

# Linked Data Notifications for the Scholarly Web

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# Project Overview

- Ruben Verborgh & Herbert Van de Sompel
- Ghent University IDLab
- Duration: 01/01/2020 - 31/12/2023
- Based on 2017 CNI Paul Even Peters Lecture by Van de Sompel
- <https://www.youtube.com/watch?v=o4nUe-6Ln-8>

# Decentralization

VS

- Facebook
- Twitter
- Google
- Publisher monopolies
- Citation , A&I databases

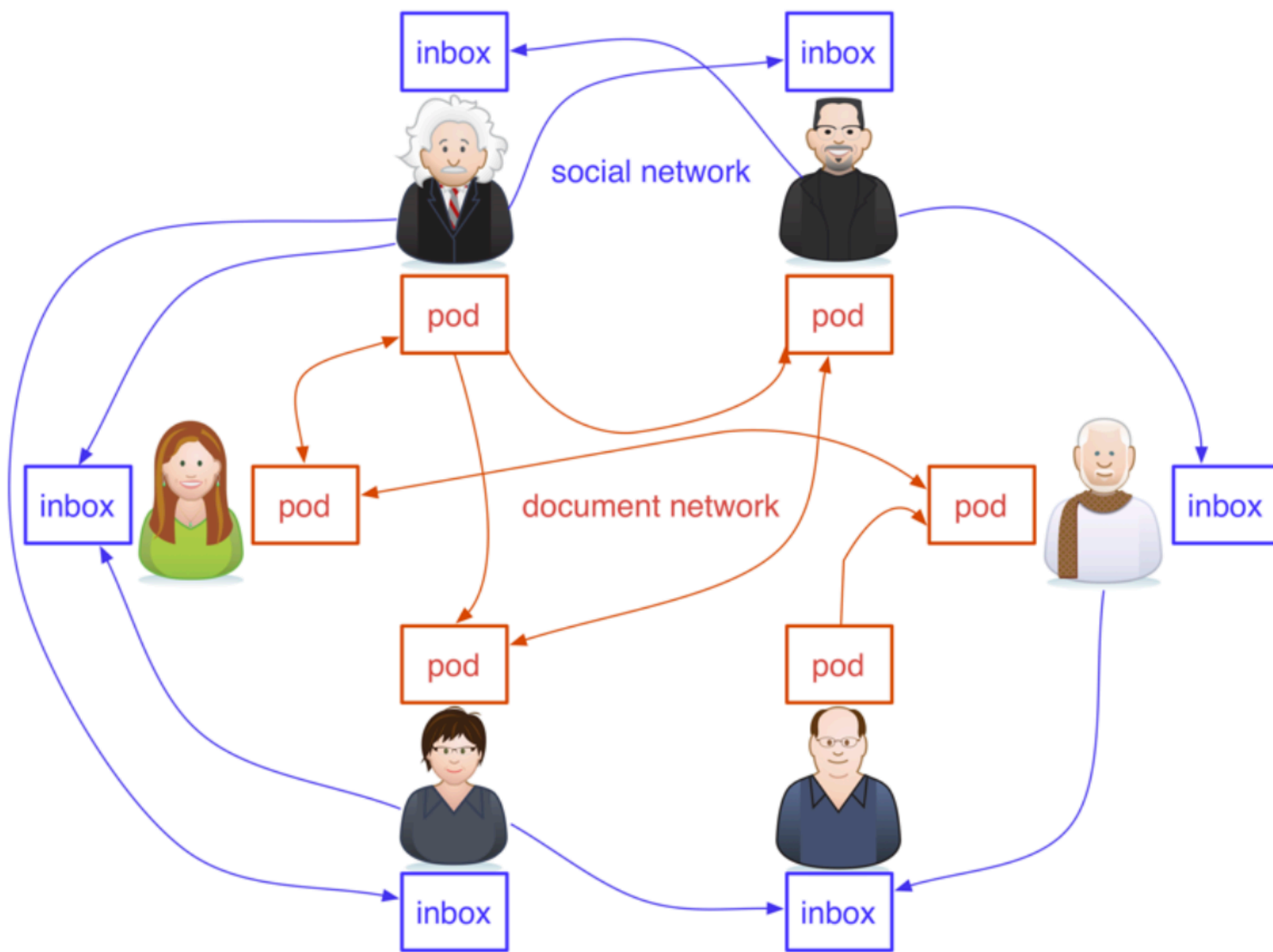
- Institutional Repositories
- Open peer review
- Open journal systems
- Open science
- **Researcher pod**

