

Federated

Data

Architectures

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post-growth
entrepreneur

@ Ponder Source

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@ Unhosted

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@ remoteStorage

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@ Solid OS

Michiel de Jong

Maintainer

@ Solid Test Suite

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Maintainer

@ OCM Test Suite

Michiel de Jong

Board Member



DAPSI

Michiel de Jong

Co-founder

@ PDS Interop

Part 1 of 2:

Personal Data Store

Interoperability

ALIGNMENT

IS

HARD

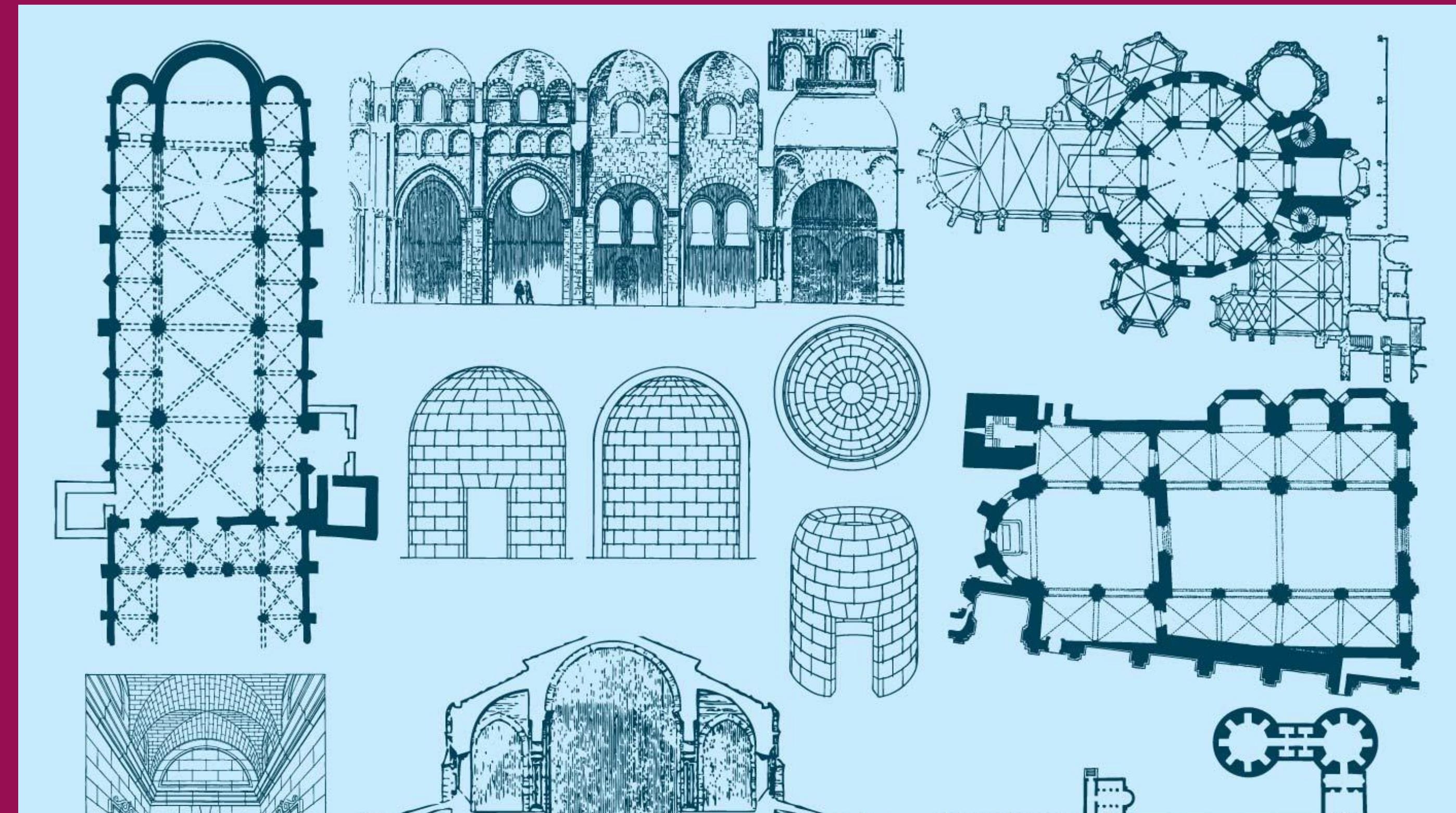
BUT WE'LL

KEEP

TRYING

1. ARCHITECTURE
2. BRIDGES
3. DATA MOVES
4. PROGRESS
5. OUTLOOK

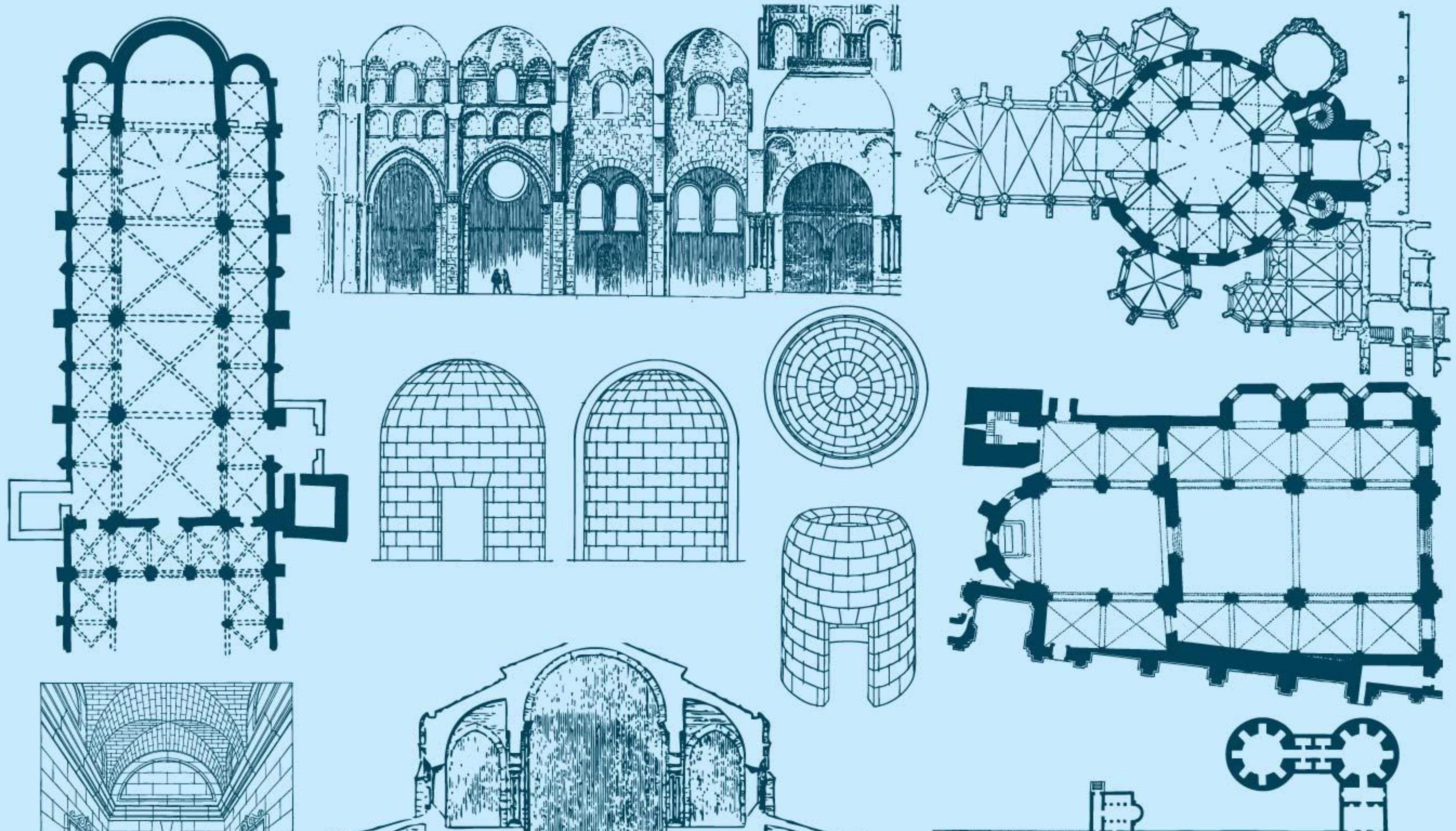
1. ARCHITECTURE



software

has moved

online



store user data

at the

software provider?



