

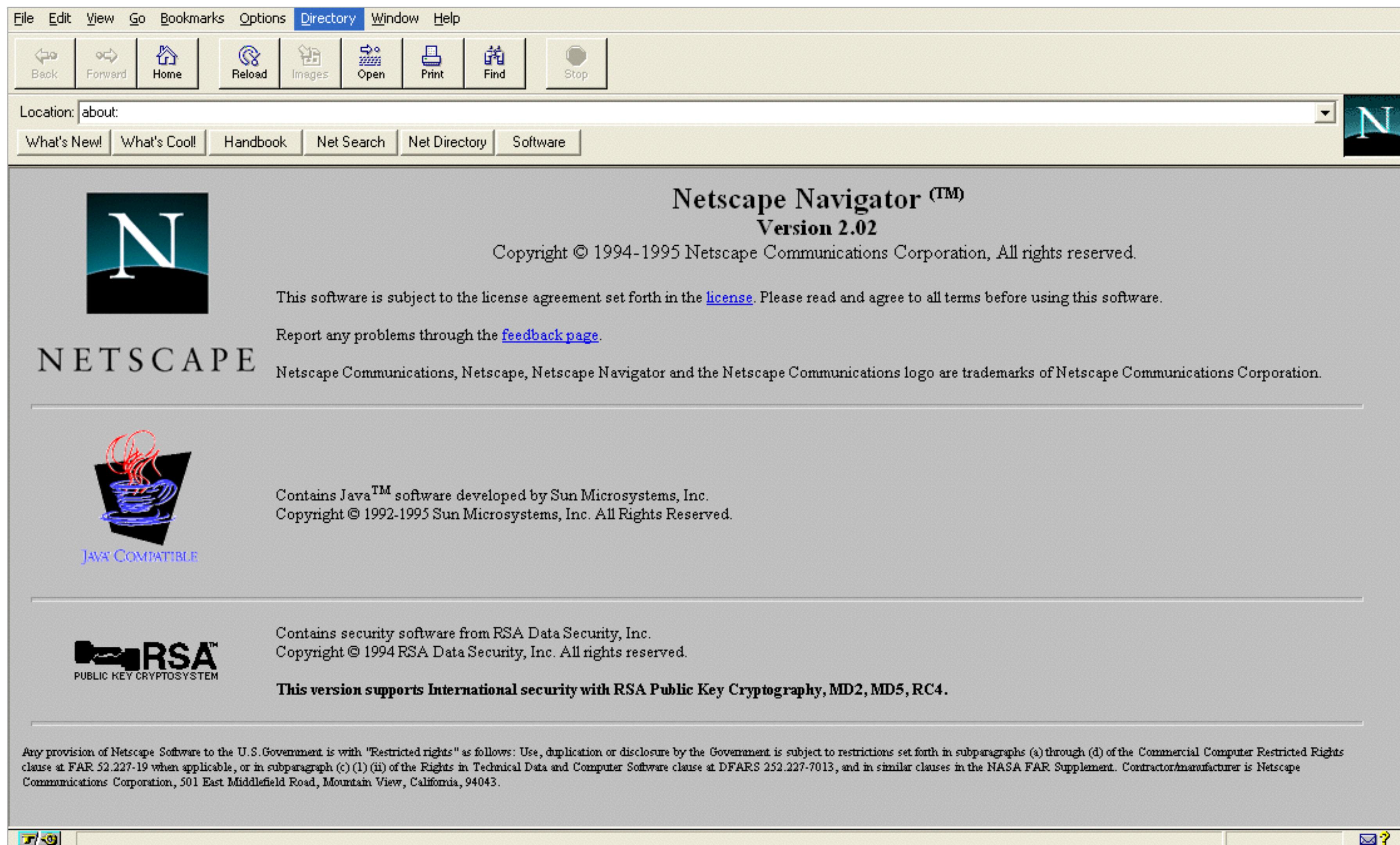
Building a New Internet

by Muneeb Ali

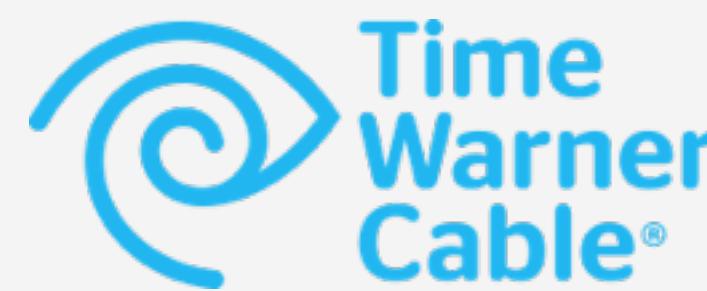
Twitter:

@muneeb

@blockstackorg



The Internet



The Internet



chrome

TURKTRUST

Google

#1 **Blind Trust**

We trust parties we don't even know exist.

The Internet



chrome



chrome

#2 No Ownership

Big companies, not users, own the data.

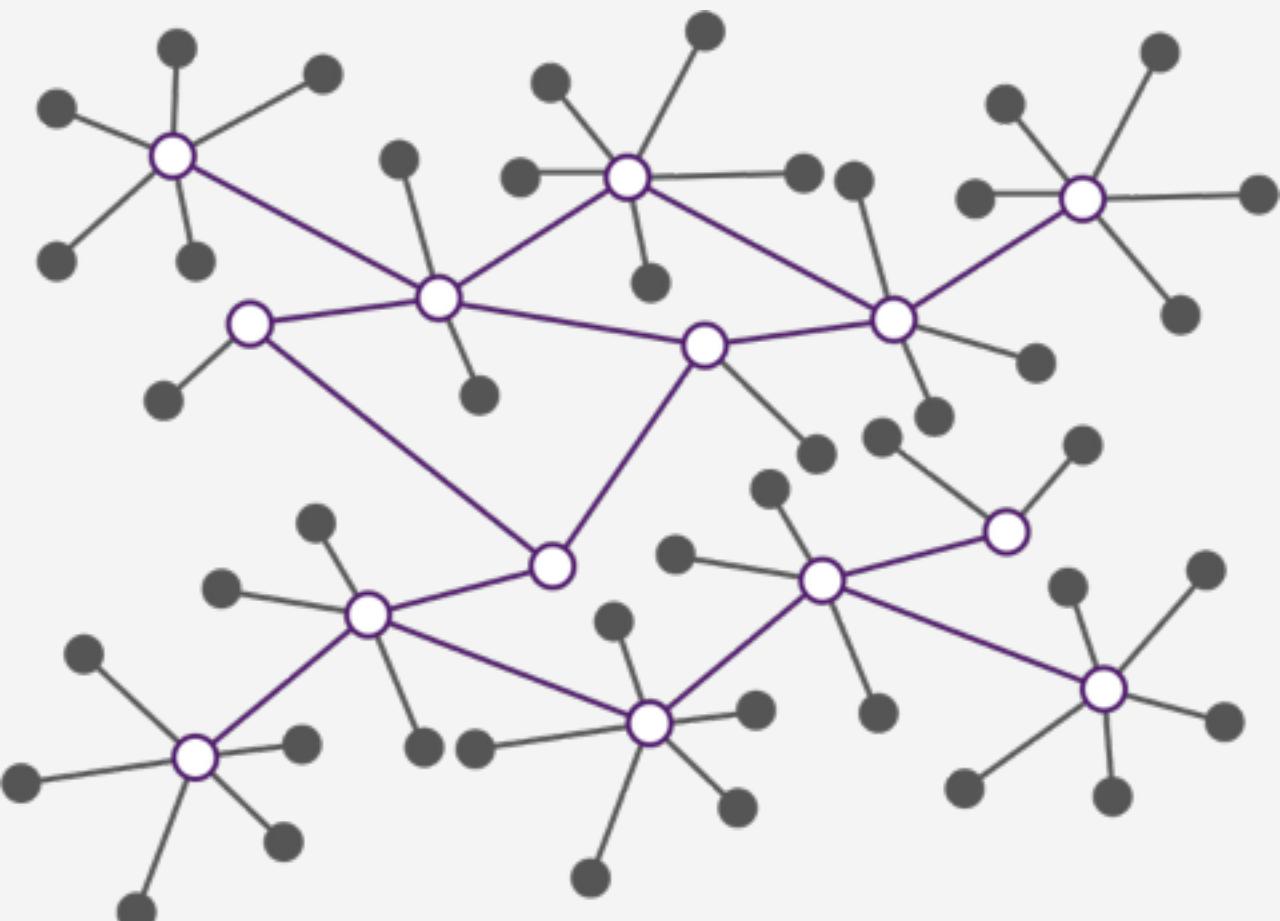
A new revolutionary tech called the blockchain.

Gives power to the people.