# Decouple Scholarly Communication System

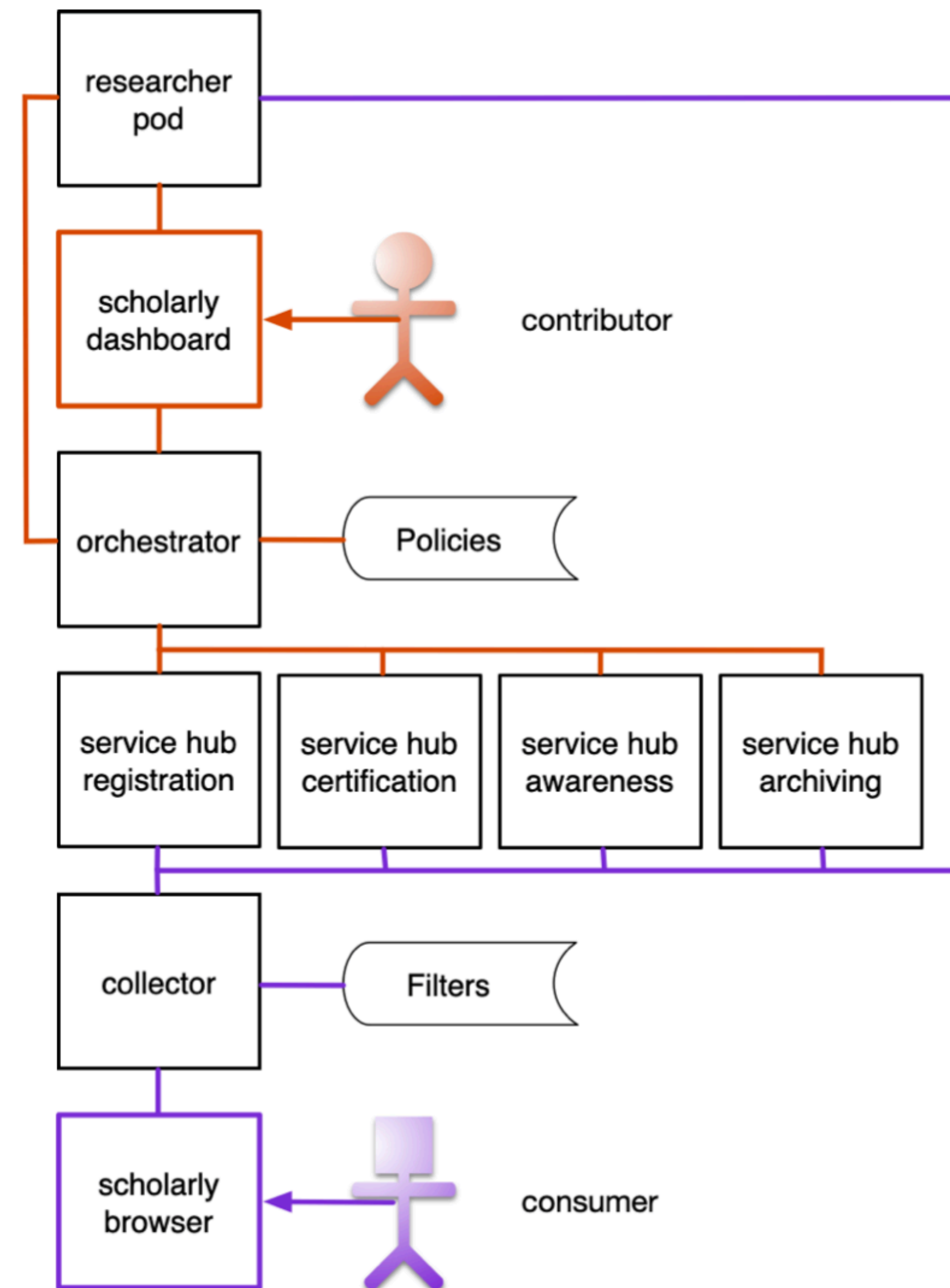
- **Registration** - Allows claims of precedence for a scholarly finding
- **Certification** - Establishes the validity of a registered scholarly claim
- **Awareness** - Allows actors in the scholarly system to remain aware of new claims and findings
- **Archiving** - Preserves the scholarly record over time

*Currently these functions are often vertically integrated within a small ecosystem of services*