personal

data

Stores

personal

cloud

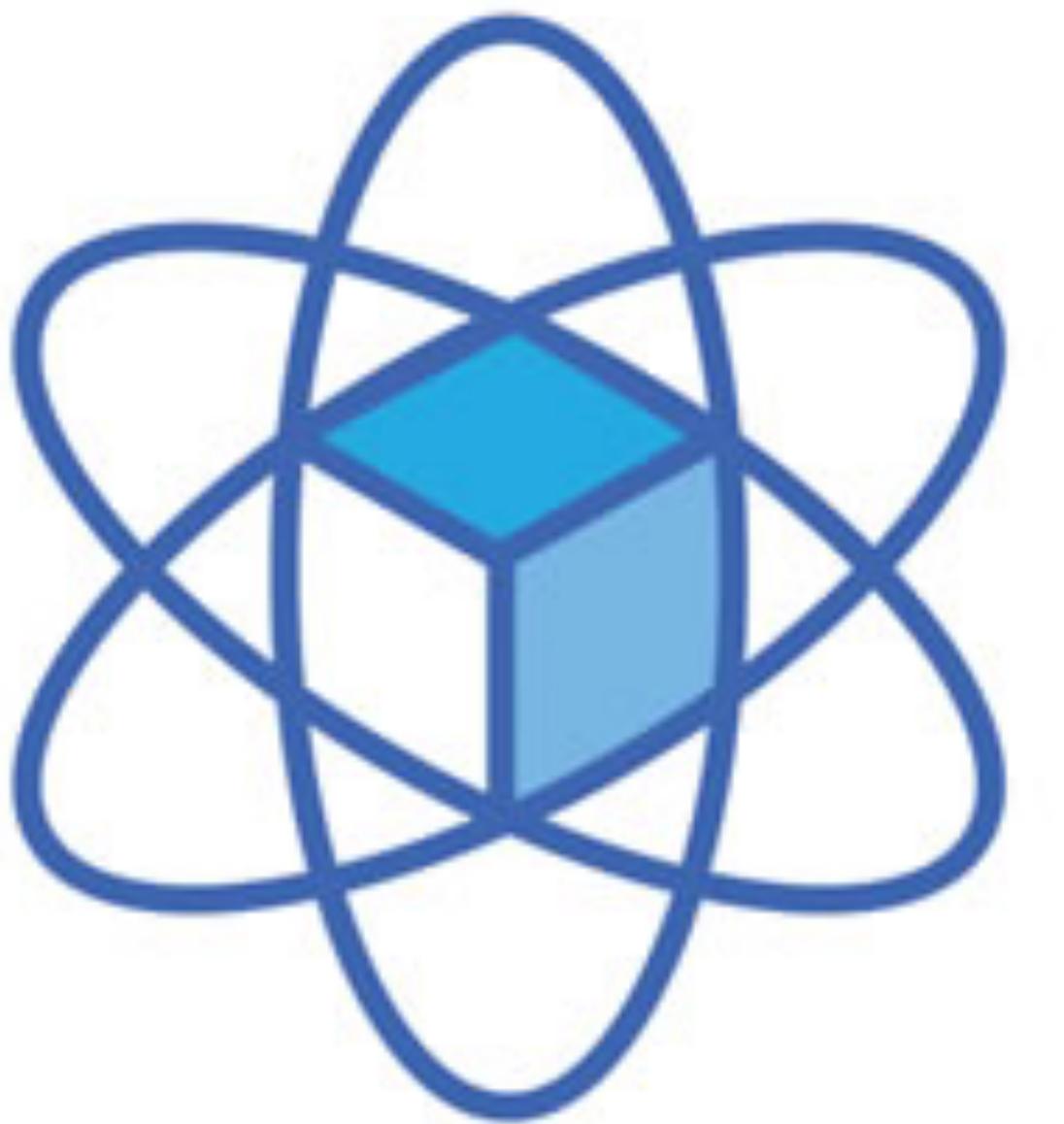
servers



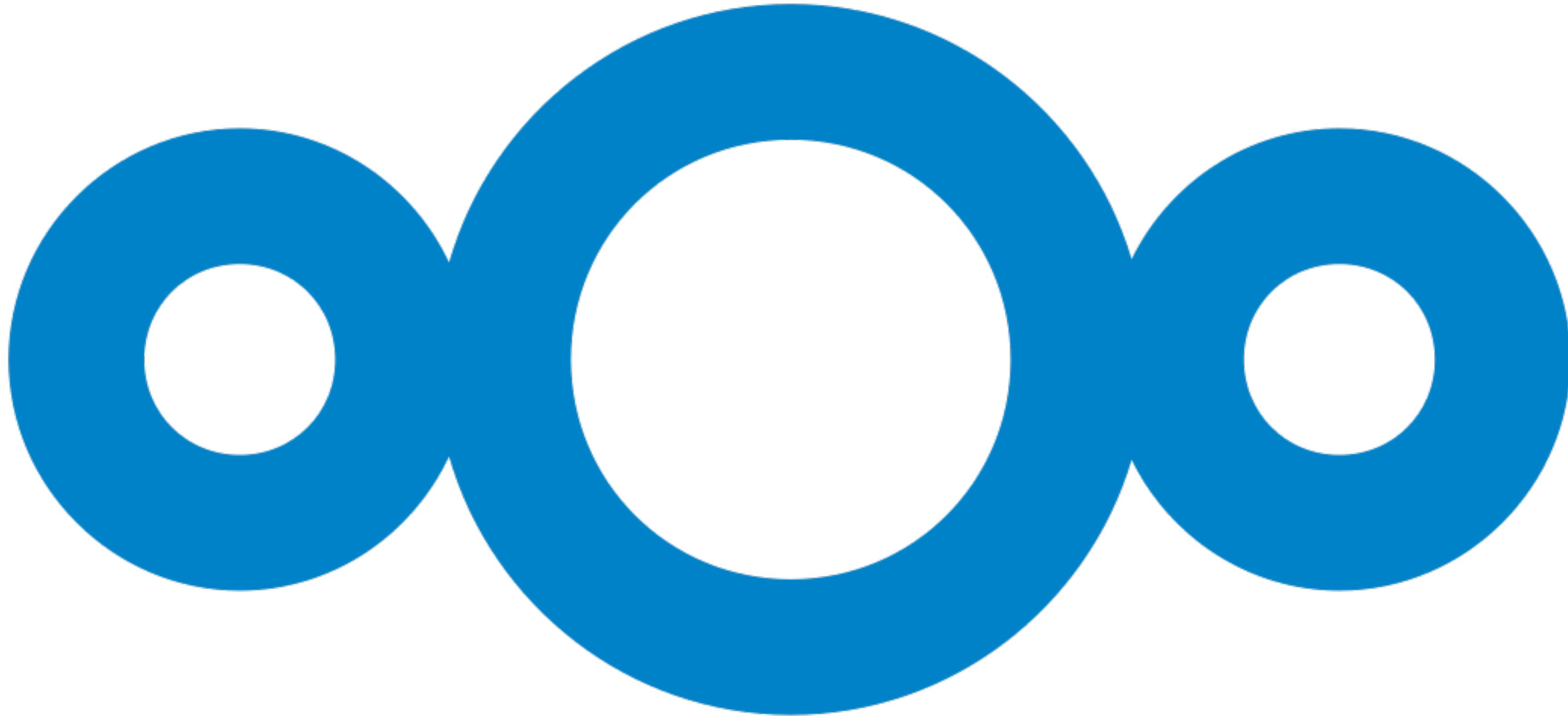
enterprise

file synchronisation

and sharing



CERNBox



Nextcloud

data portability

for end-users

switching services

DAPSI



Meet the brightest
ideas for solving
Data Portability
challenges!

