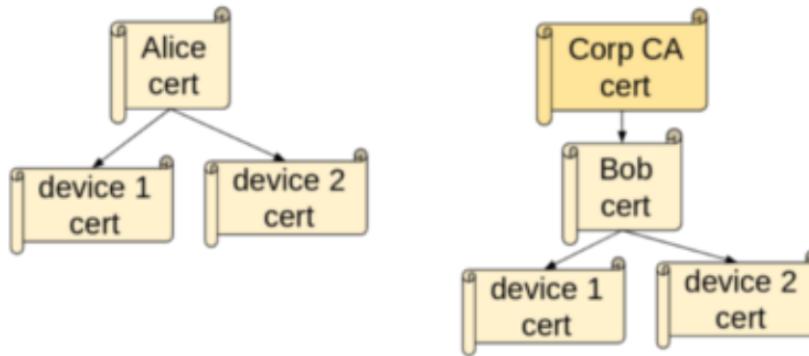


Decentralized



Distributed

# GENERATE A RING ACCOUNT



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

*ring:346297f4f3629ae554b92442cc2fde46059f5ac0*

# THE NAME SERVER

GET */name/foobar*

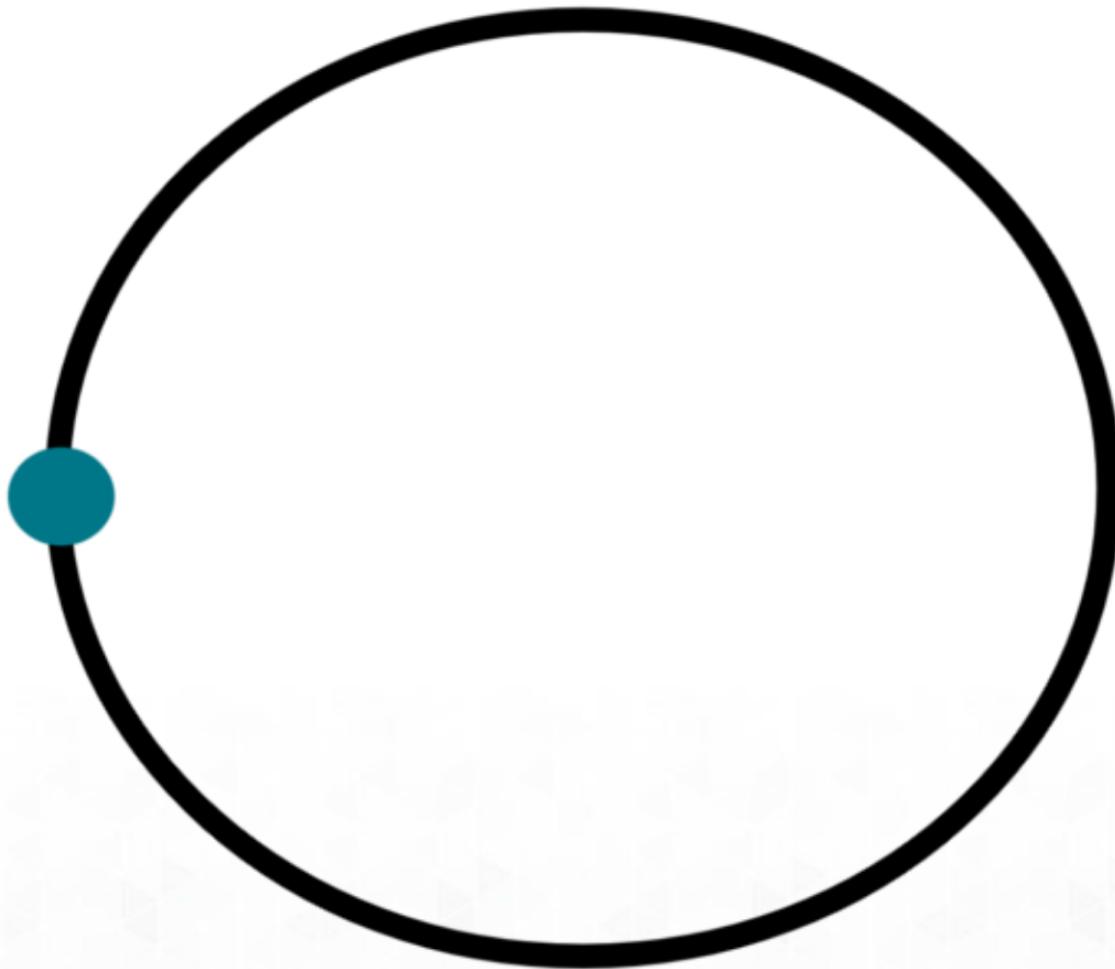
```
{  
  "name": "foobar",  
  "addr": "0x29347542eb07159f316577e1ae16243d152f6b7b"  
}
```

