

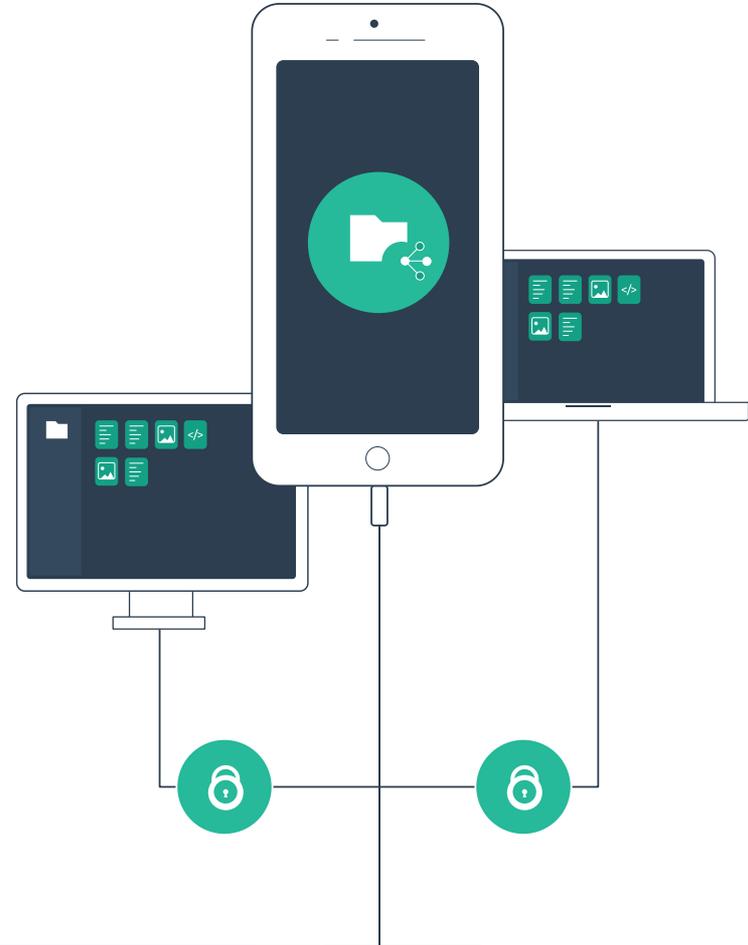


The Private Web



Kevin O'Dwyer

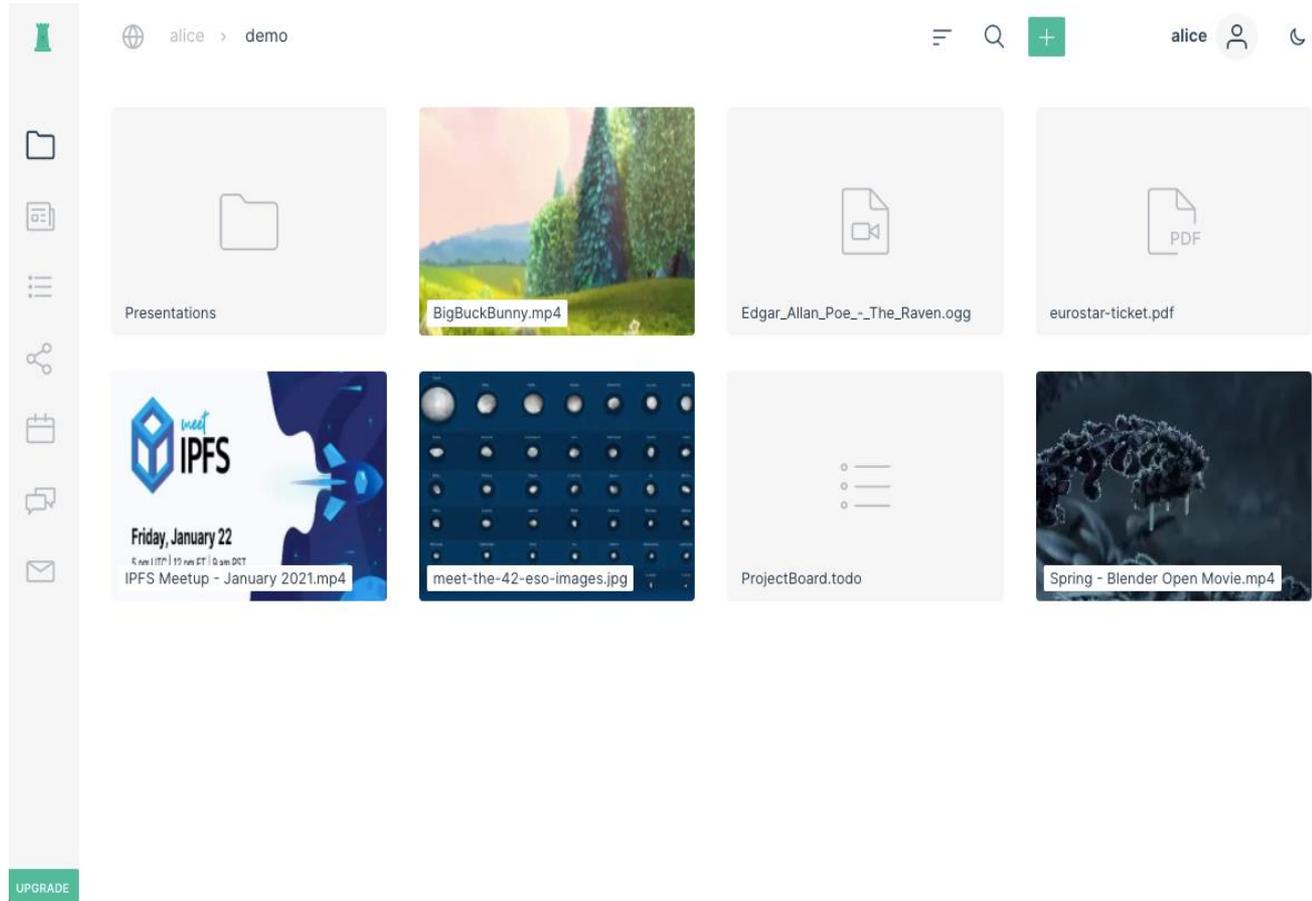