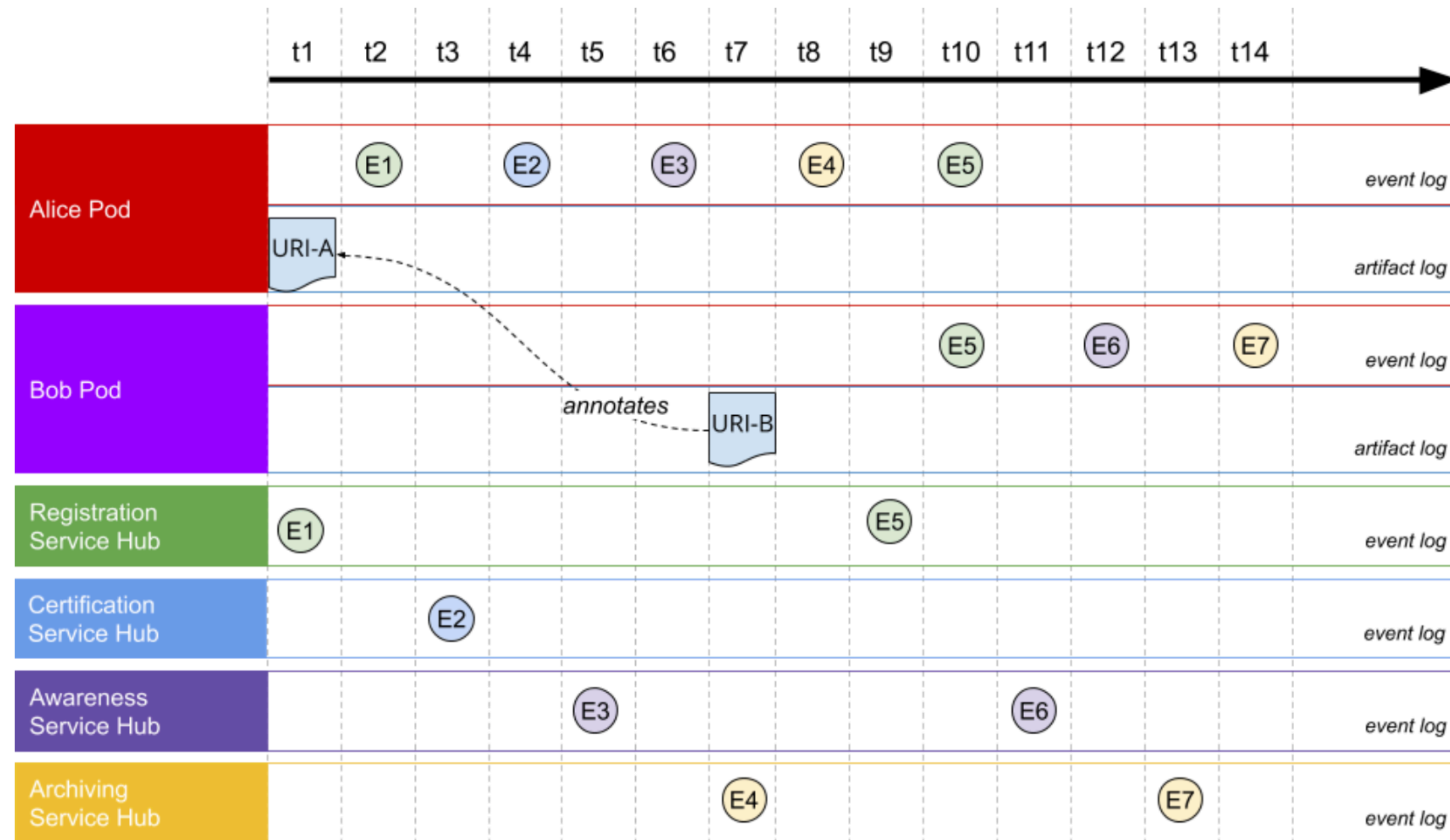
# Linked Data Notifications



We envision a scholarly network with researchers owning a (Solid) pod exchanging LDN messages to express their scientific ideas...  
...but also communicate with a larger decentralised network of service hubs that fulfil all scholarly communication functions.