Payments



Payments



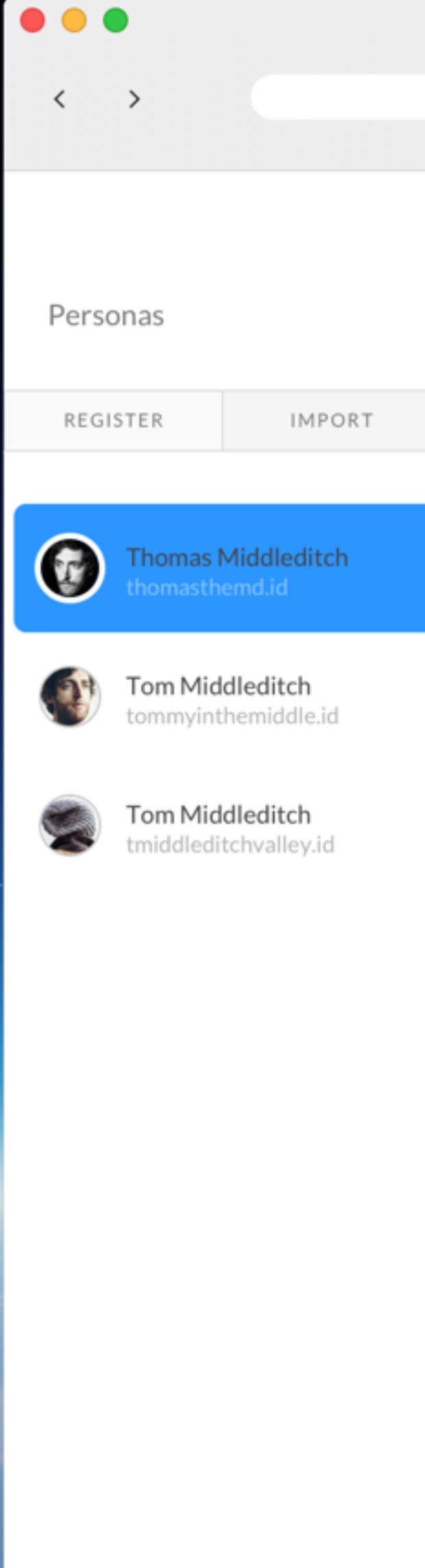
How to use this new network?

91148ee24f1ee9a6f42c3dd64c2287781c8c57a6e8e929c8097e586d5322a3d

Payments → Banks (Citibank)

Internet → Data Banks (Facebook)





Personas

REGISTER IMPORT

Thomas Middleditch
thomasthemd.id

Tom Middleditch
tommyinthemiddle.id

Tom Middleditch
tmiddleditchvalley.id

Search for people, apps and more...

Home Account

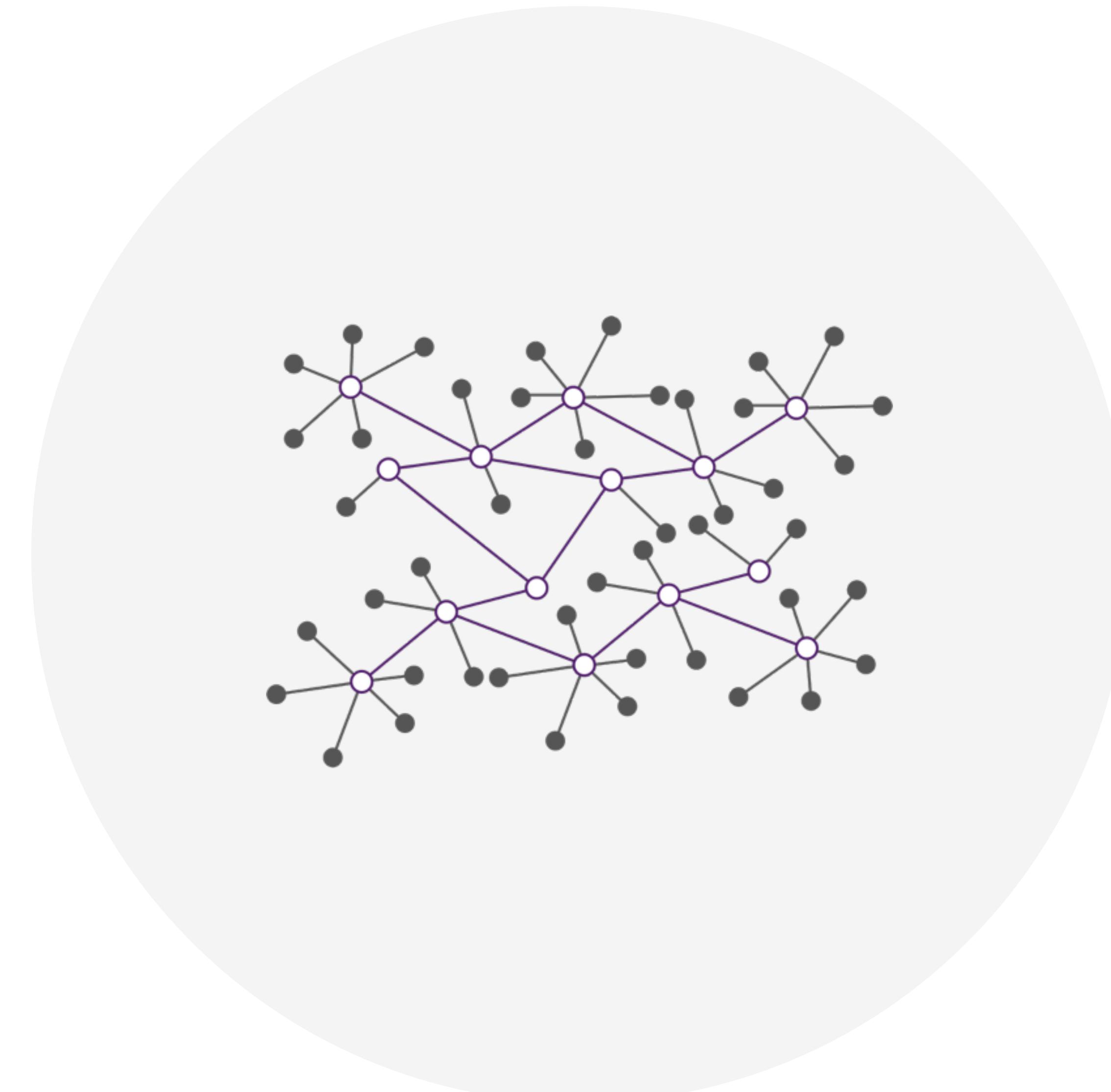
 blockstack

Browse the decentralized internet

The Blockstack browser is the world's first browser that enables you to browse the decentralized internet

