



There is **Spirit** in everyone, but it needs to be free !



Using Blockchain Technology to Achieve Health Data Provenance

Hyper e-Health team

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We aim at solving the data provenance challenge by

- Normalizing the health data in a canonical form, inspired by real projects using DS4P (IHE, HL7)
- For each item, expressing "chained" provenance records in W3C PROV (international standard defining a data model for data provenance)
- Distributing the records chain using a smart contract on Hyperledger (a blockchain implementation)
- Querying data and provenance from mobile, and from portals (IHE / FHIR)

Standards-based

Our solution is entirely based on open standards from W3C (PROV, DSG), IHE (Sequoia, NwHIN), and HL7 (CDA, FHIR)

Implementation approach

The phase 2 implementation of the phase 1 scenario will leverage the following products, worldwide deployed: **Cisco Medical Data Exchange (MDES)** with **SpiritEHR**, (the combination with the highest ranking at IHE connectathons), and **Hyperledger** (supported by the Linux Foundation)



HYPERLEDGER



CISCO

Hyper e-Health is a international team of experts in the field of Data Provenance, Health IT, and Blockchain technology. The team is devoted to the interoperability and adoption of open standards.



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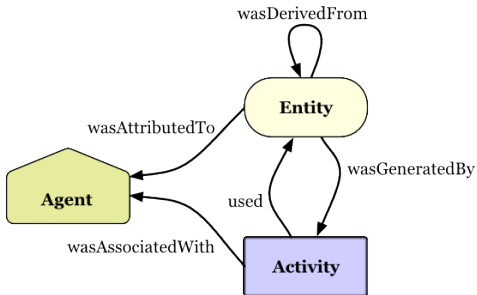


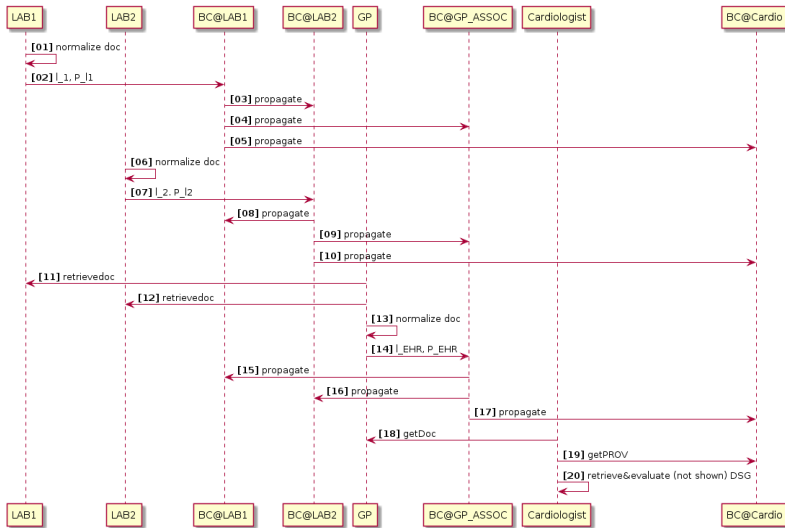
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Thank You