more: [https://tuleap.ring.cx/plugins/mediawiki/wiki/ring/index.php?title=Name\\_server\\_protocol](https://tuleap.ring.cx/plugins/mediawiki/wiki/ring/index.php?title=Name_server_protocol)

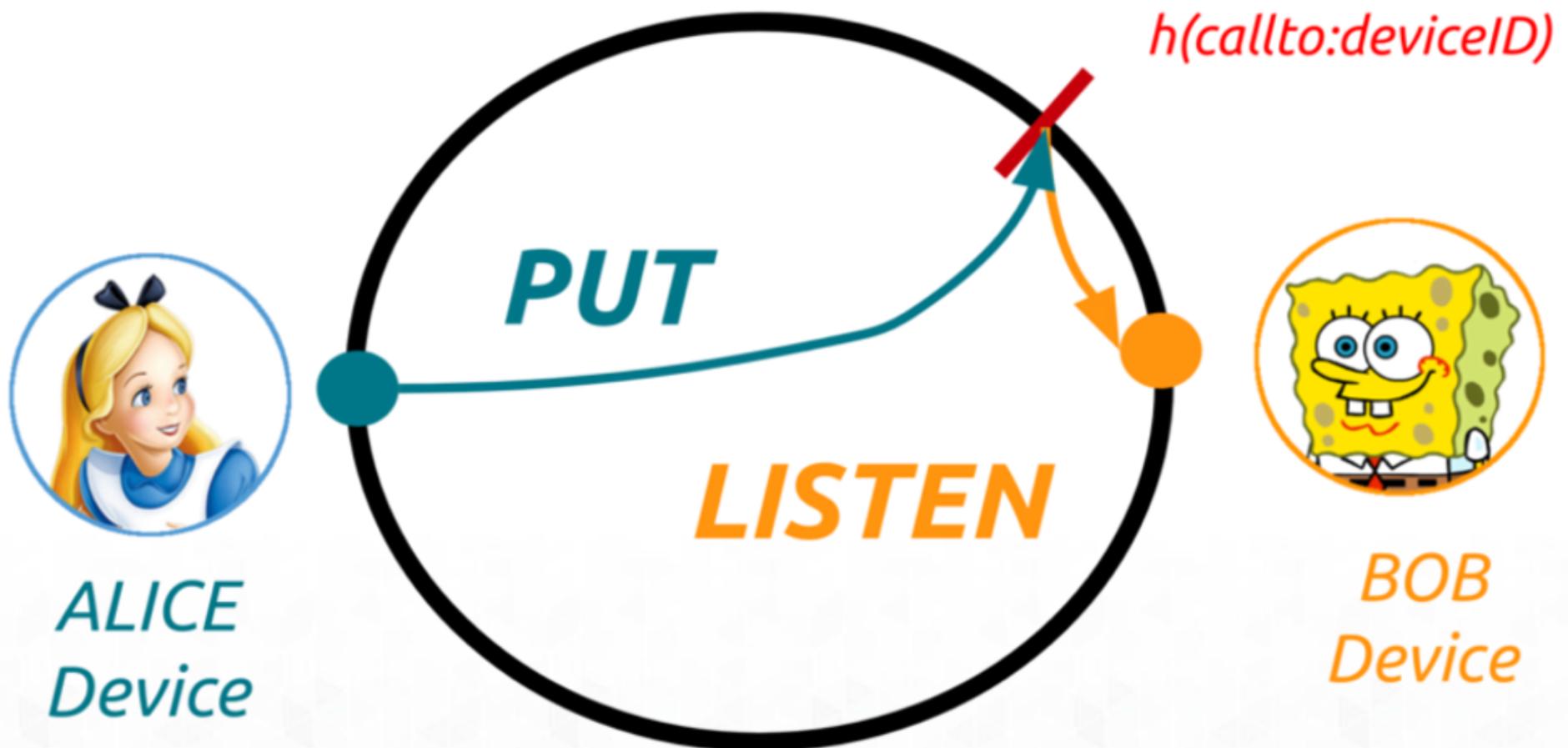
# LET'S COMMUNICATE



*ALICE*  
*Device*



# LET'S COMMUNICATE (2)



# LET'S COMMUNICATE (3)

## ICE Negotiation (RFC 5245)



*ALICE*  
*Device*