Login with Blockstack

The New Internet



werner.id

Home Account

Personas

REGISTER IMPORT

Thomas Middleditch
thomasthemd.id

Tom Middleditch
tommyinthemiddle.id

Tom Middleditch
tmiddleditchvalley.id

✓ Registered in block #387562,
transaction #339

Werner Vogels

CTO @ Amazon

Seattle, WA

wernervogels

@werner

wv

Connections

The New Internet



 **blockstack**

werner.id

muneeb.id



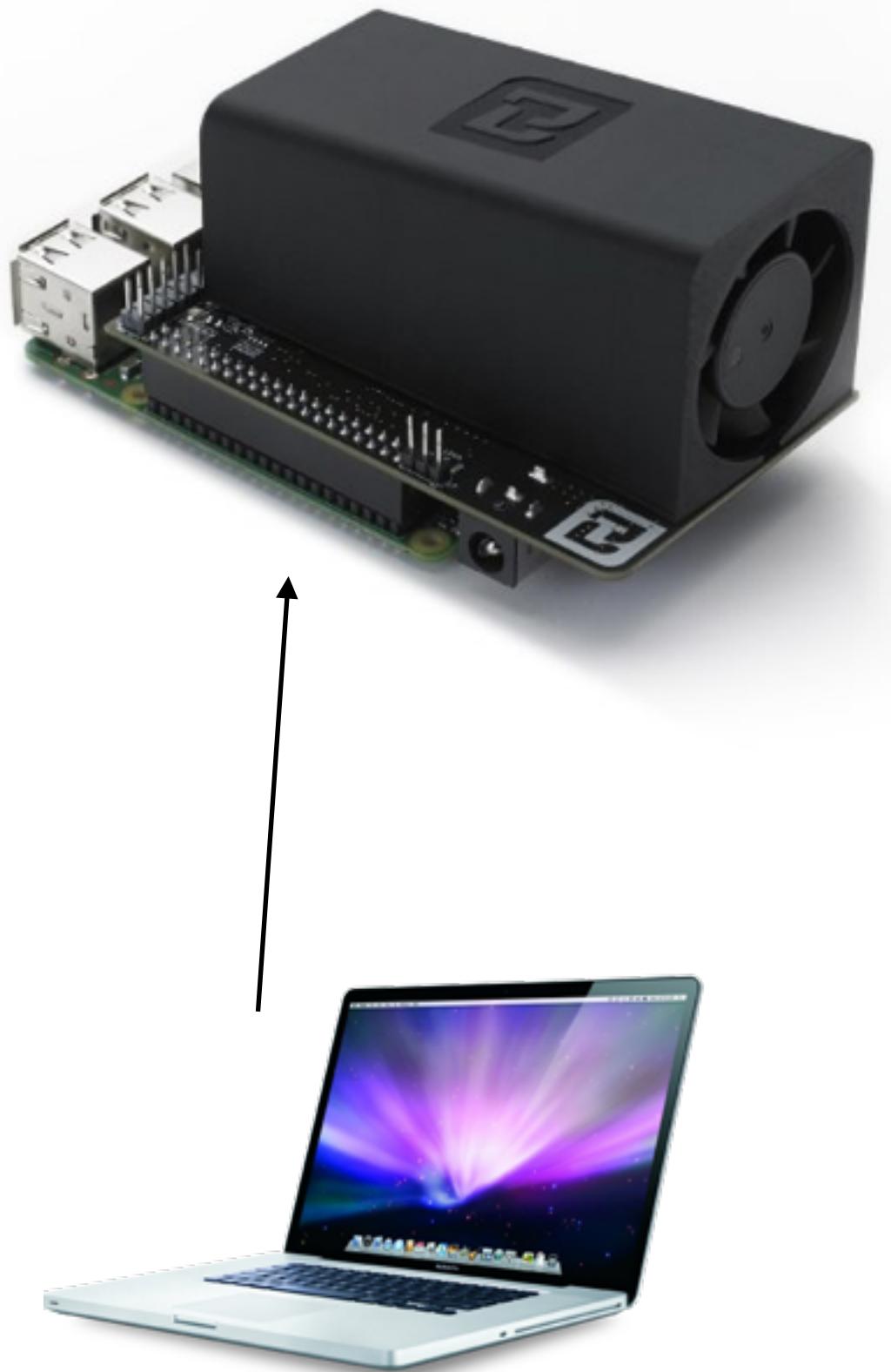
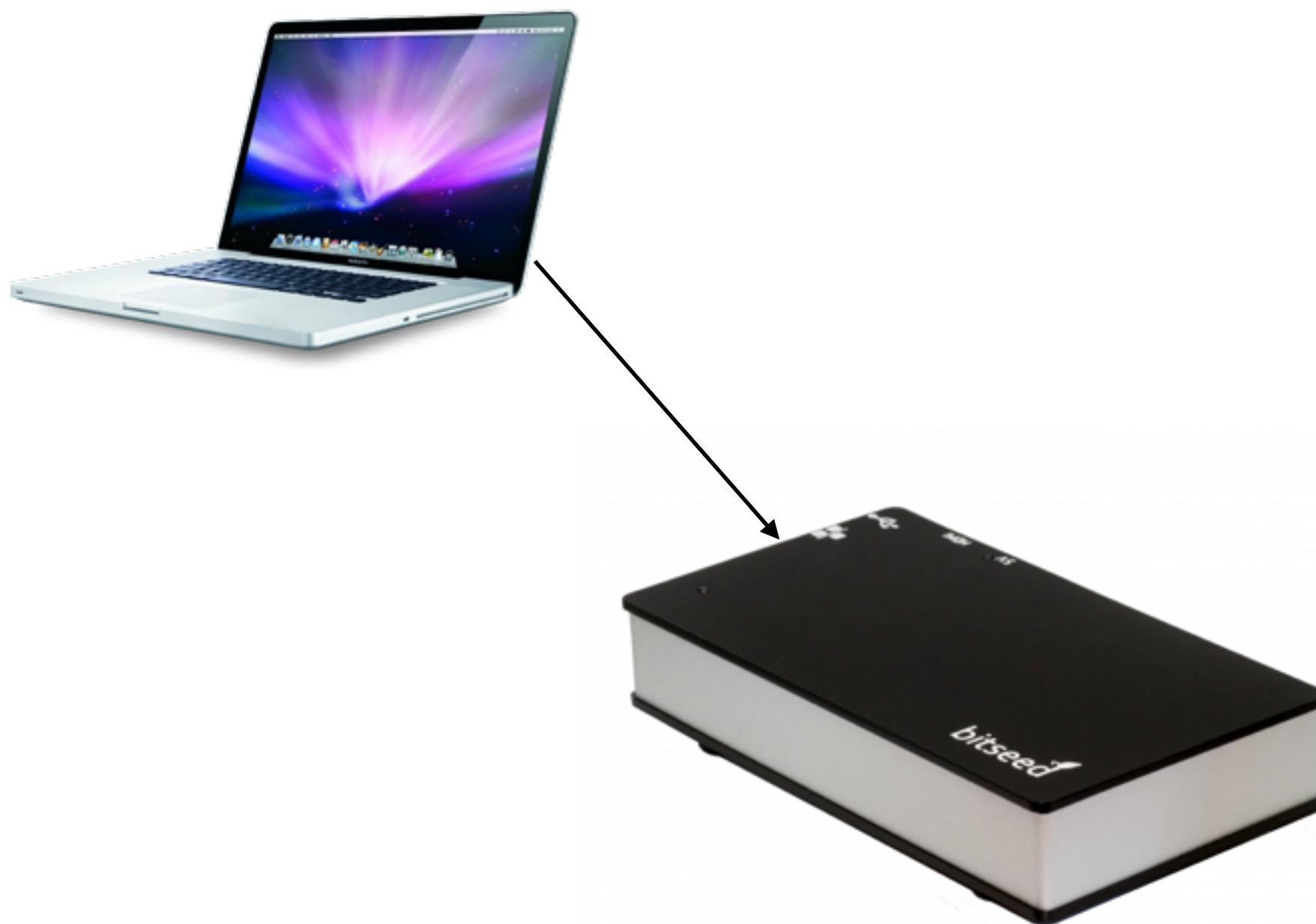
 **blockstack**