federation

between

networks



LinkedIn

flickr

Gebo

myspace.com

facebook

Open

Cloud

Mesh



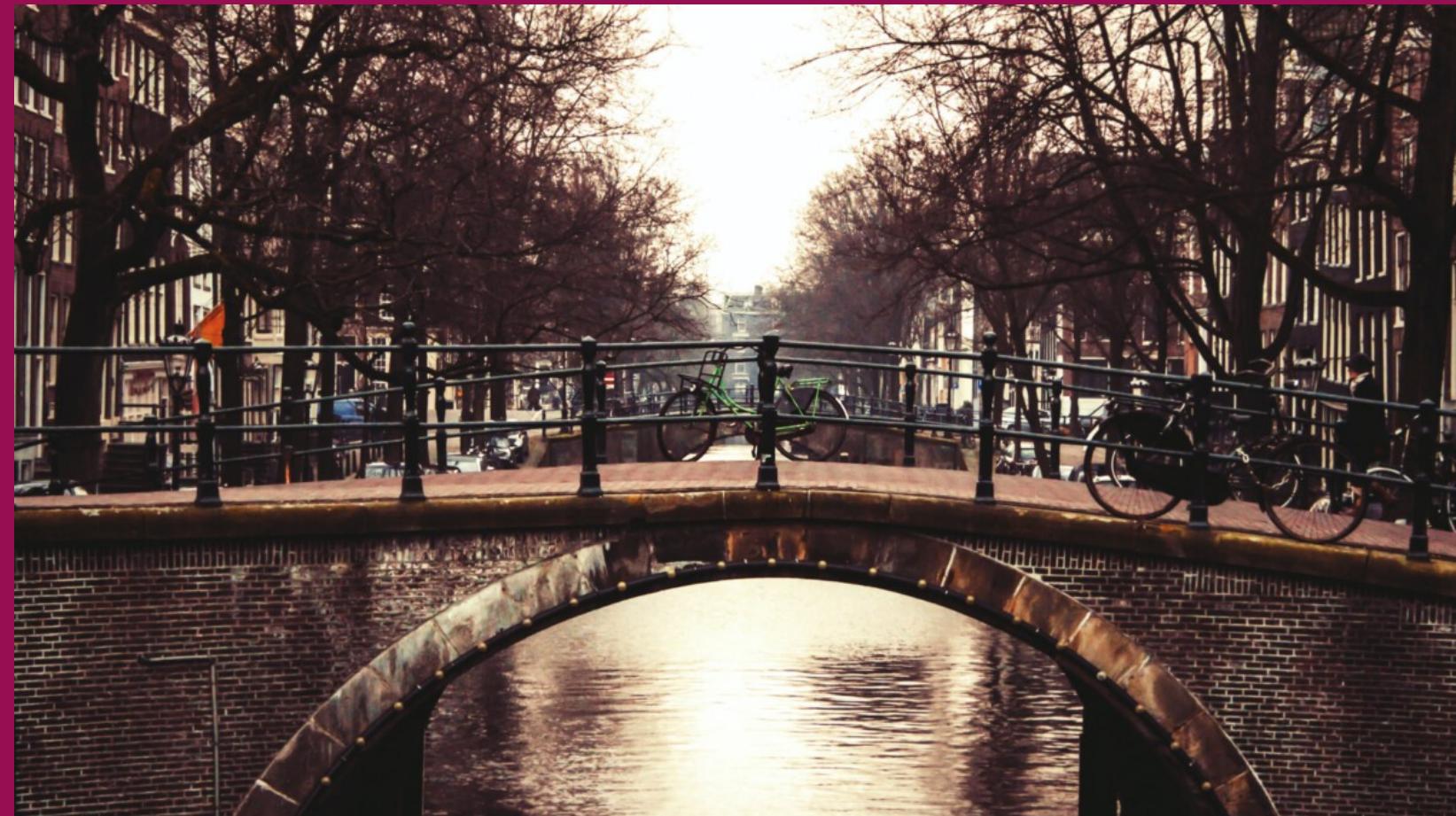
OPENCLOUD MESH

Invites

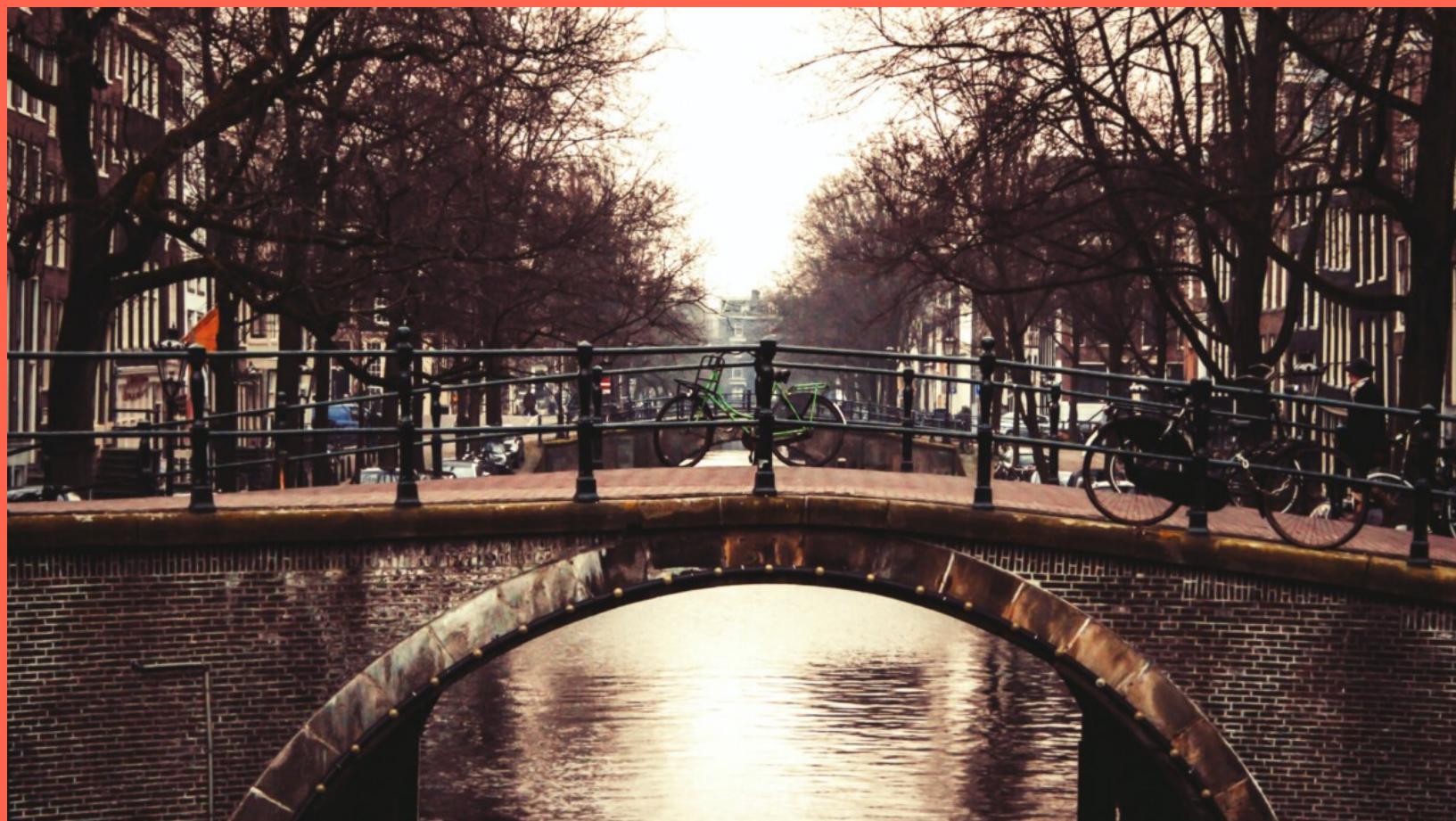
Notifications