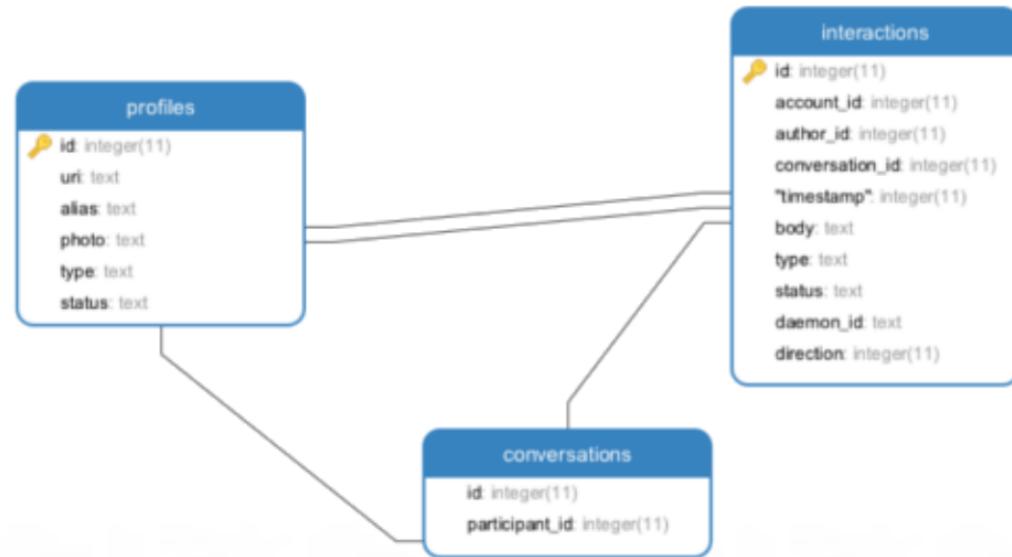
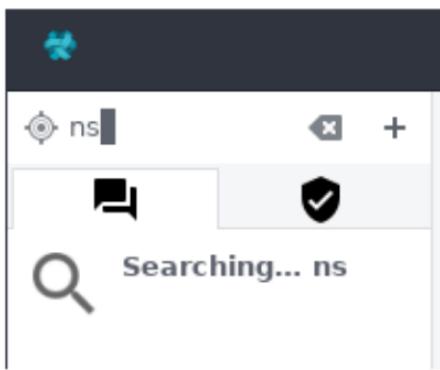
*BOB*  
*Device*

# UNIVERSAL



# SOME NEW 2017 FEATURES

- New contact management system and searching item
- Common database for each platforms
- Add the ability to change passwords
- vdpau acceleration support, etc.

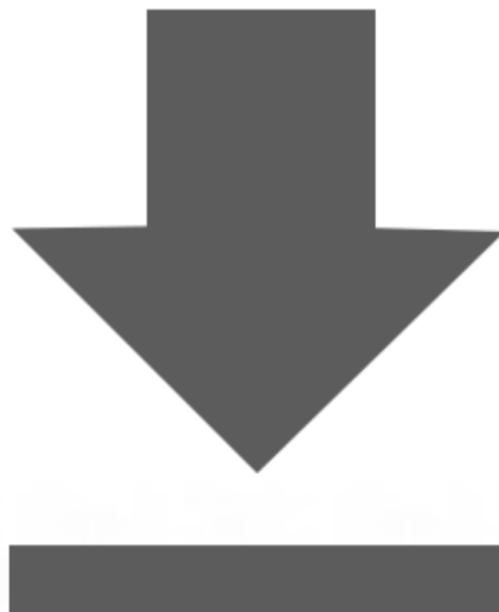


# RELEASE PARTY!

- 1.0!
- FDroid
- Android TV
- iOS (Ring GNU package)