How Blockstack works

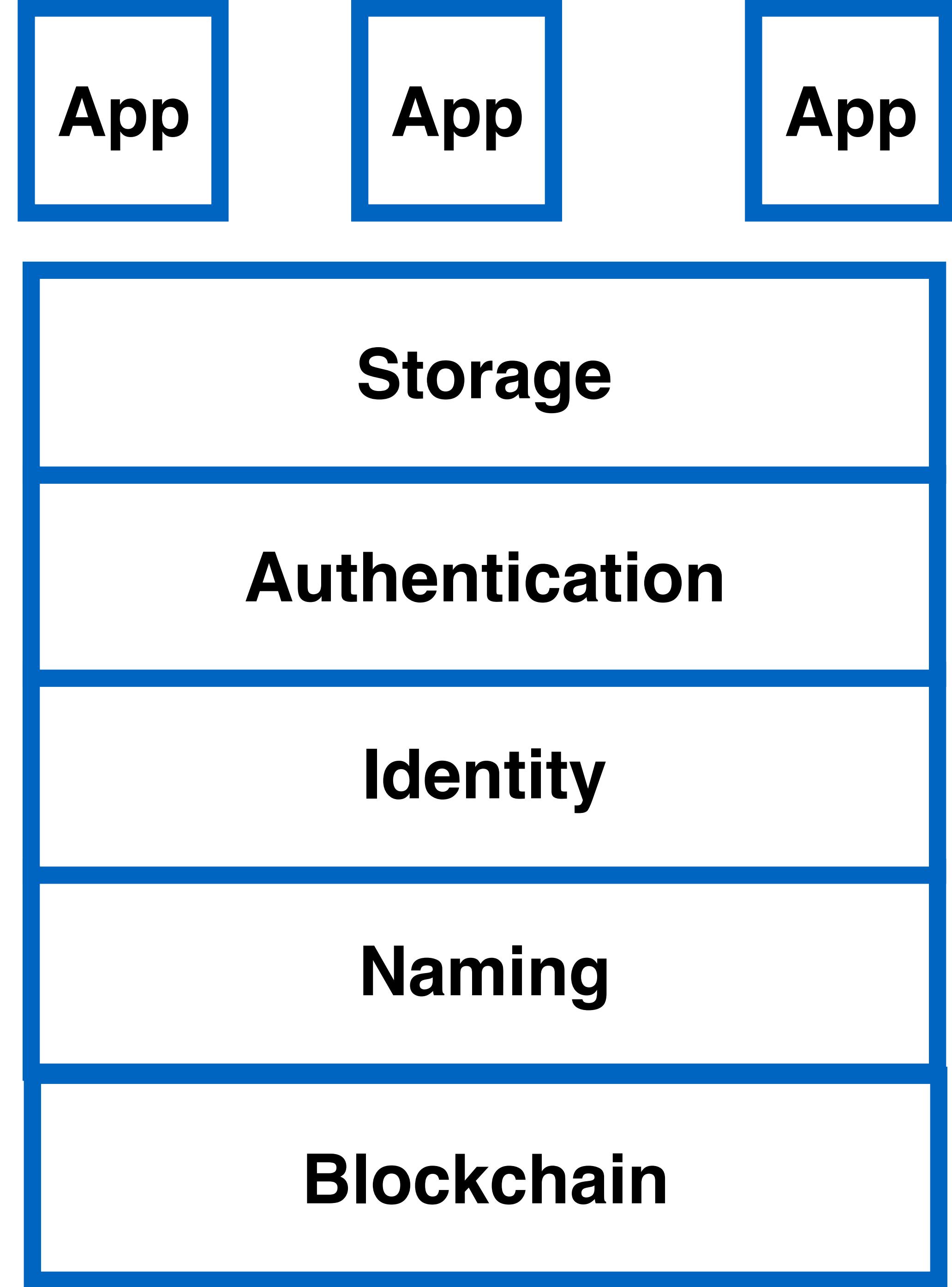
Security on the new Internet

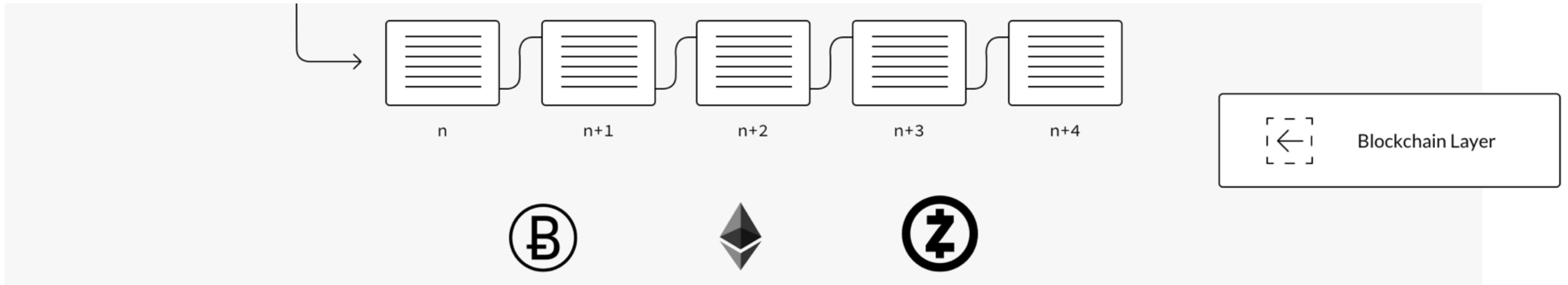
David Clark's trust-to-trust principle

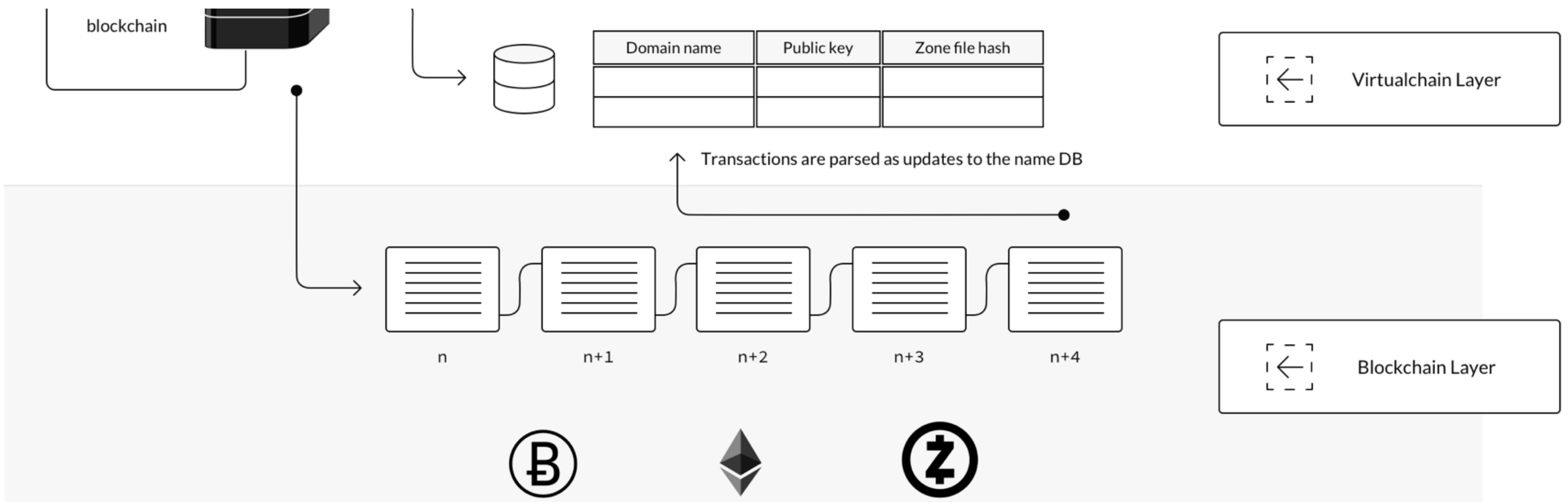




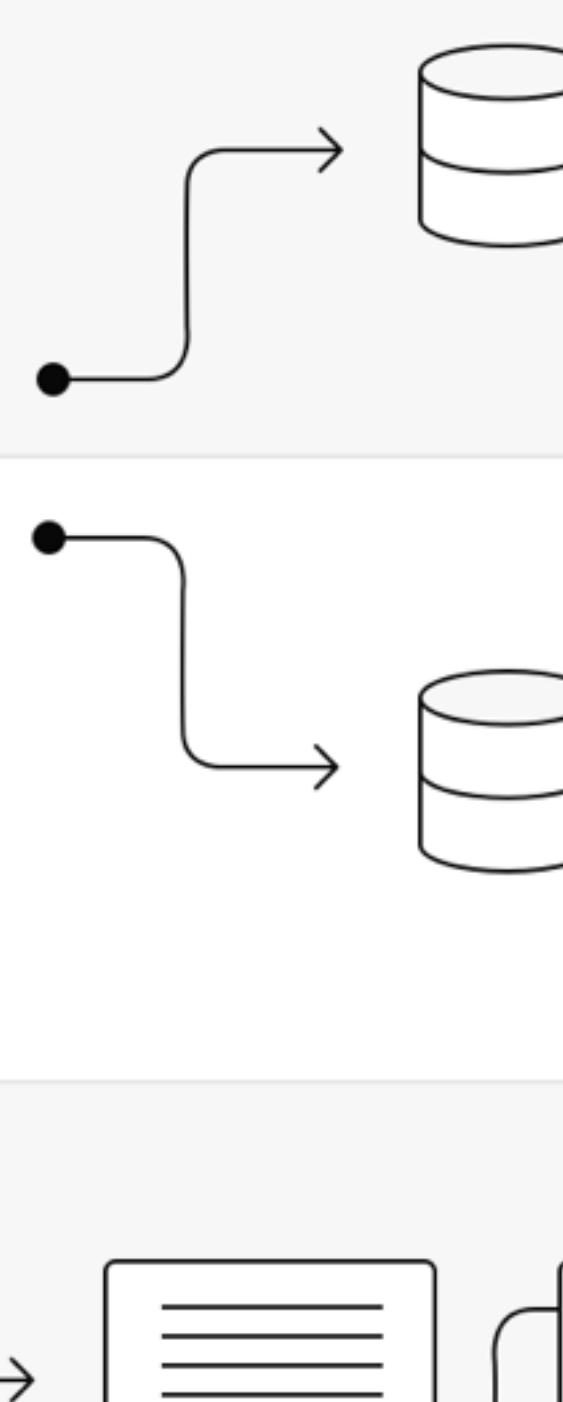
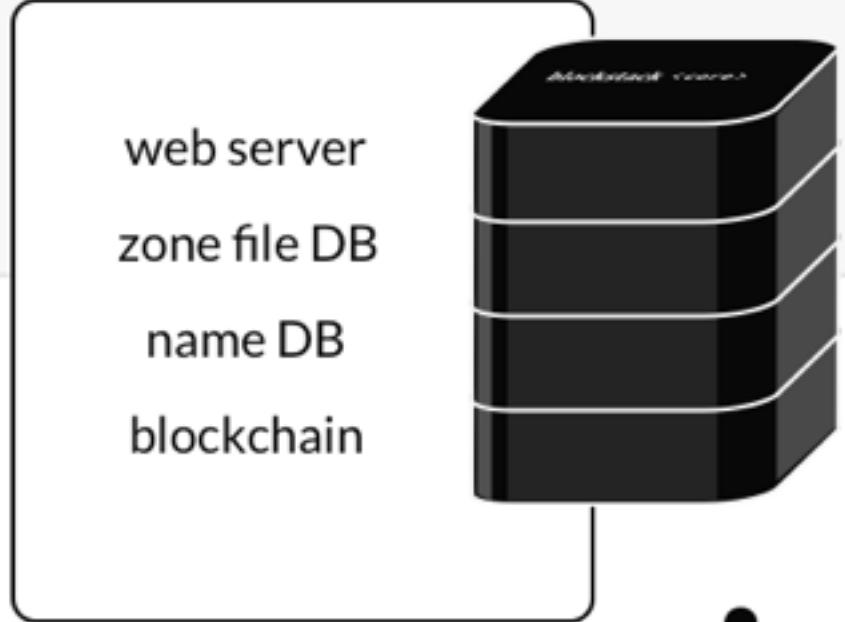
blockstack







blockstack <core>

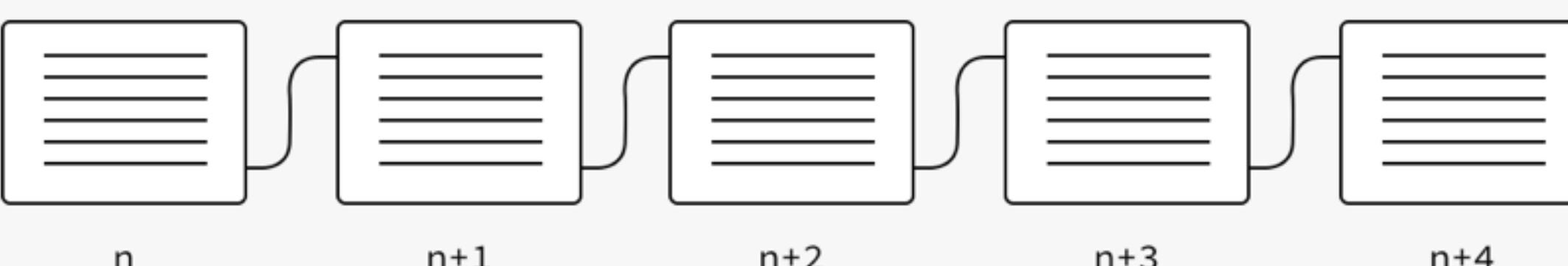
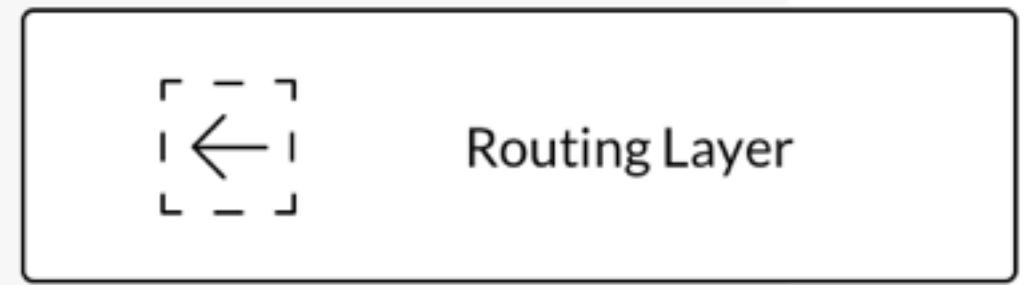