WebDAV

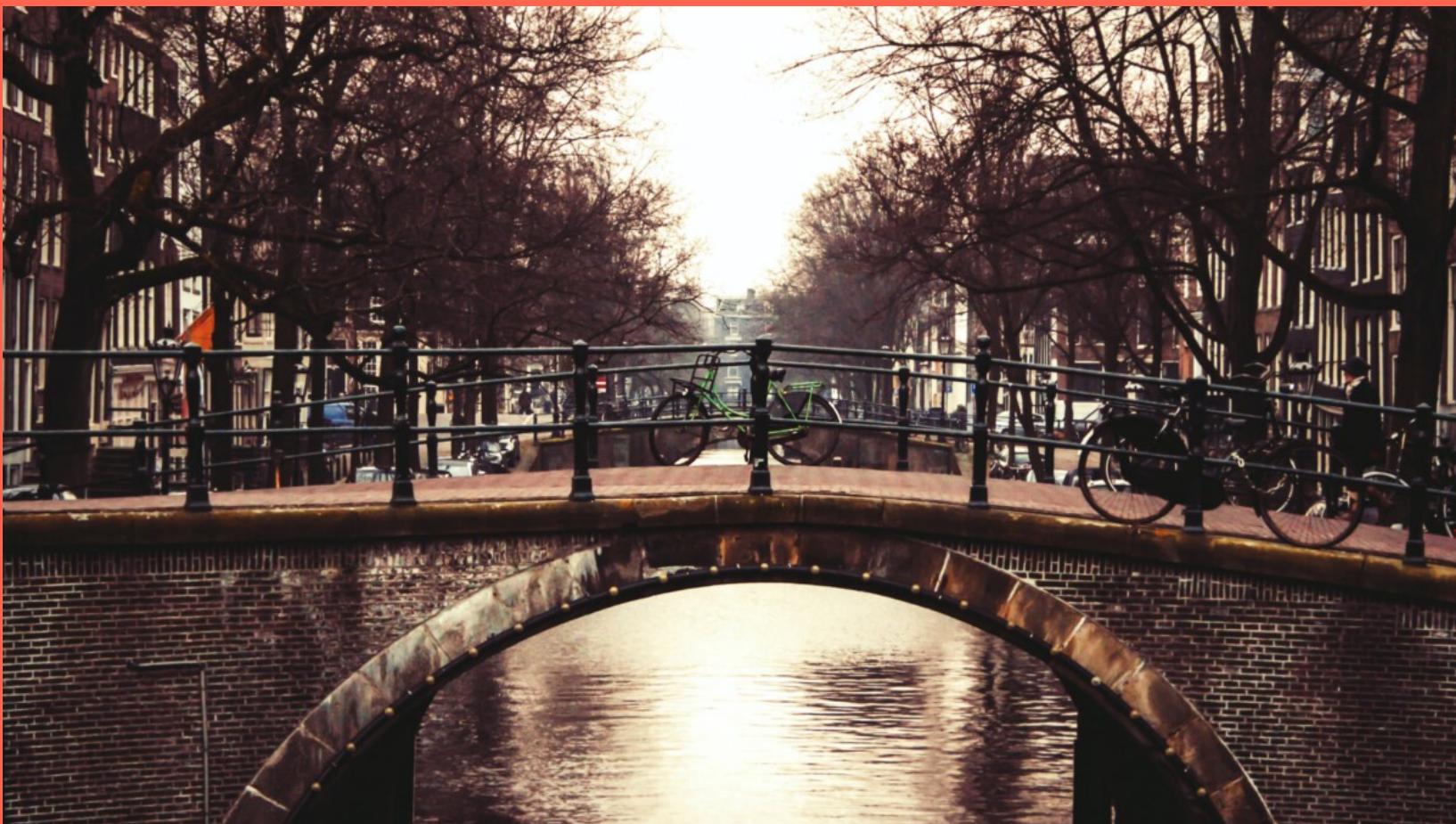
2. BRIDGES



SOLID-Nextcloud



ScienceMesh-Nextcloud



remoteStorage.js



Google Drive



Dropbox

polyglot client lib

3. DATA MOVES



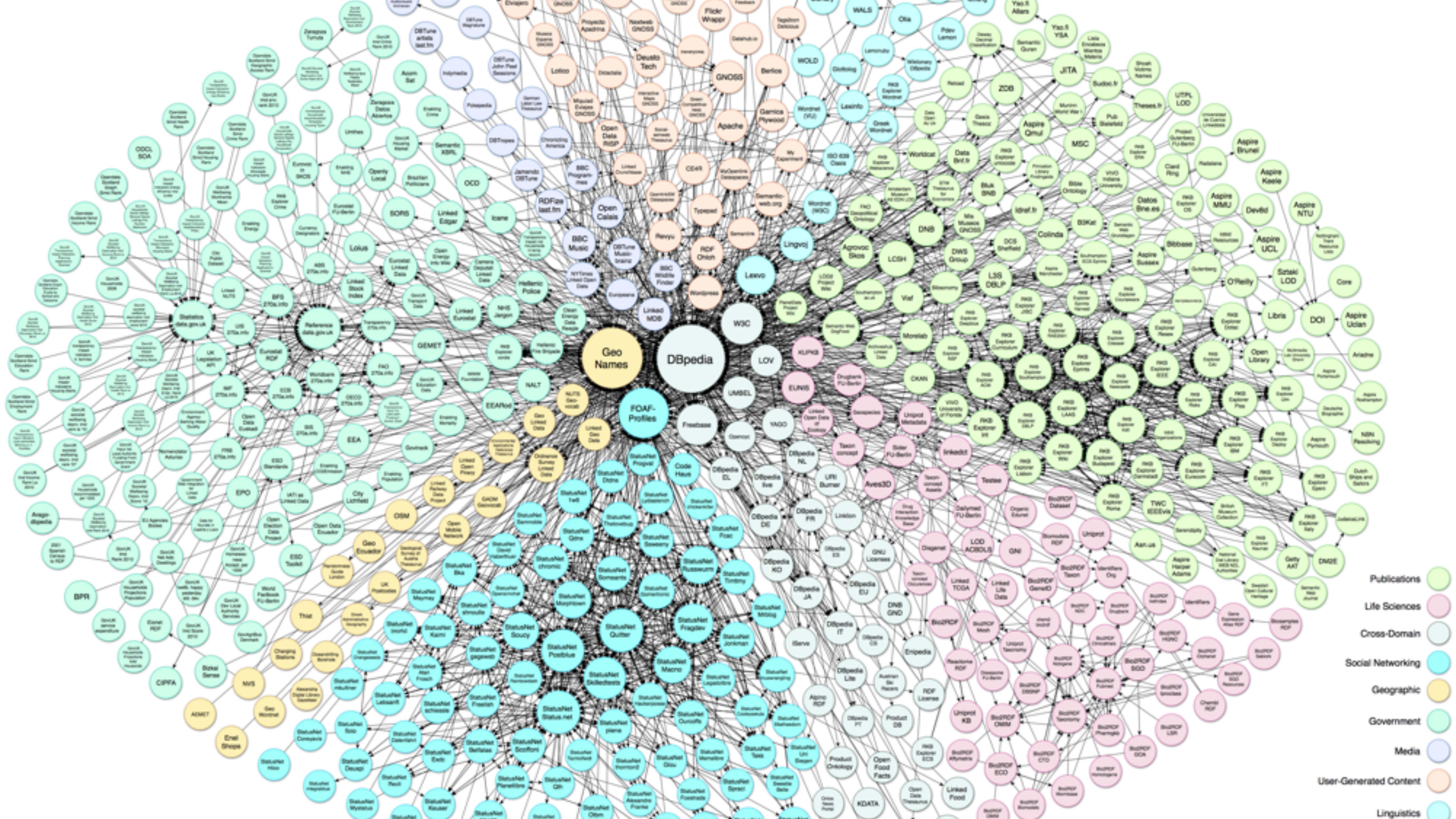
