

Decentralized Communication Services

Trustful hyper-linked entities in dynamic networks

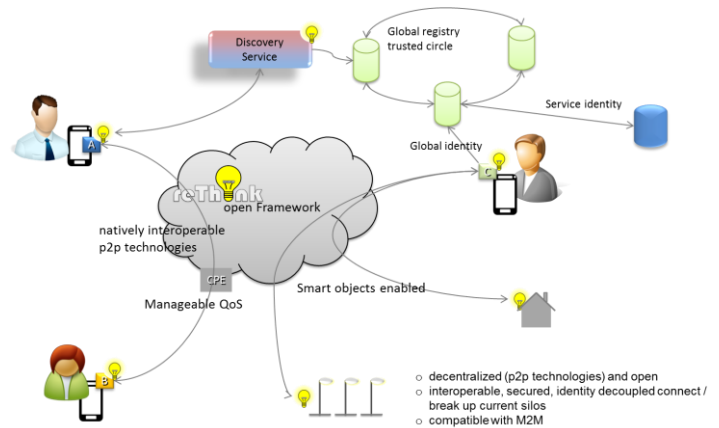
reTHINK framework overview

The reTHINK Framework is a decentralised communication infrastructure (licensed under Apache 2.0) that enables developers to easily build and integrate, communication services that are faster, more effective, more trustful and inherently inter-operable. Write once, deploy anywhere, together with seamless cross domain interoperability, gives developers and service providers much more freedom to really focus on users' expectations. Ultimately, the reTHINK framework is an alternative to current dominant walled-garden communication networks that prevent new developers and new service providers from entering in the market and, at the same time, empowers the users with the choice and the management of their private data and identities.

The reTHINK Framework provides the tools to build a global decentralised network of hyperlinked entities (hyperties) that are executed at the edge and trustfully communicate through a decentralised messaging framework.

Developers are invited to join the reTHINK Slack channel <https://rethink-project.slack.com/signup> by

sending an email to contact@rethink-project.eu, and experiment with the demonstrations and build on top of it new hyperties and/or applications

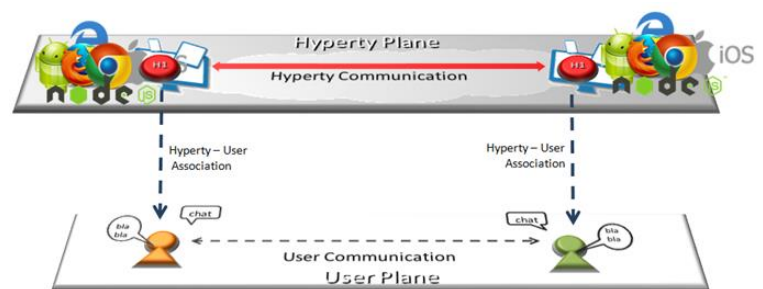


Features:

- Build interoperable services
- Connect human to machines
- Use your own identity provider
- Find contacts whatever service they use
- Benefit of quality of service for your communications

Hyper-linked Entities - Hyperties

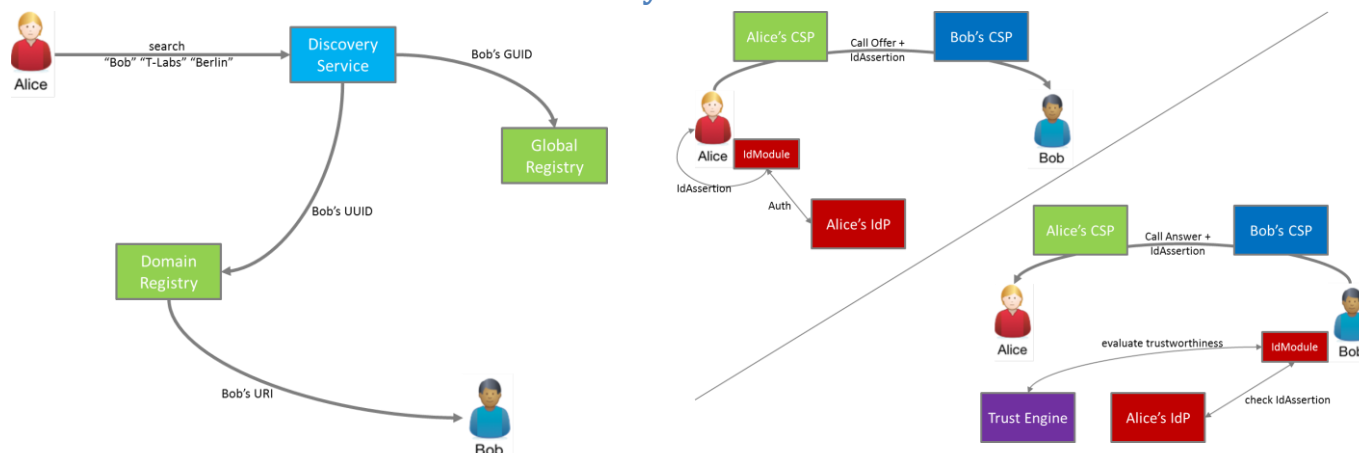
Hyperties are cooperative micro services that are executed in devices on behalf of users through simple but sophisticated identity management techniques. This means, hyperties are independently deployable components, each one providing a small set of business capabilities, using the smart endpoints and dumb pipes philosophy, i.e. hyperties don't depend on complex and sophisticated communication middleware. Instead, hyperties rely on a very light but powerful messaging framework concept. Hyperties follow the emerging *edge* and *fog computing* paradigms as opposed to more popular cloud computing. Hyperties can also be executed in network servers for specific business capabilities (e.g. media servers) or when end-user devices don't have enough capabilities in terms of computing resources and/or power.



Features:

- Independently deployable business capability
- An instance is associated to a "User" through an identity
- The Identity is decoupled from the service provider

Identity in reTHINK



Features:

- Identity portability across service providers
- Identity decoupled from service providers
- User selected identity provider
- Global reachability
- Trustworthiness evaluation

More information

Central entry points: <https://rethink-project.eu> and <https://github.com/reTHINK-project>



Webinars (https://www.youtube.com/channel/UC4xTKj2ZvhUyJosA_fLeAhg)



Demonstrations (<https://hysmart.rethink.ptinovacao.pt/>)



Available Hyperties (<https://github.com/reTHINK-project/dev-hyperty>)



Quick start to develop Hyperties (<https://github.com/reTHINK-project/dev-hyperty-toolkit>)



Quick start to develop Applications with Hyperties (<https://github.com/reTHINK-project/dev-app>)



Tutorials (<https://github.com/reTHINK-project/specs/blob/master/tutorials/readme.md>)



Complete Specification (<https://github.com/reTHINK-project/specs>)

About reTHINK

- Operators: Orange, Portugal Telecom, Deutsche Telekom
- SME: Eurescom, Quobis, APizee
- Academics: IMT, TU Berlin, Fokus Fraunhofer, INESCID



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Contact: Anastasius Gavras, Eurescom GmbH

contact@rethink-project.eu