Zone file hash	Zone file

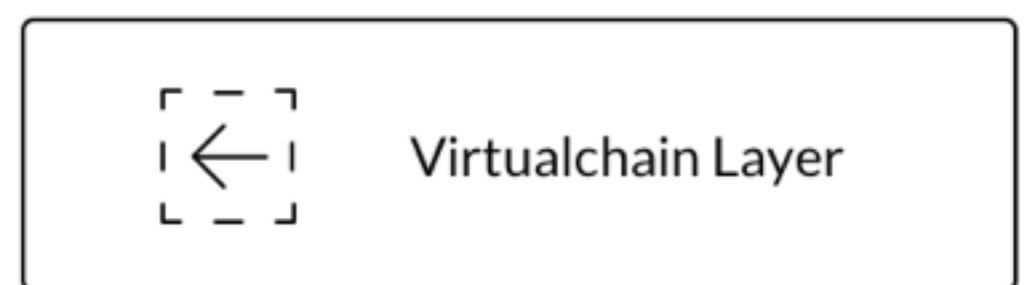


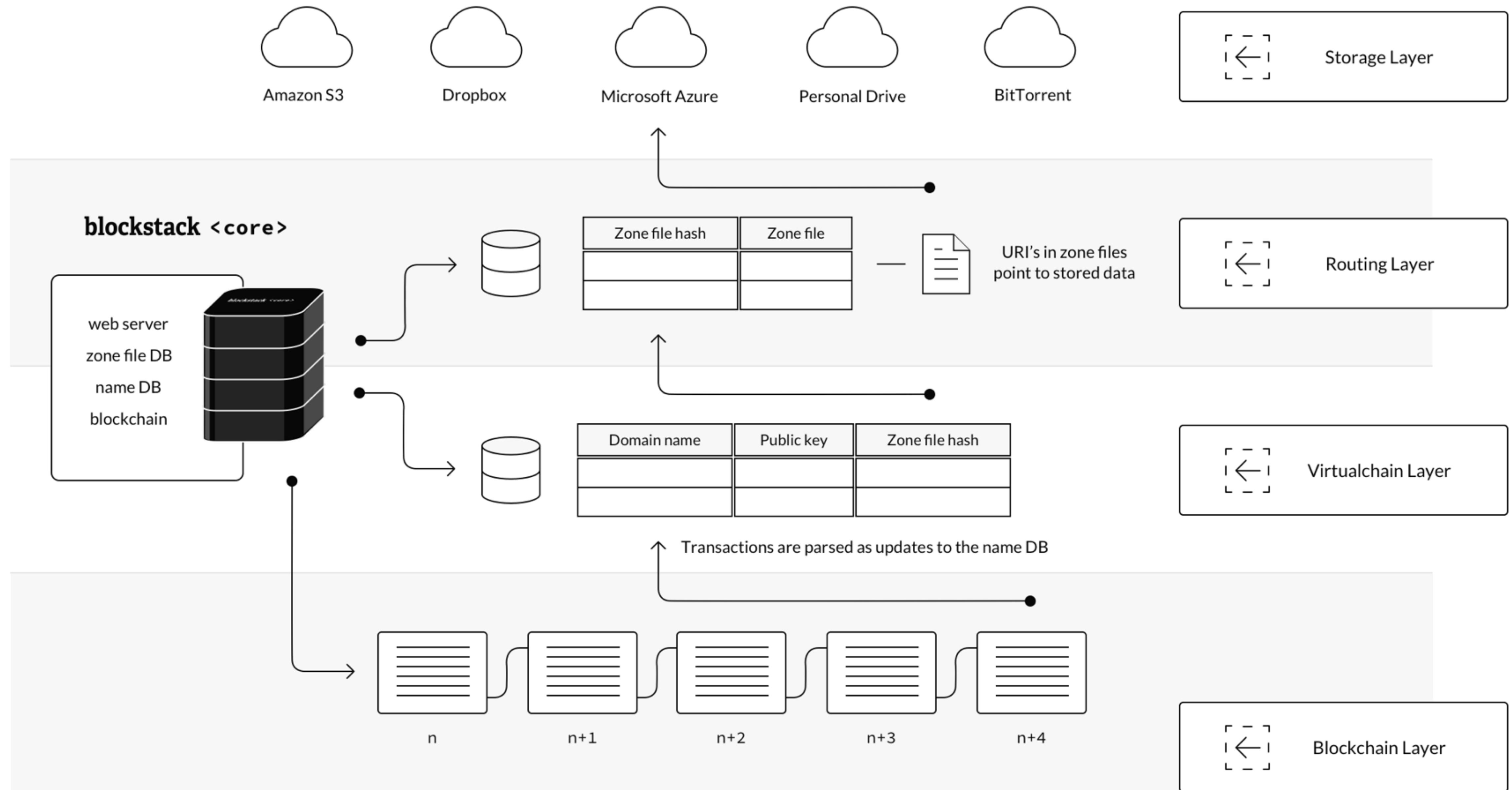
URI's in zone files
point to stored data

Domain name	Public key	Zone file hash



Transactions are parsed as updates to the name DB



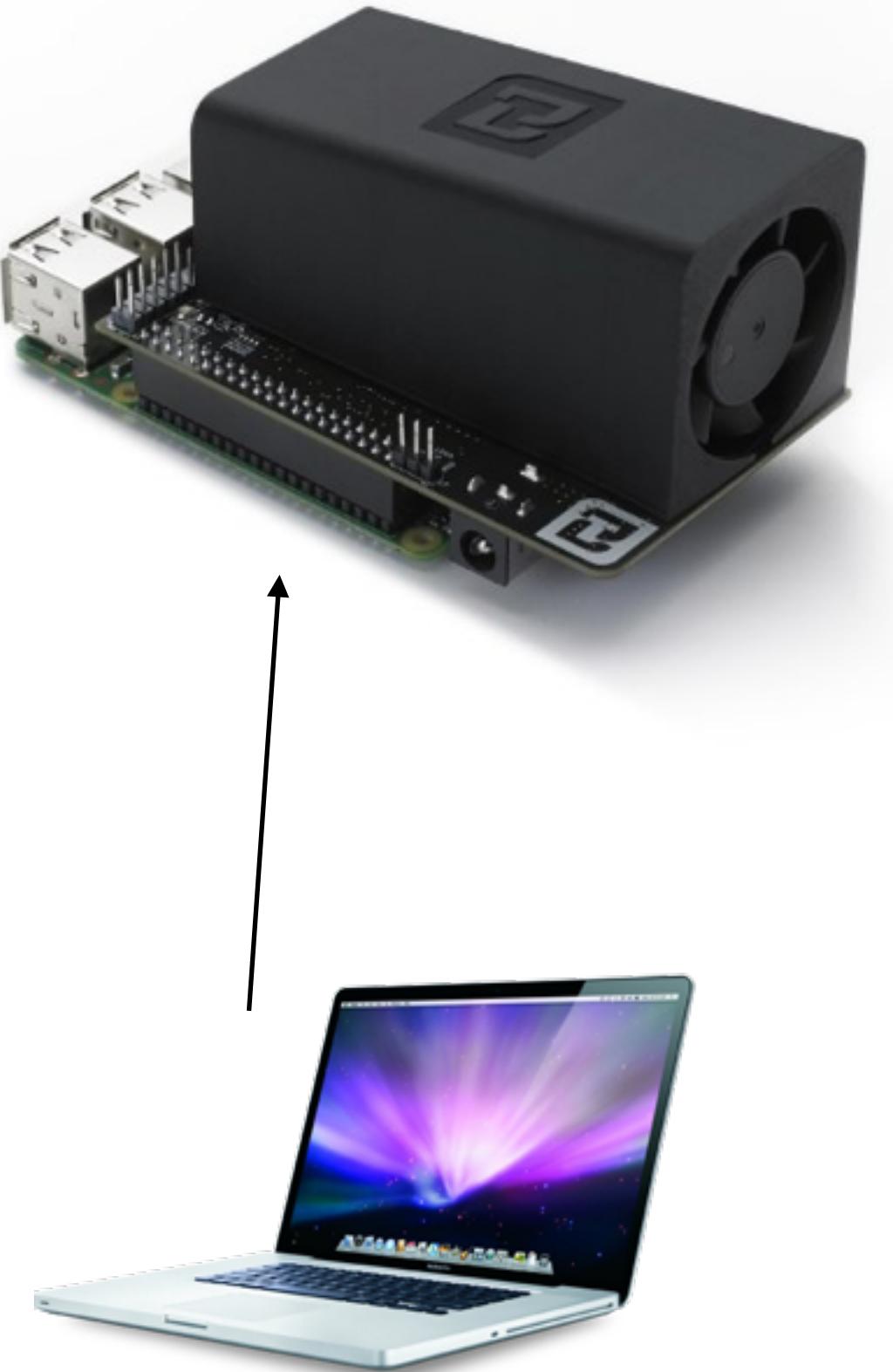


Example Zone File:

```
$ORIGIN werner.id
$TTL 3600
_http._tcp URI 10 1 http://54.231.237.47/werner.id
```