Distributed Versioning



Linked Data

IPFS

CRDT



The
Oracle
Problem

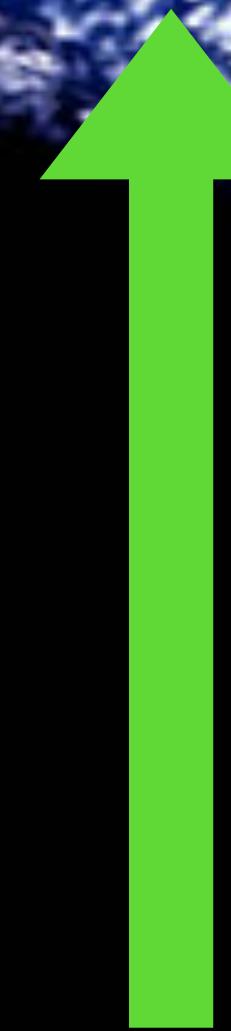
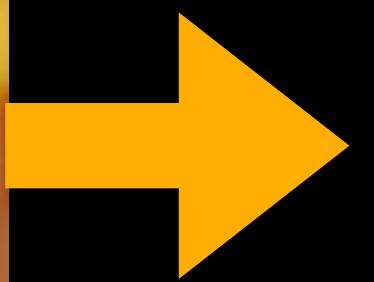
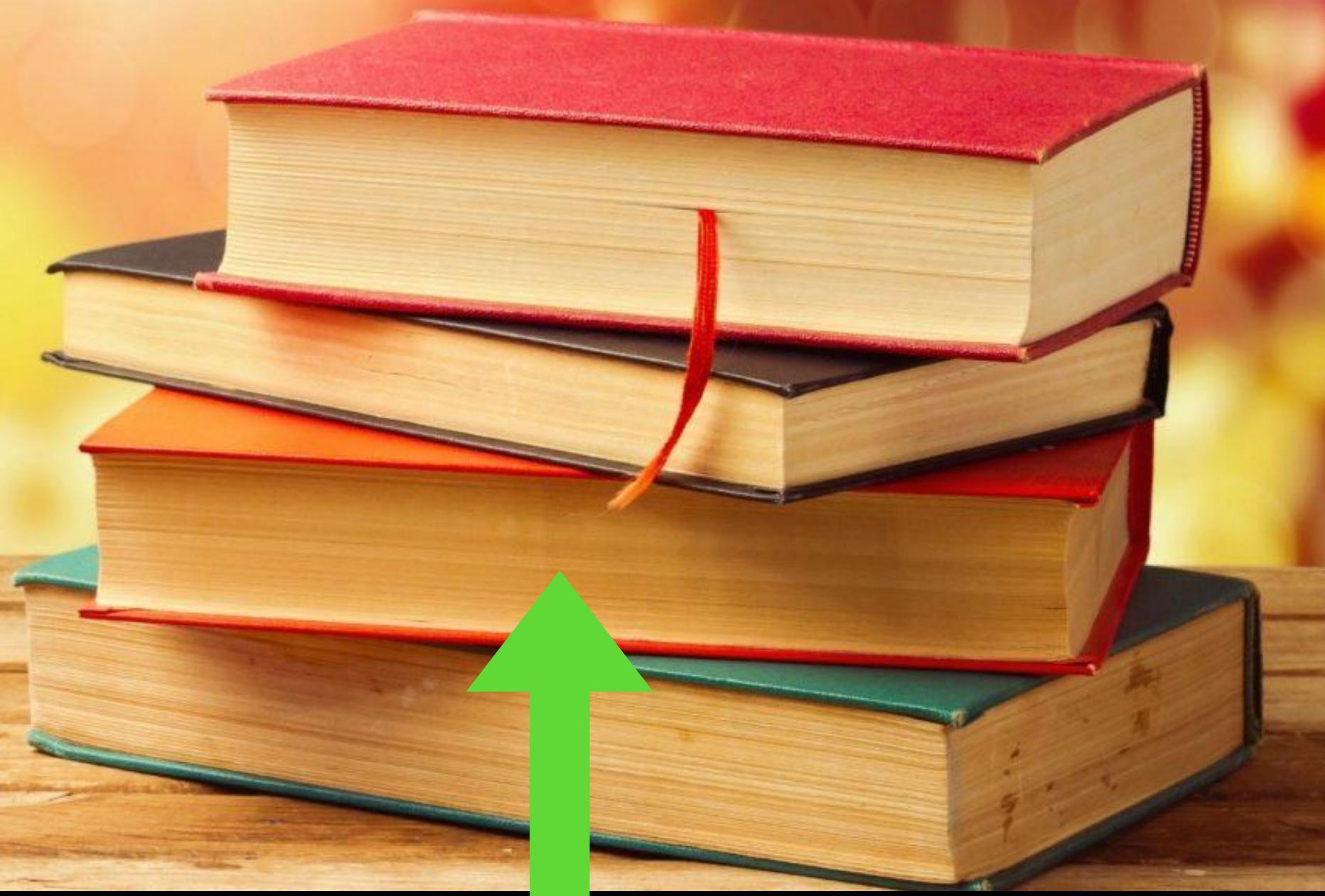