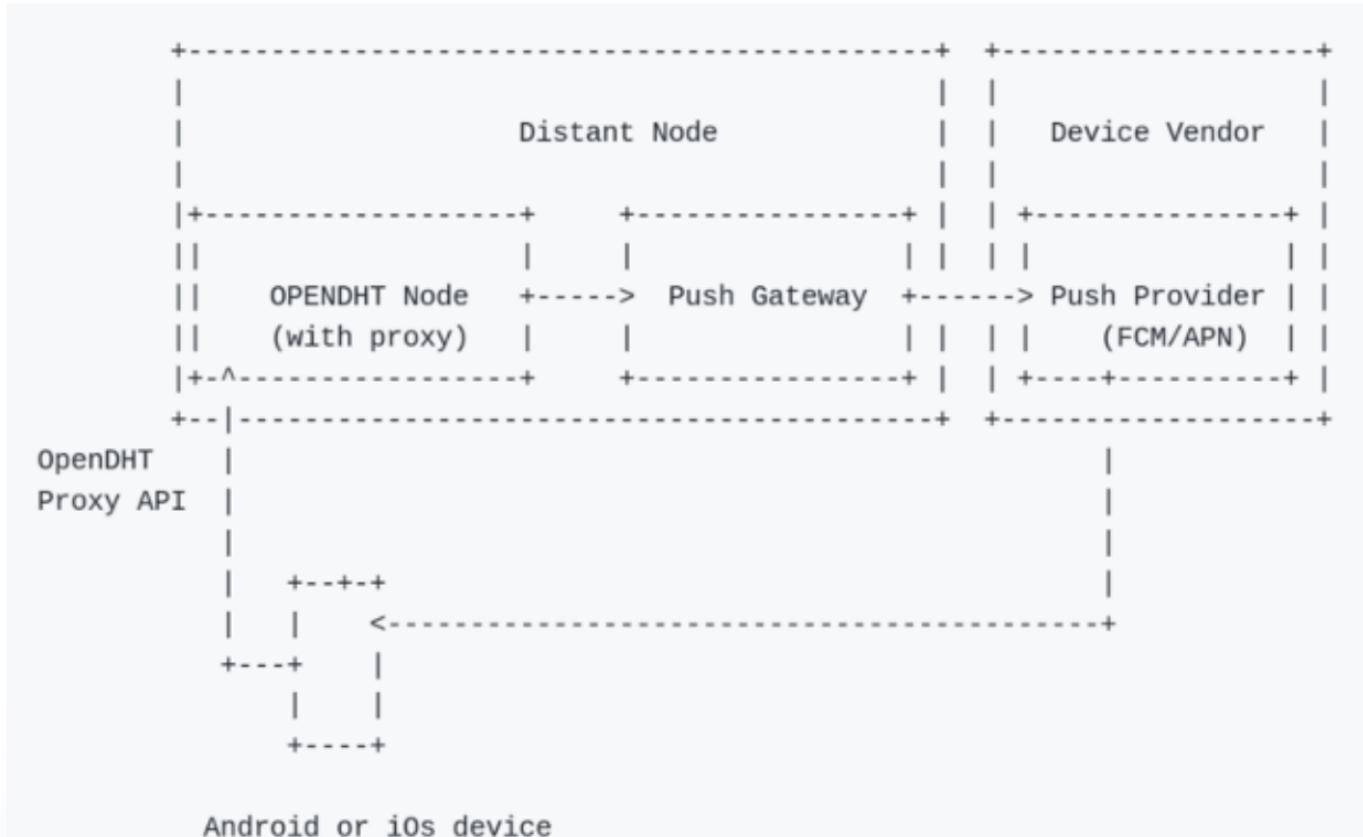
# FILE TRANSFER



# 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](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
- Redesign of the media system

# 2018 IN SHORT (2)

- Improve the Telepathy Client
- Connect Ring to Matrix as well as possible
- Ring as a WebRTC client

# 2018 IN SHORT (3)

- 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>