Security on the new Internet

Can ask for consensus hash from friends



Control plane vs data plane

- Blockchains are horrible for data & compute
- P2P networks are horrible for performance

Serverless Computing

- Push computing to client-side
- Little to no infrastructure to manage

```
import blockstack from 'blockstack'
let user = blockstack.loginUser()
user.get("photos")
```

Project Status



Blockstack

Building a new decentralized web

🔗 <https://blockstack.org>

Repositories

People 7

Teams 6

Projects 0

Settings

Pinned repositories

blockstack

The new decentralized Internet

498 60

blockstack-core

A server that handles the core functionality of Blockstack

Python 622 73

blockstack-cli

A command line interface and client for Blockstack

Python 157 37

blockstack.org

The Blockstack website

JavaScript 18 20

blockstack-explorer

A block explorer for Blockstack

JavaScript 4 5

virtualchain

Library for scanning blockchains and running Blockstack state engines

Python 33 7

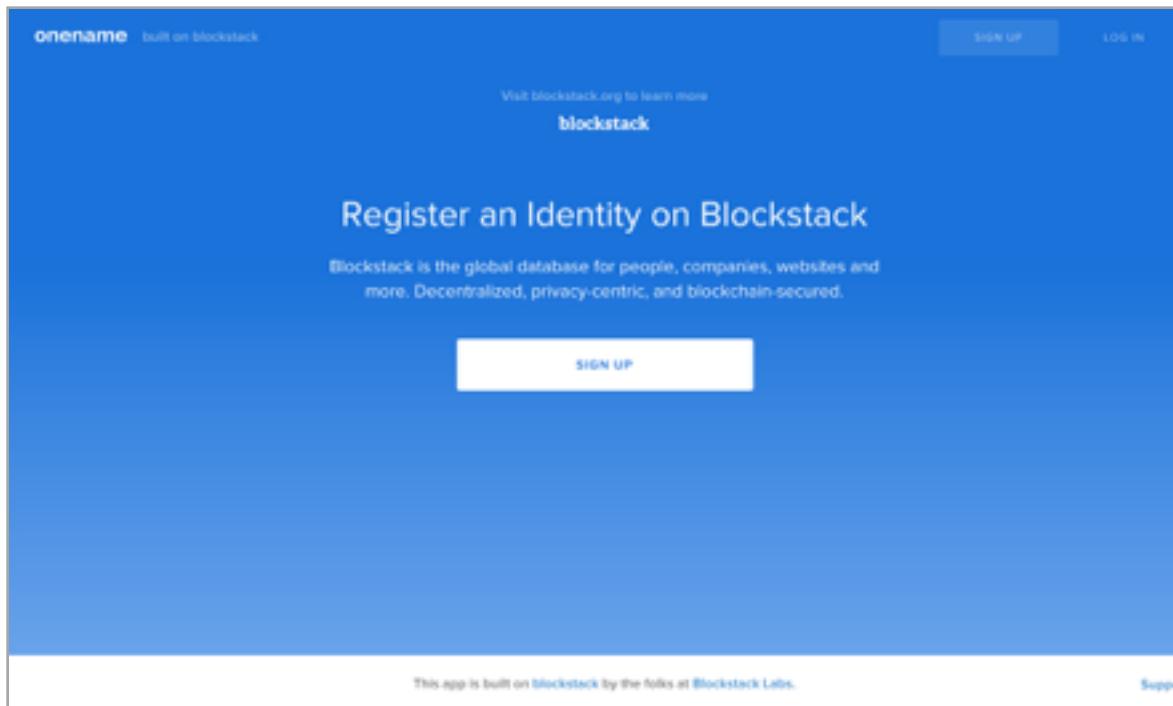
Customize pinned repositories

We launched several key Blockstack clients

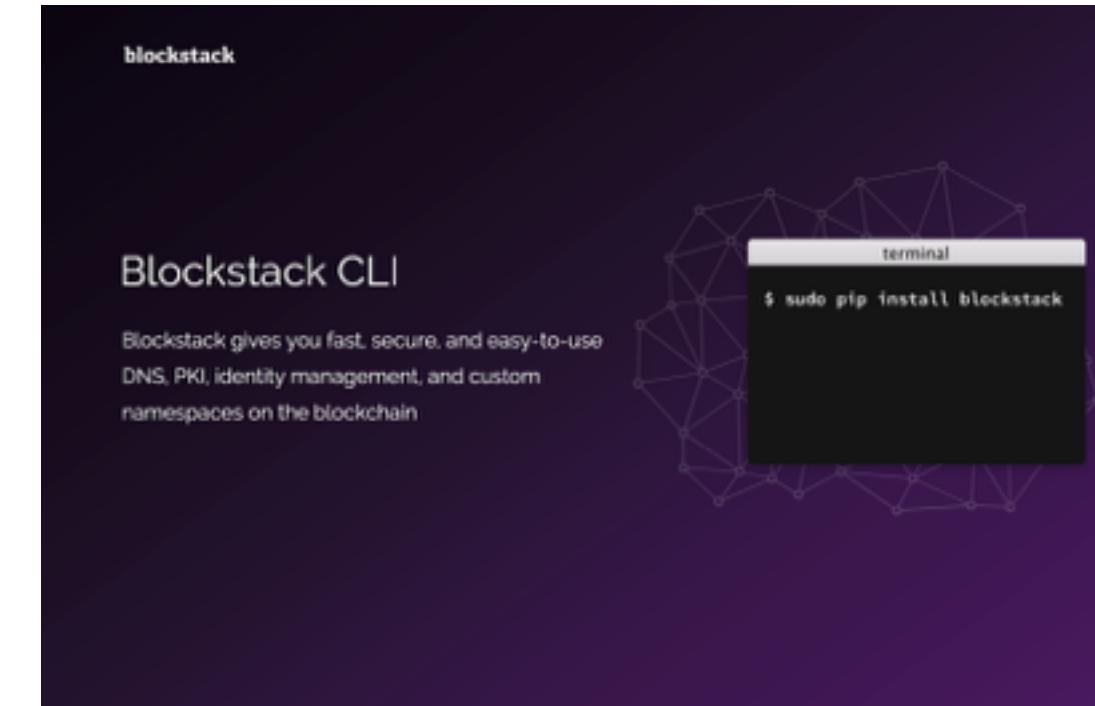


blockstack

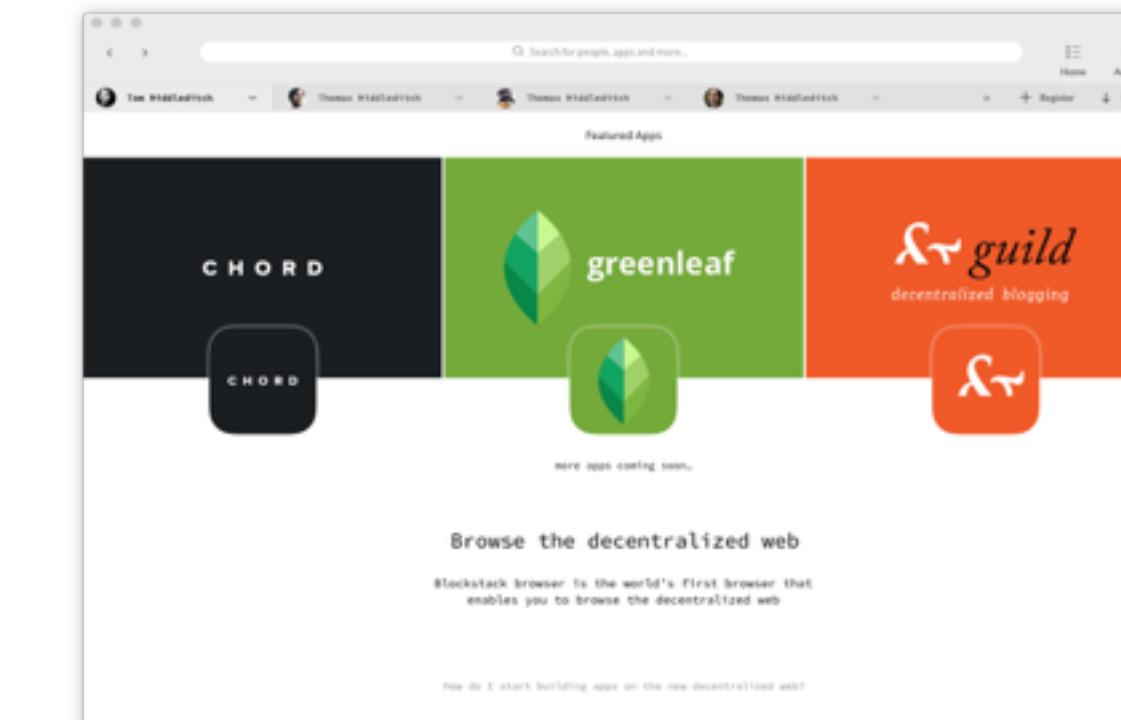
Onename
Web App



Blockstack
Command-line Interface



Blockstack
Browser



```
$ blockstack lookup fredwilson.id
```

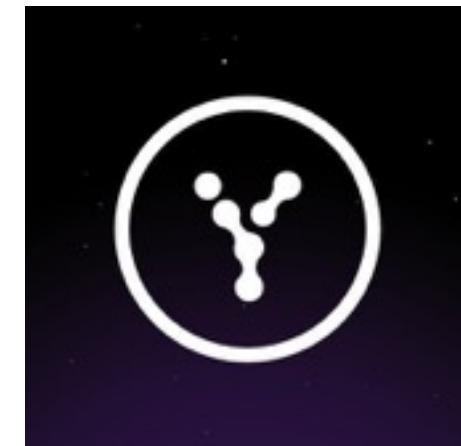
You should get a response like this:

```
{
  "data_record": {
    "name": "Fred Wilson",
    "bio": "I am a VC",
    "website": "http://avc.com"
    ...
  }
}
```

Organizations building on Blockstack range from startups to academic institutions to large enterprises