SMART CONTRACT

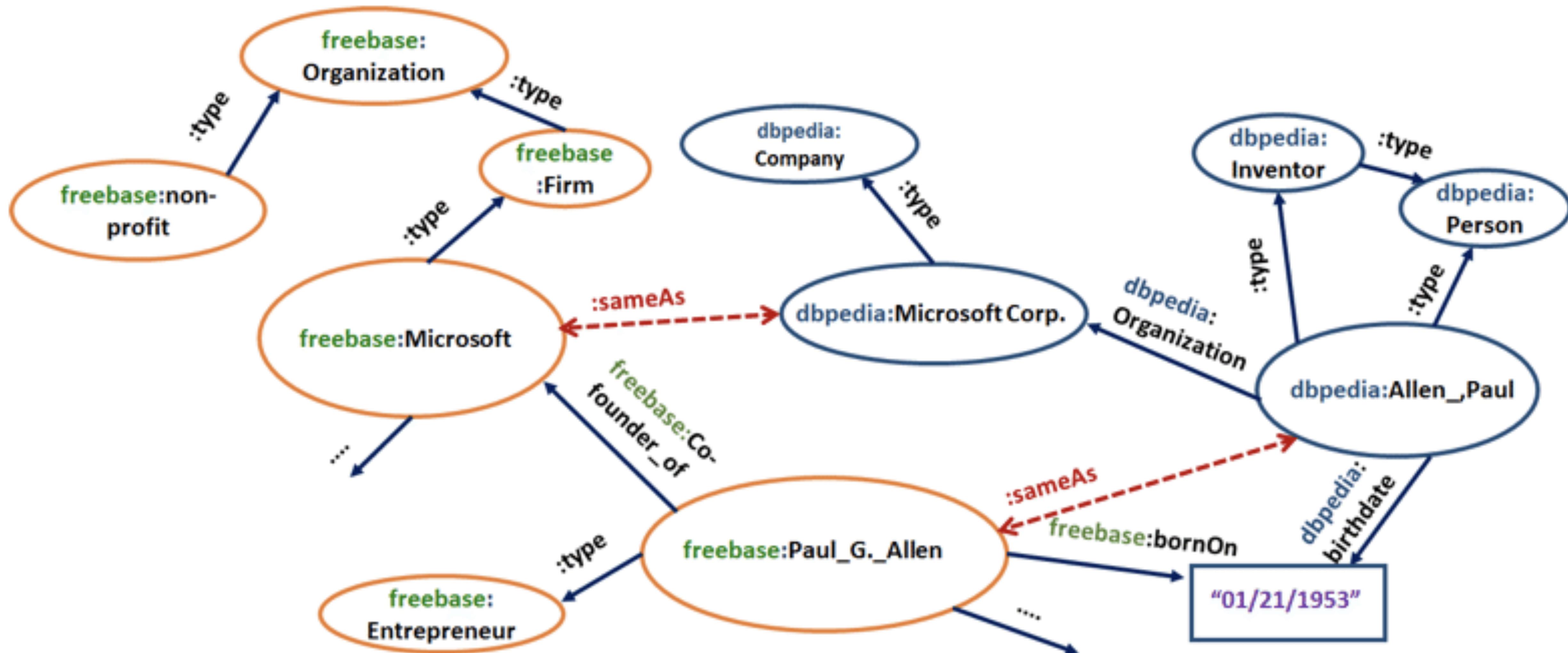
The Web

vs

The World



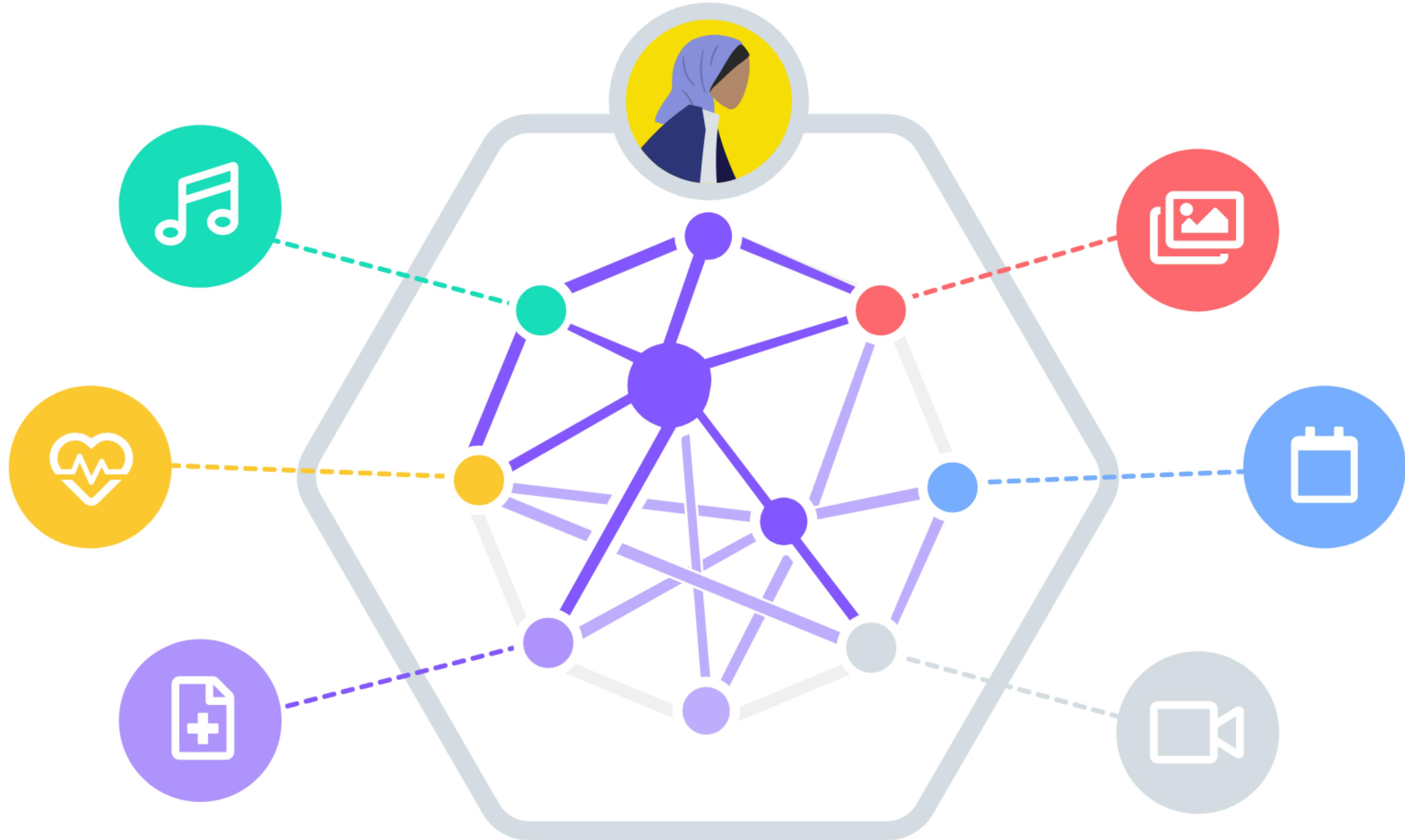
The
sameAs
Problem



data

moves

around



software

architecture

matters

server
architecture
matters

application

architecture

matters

4. PROGRESS



The
CURSE
of Freedom





Discussions

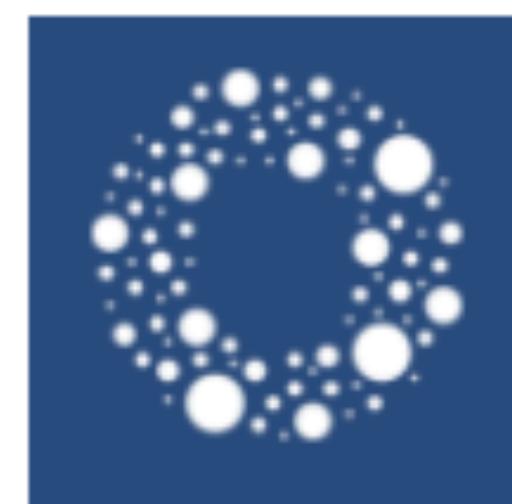
Experiments

Test Suites

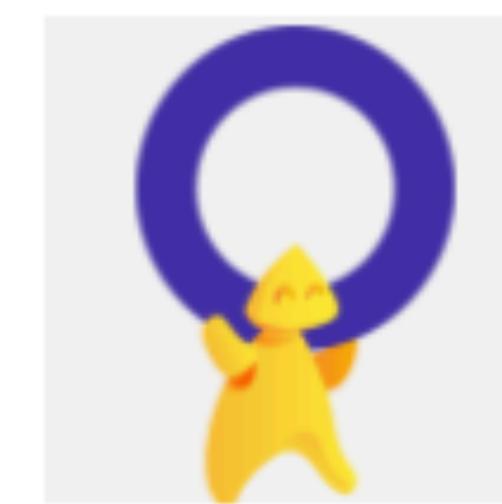
Solid Test Suite

Current Sponsors

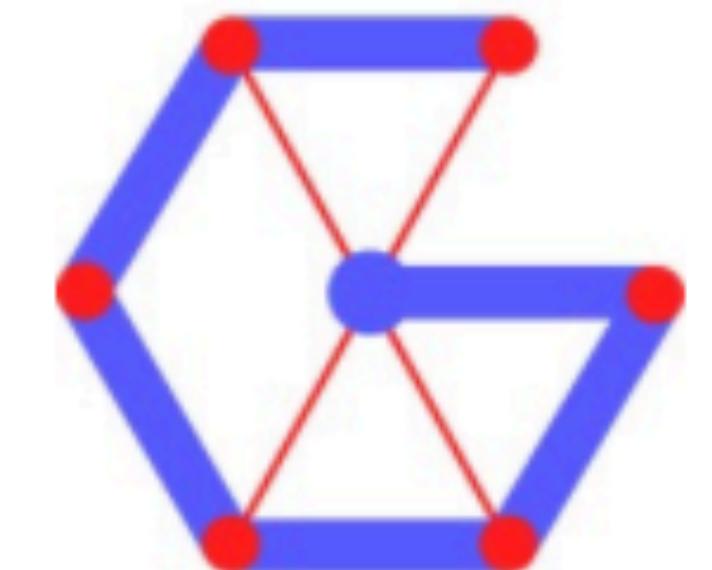
These awesome *Solid-related startups* collectively sponsor the maintenance of the independent Solid test suite through our [Open Collective](#), click on their logos to check them out!



Digital



O Team



GraphMetrix



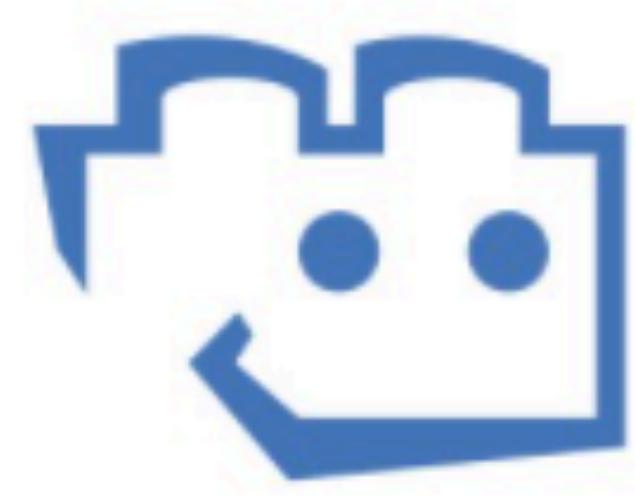
Interition



Ontola



Understory



Startin'blox

Solid Test Suite

#	name	version	prog.lang	IDP	CRUD	WAC	(WPS)	(CON)	(MON)
1.	Node Solid Server	(each PR)	JavaScript	✓	✓	✓	✓	✓	✓
2.	PHP Solid Server	(each PR)	PHP	✓	✓	✓	✓	✓	
3.	Solid-Nextcloud	(each PR)	PHP	✓	✓	✓	✓	✓	
4.	Community Solid Server	v1.1.0	TypeScript	1)	✓	6)	✓	✓	
6.	TrinPod	stage.gr...x.net	Lisp	1)	✓	✓		2)	
5.	Inrupt ESS	pod.inrupt.com	Java	1)	✓	3)	4)	5)	
7.	Reactive-SoLiD	(coming soon!)	Scala						
8.	DexPod	(coming soon!)	Ruby						
9.	Disfluid	(coming soon!)	C						

documentation

pdsinterop.org