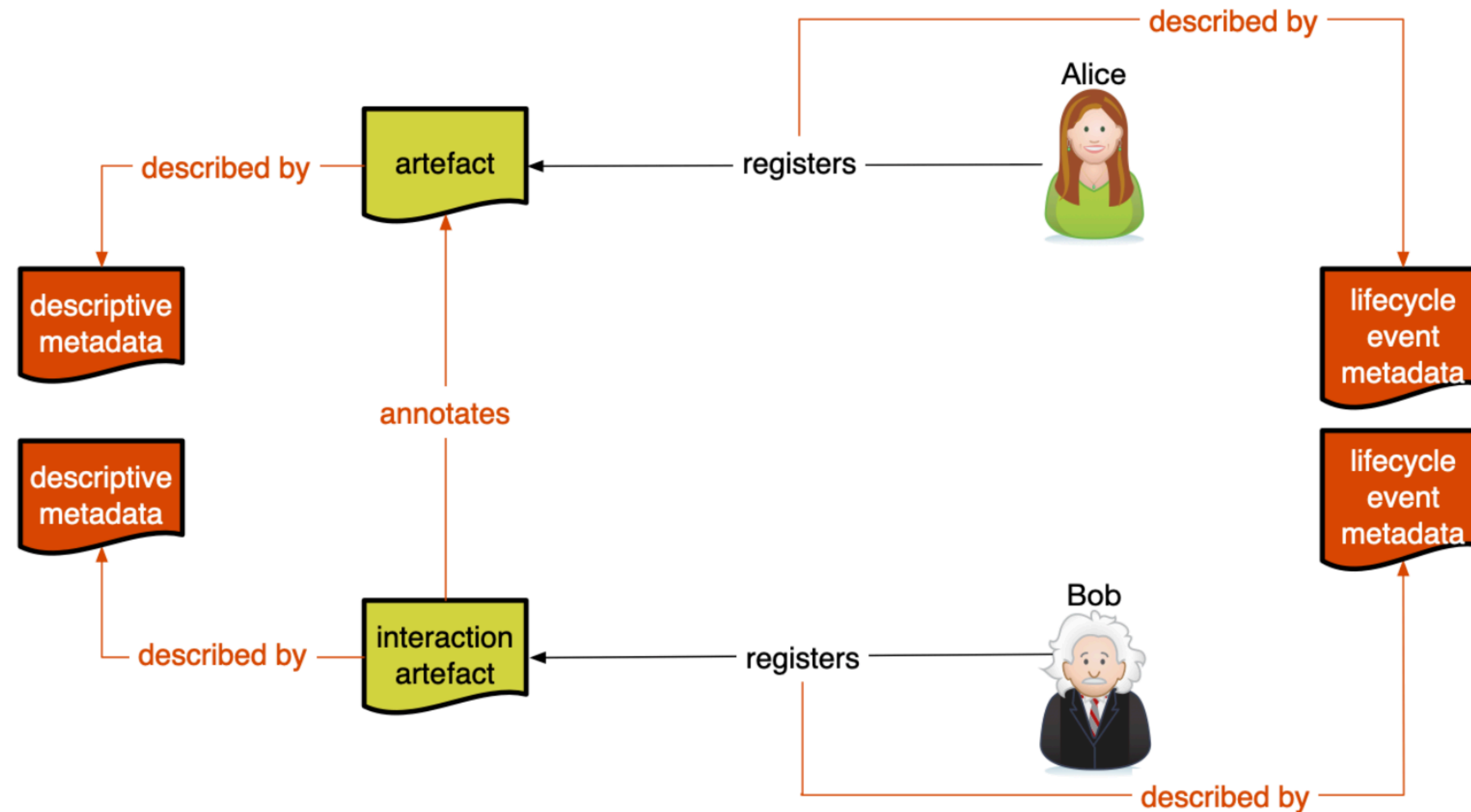


# Notification -> Time



We propose using Linked Data Notifications as protocol because in typically scholarly communication the interaction between all actors in the network can take weeks or months to change the state of an artefact. The REST protocol would be too inefficient to keep the state of these very long running interactions.

# Lifecycle Event metadata



All actors in our network keep a network accessible lifecycle event log with metadata about all contributions, peer contributions, functions of scholarly communication and social interactions.

This information is currently spread around in many services without a standard and require a lot of heuristics and post-factum processing to be reused

# Current status

- Writing specifications for Mellon components
  - <https://mellonscholarlycommunication.github.io/spec-overview/>
- Writing specifications for LDN notifications in cooperation with COAR Notify project
  - <https://notify.coar-repositories.org>
- Demonstrator to implement LDN + tools on top of Solid / DSpace / Fedora



# Follow along

- <https://mellonscholarlycommunication.github.io/spec-overview/>
- <https://github.com/MellonScholarlyCommunication>
- <https://knows.idlab.ugent.be/projects/mellon/>

# People

- Herbert Van de Sompel
- Ruben Verborgh - IDLab
- Ruben Dedecker - IDLab
- Jeroen Werbrouck - IDLab
- Miel Vander Sande - Meemoo
- Patrick Hochstenbach - Ghent University Library