OpenBazaar



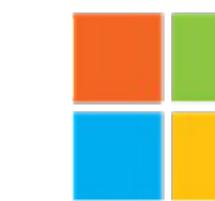
CONSENSYS



DemocracyOS

anyshare

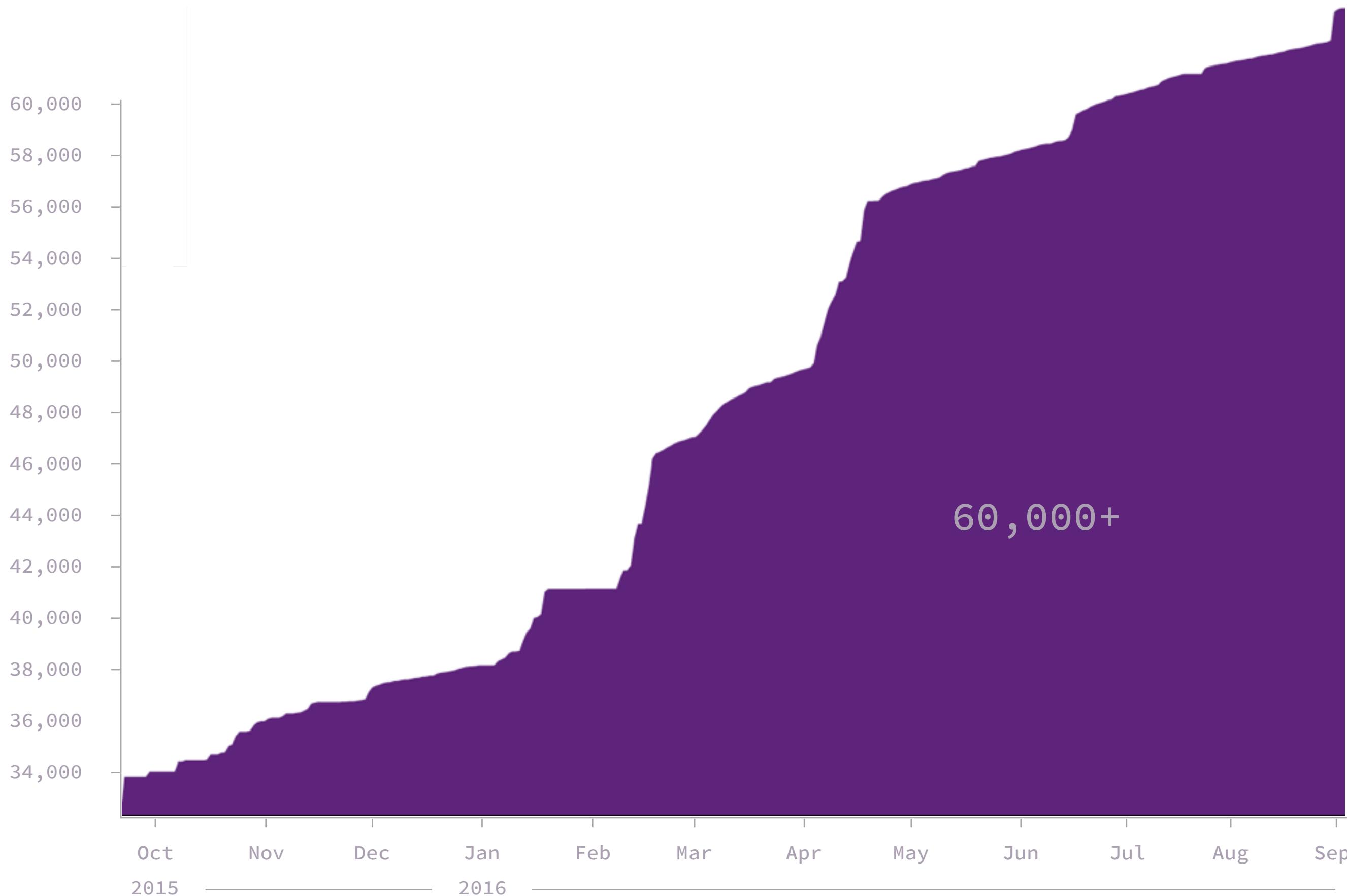
consent



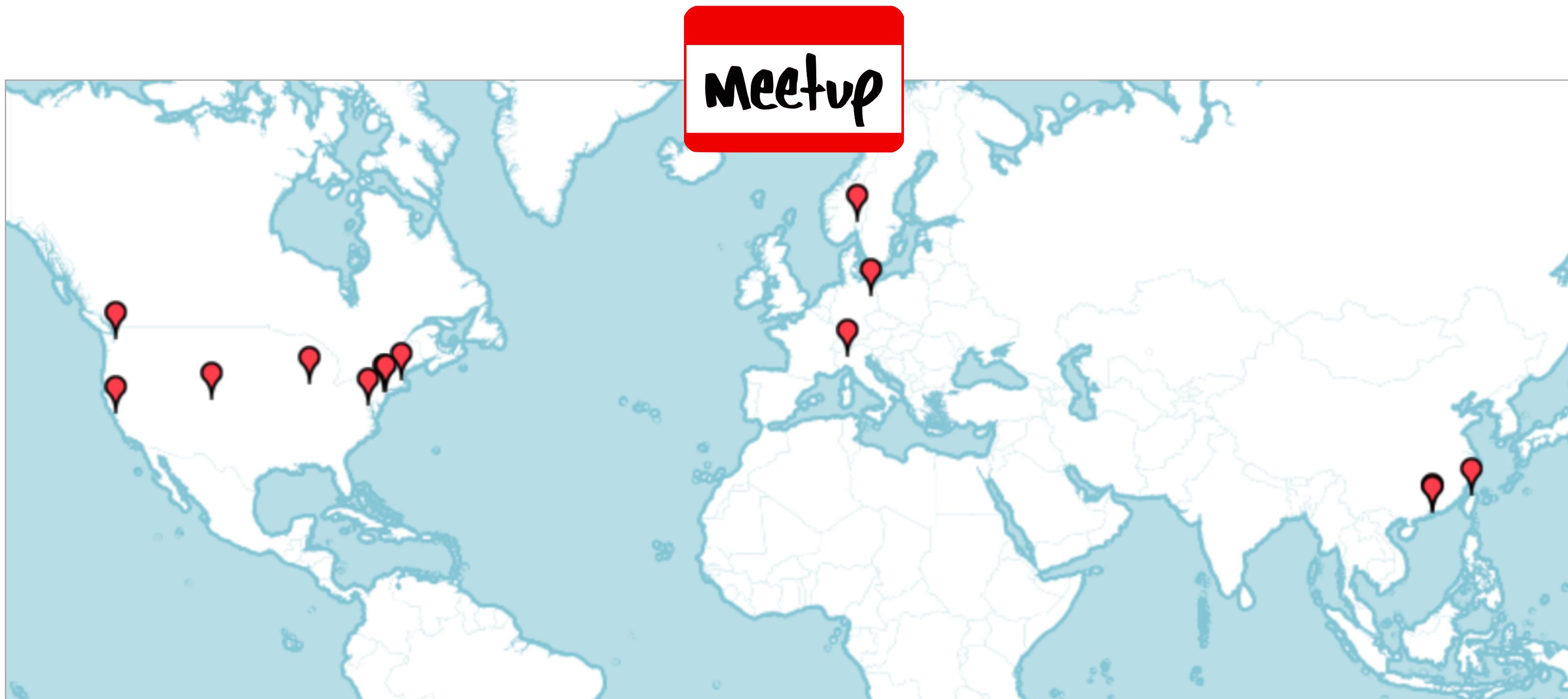
Microsoft



Registrations in the .id namespace



We've started developer meetups around the world



1,674
members

6
interested

14
Meetups

14
cities
7
countries

Advisors



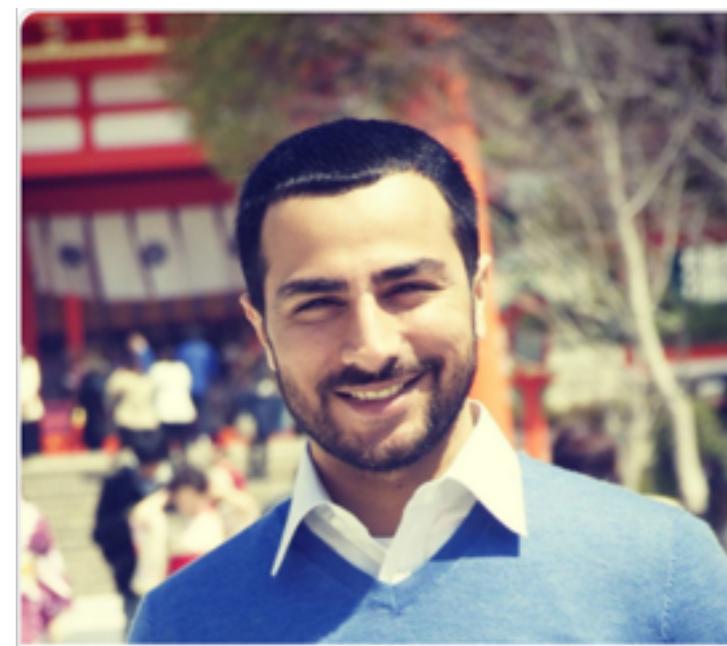
+judecn

Jude Nelson



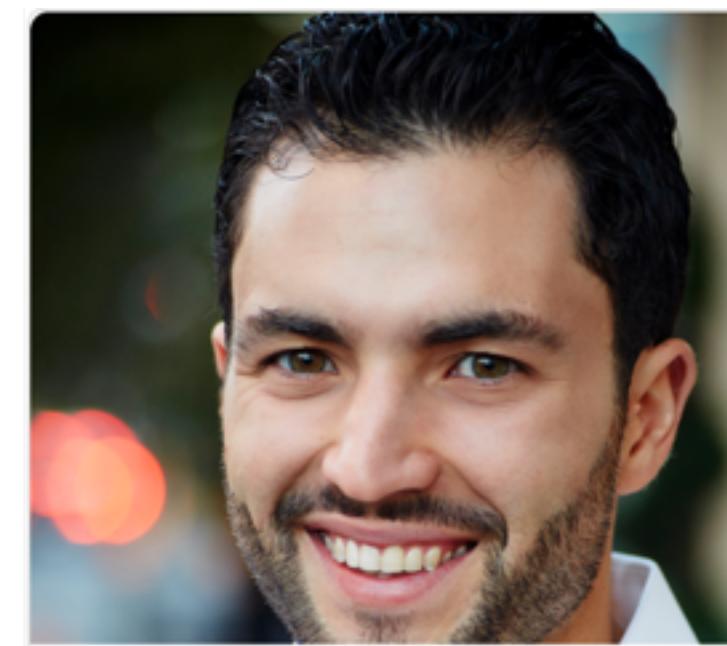
+guylepage3

Guy Lepage



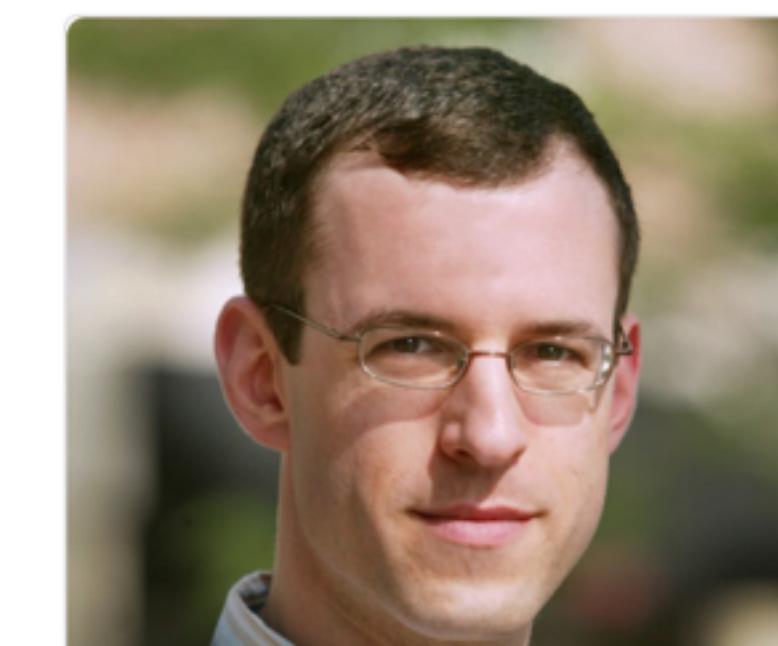
+muneeb

Muneeb Ali



+ryan

Ryan Shea