(and other places!)



Q Search Conventions

Addressbook

NB: this currently mainly describes how Solid OS stores data on a Synology NAS.

You can create an addressbook containing persons and groups, by RDF documents on your pod. To create an addressbook, create a document, e.g., `/address-book/index.ttl`, and add the following triples to that document:

```
</address-book/index.ttl#this> a vcard:AddressBook .  
</address-book/index.ttl#this> dc:title "New address Book" .  
</address-book/index.ttl#this> acl:owner </profile/card#me> .
```

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Versions: [00](#) [01](#) [02](#) [03](#) [04](#) [05](#) [06](#) [07](#) [08](#) [09](#) [10](#) [11](#) [12](#)
[13](#) [14](#) [15](#) [16](#) [17](#)

INTERNET DRAFT

Document: [draft-dejondg-remotestorage-17](#)

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14 June 2021

Intended Status: Proposed Standard

Expires: 1 December 2021

remoteStorage

Abstract

This draft describes a protocol by which client-side applications, running inside a web browser, can communicate with a data storage

5. OUTLOOK



PDS

Interoperability

For Files?

PDS

Interoperability

For App Data?

LinkedIn

flickr

Gebo

myspace.com

facebook

ALIGNMENT

IS

HARD

BUT

schema

on

read!

continuous

polyglot

import!

WE'LL

KEEP

TRYING

THANK YOU!

@michielbdejong