

Nebula

Enabling AI for Healthcare with
Federated Analytics

Sideral

AI Action Summit Hackathon AI for One Health

February 16th, 2025



Introduction

AI



Introduction

Data



AI



Introduction

Data Access



Data



AI



Introduction

AI needs better access to data!



Healthcare Data in France

Nationwide statistics ?

- encourage collaboration
- ensure data coherence
- link with other fields
- protect security and privacy

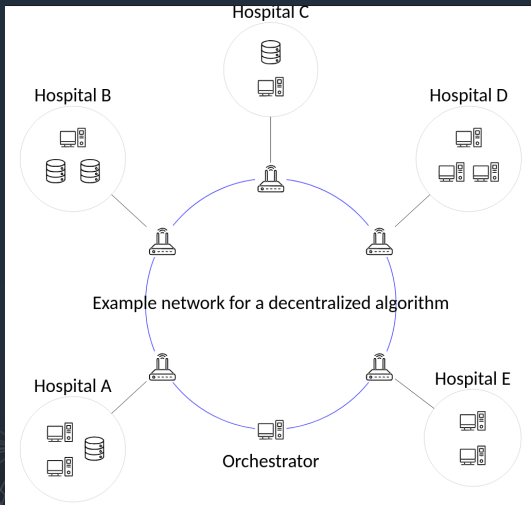


Our Approach

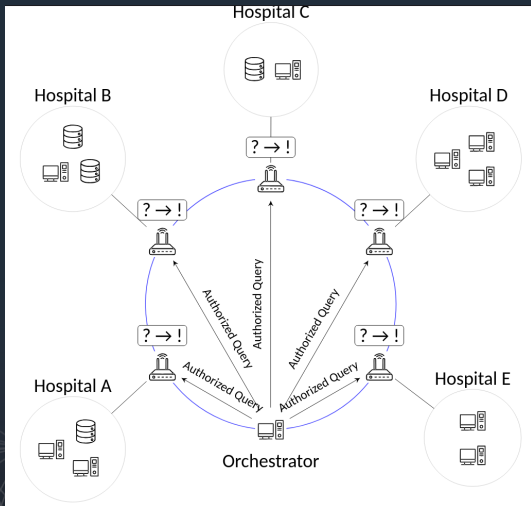
- in-house algorithms
- P2P and adapters
- centralized and decentralized deduplication
- standardized data formats
- enable building novel standards



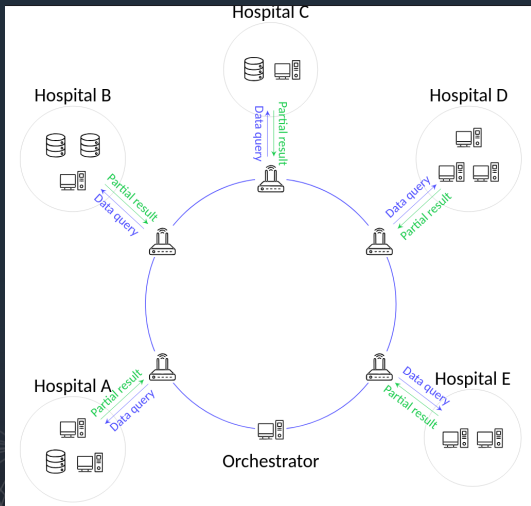
Example algorithm: histogram aggregation



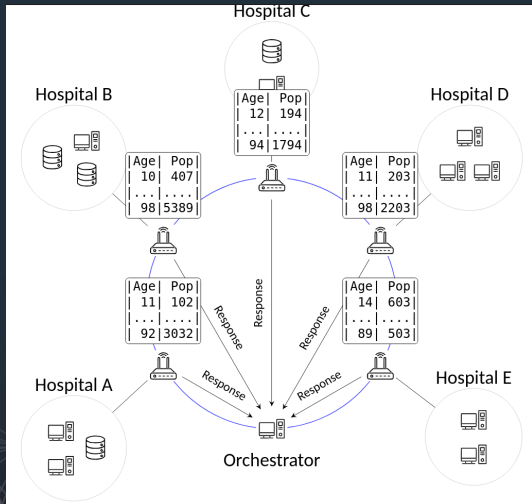
Example algorithm: histogram aggregation



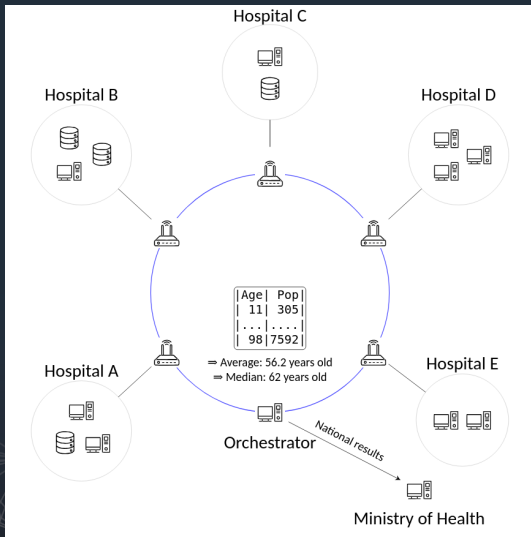
Example algorithm: histogram aggregation



Example algorithm: histogram aggregation



Example algorithm: histogram aggregation



Our solution

Nebula

A **P2P cloud** infrastructure platform
for **building federations**



Our solution

Nebula enables:

- **massive interoperability**
- **secure data collaboration**
- **federated datasets**



Our solution

Demo time!



Reach and strong points

- no PII transit
- extensible in scope
- public-private partnerships
- sovereign system AND international collaboration
- facilitate data access
- CNIL-approved



Conclusion

Thanks for listening ! Any questions ?