+mfreed

Mike Freedman

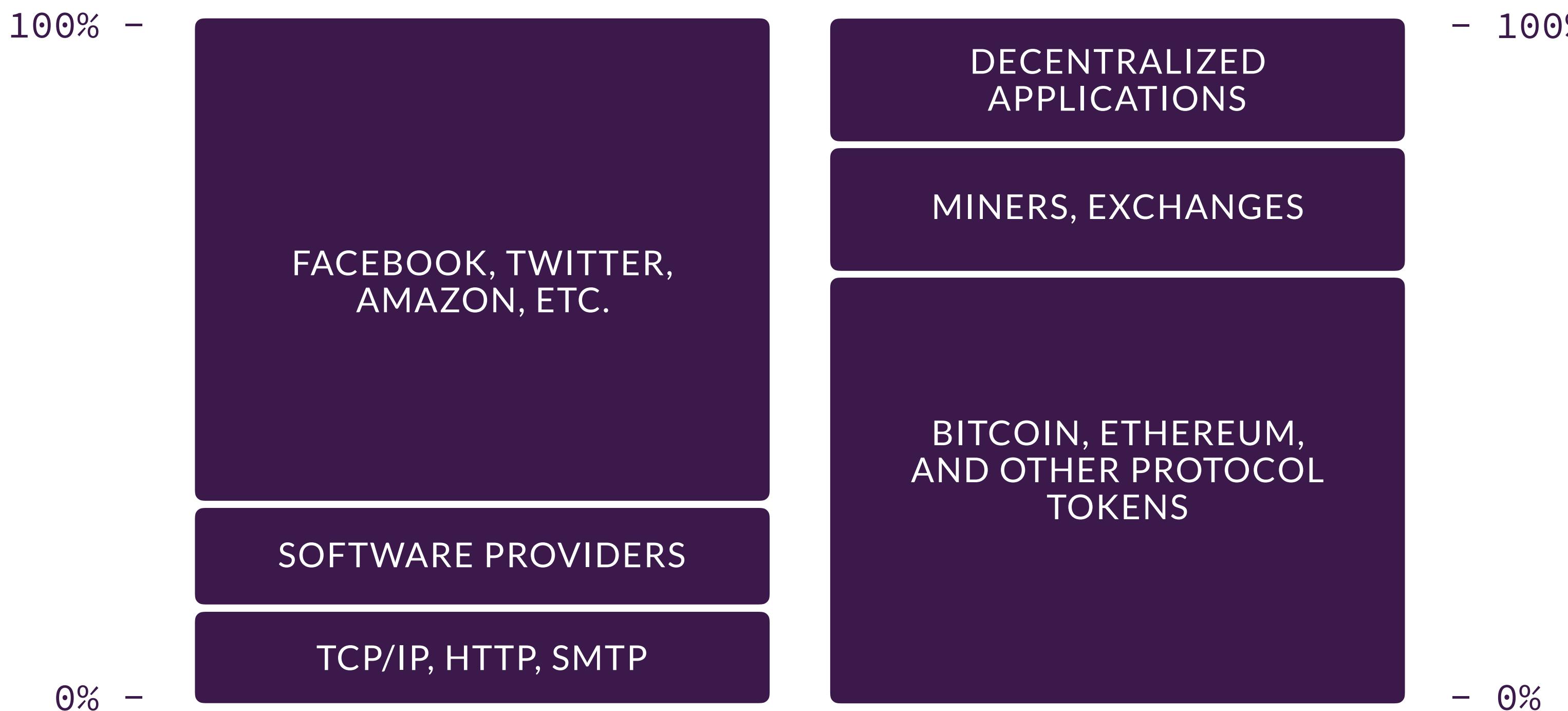


+jp

JP Singh

plus open-source contributors and 3000+ community members

Thesis: value capture will move down the software stack



More info: <https://www.usv.com/blog/fat-protocols>



The new Internet

In the real world, we have property rights.



The New Internet



blockstack

werner.id



muneeb.id



blockstack

Old Internet

#1 Blind Trust

#2 No Ownership

New Internet

#1 ~~Blind Trust~~

#2 ~~No~~ Ownership

Let's build a truly open and fair Internet!



Thank you

Twitter:

@muneeb

@blockstackorg