Co-founder
R&D Engineer



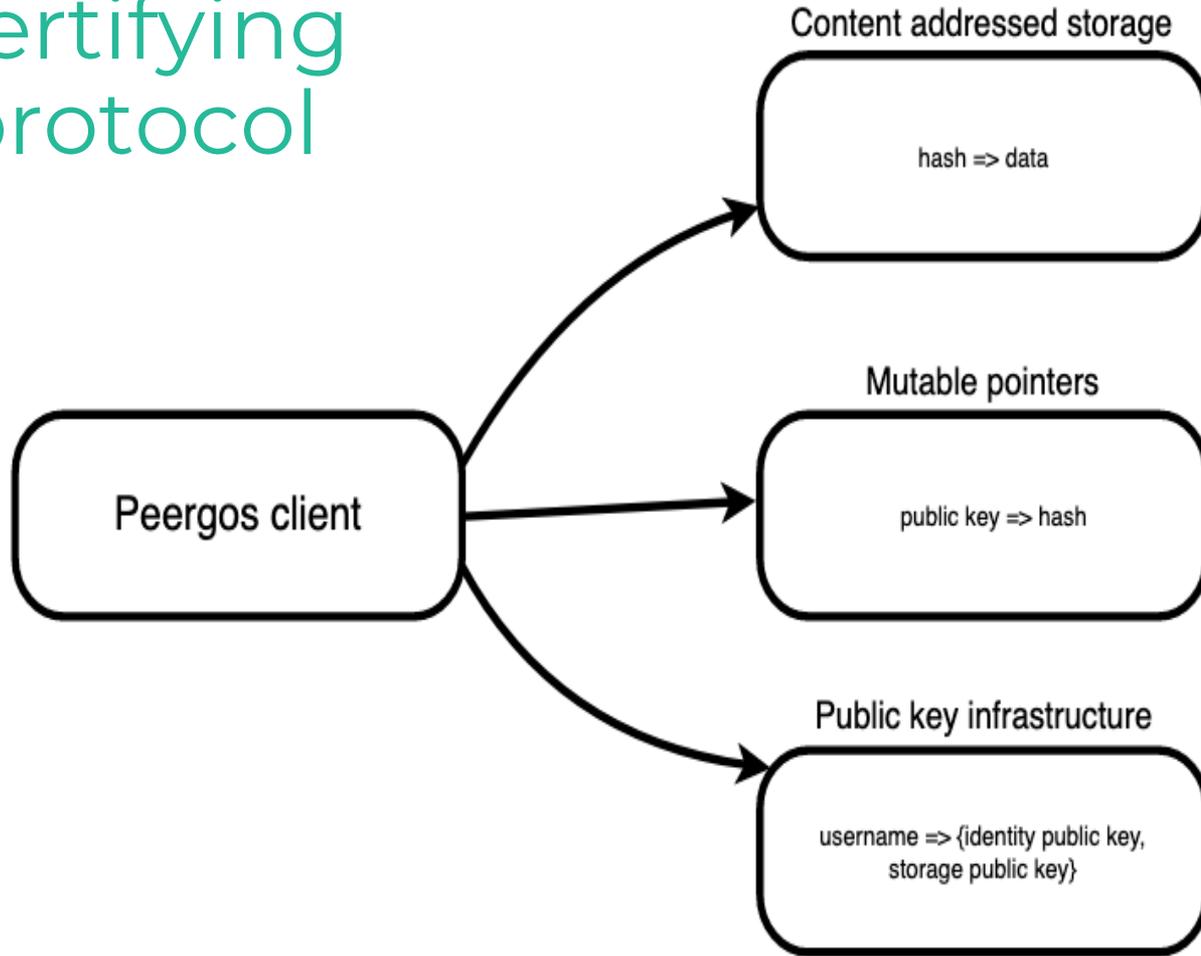
Our vision:

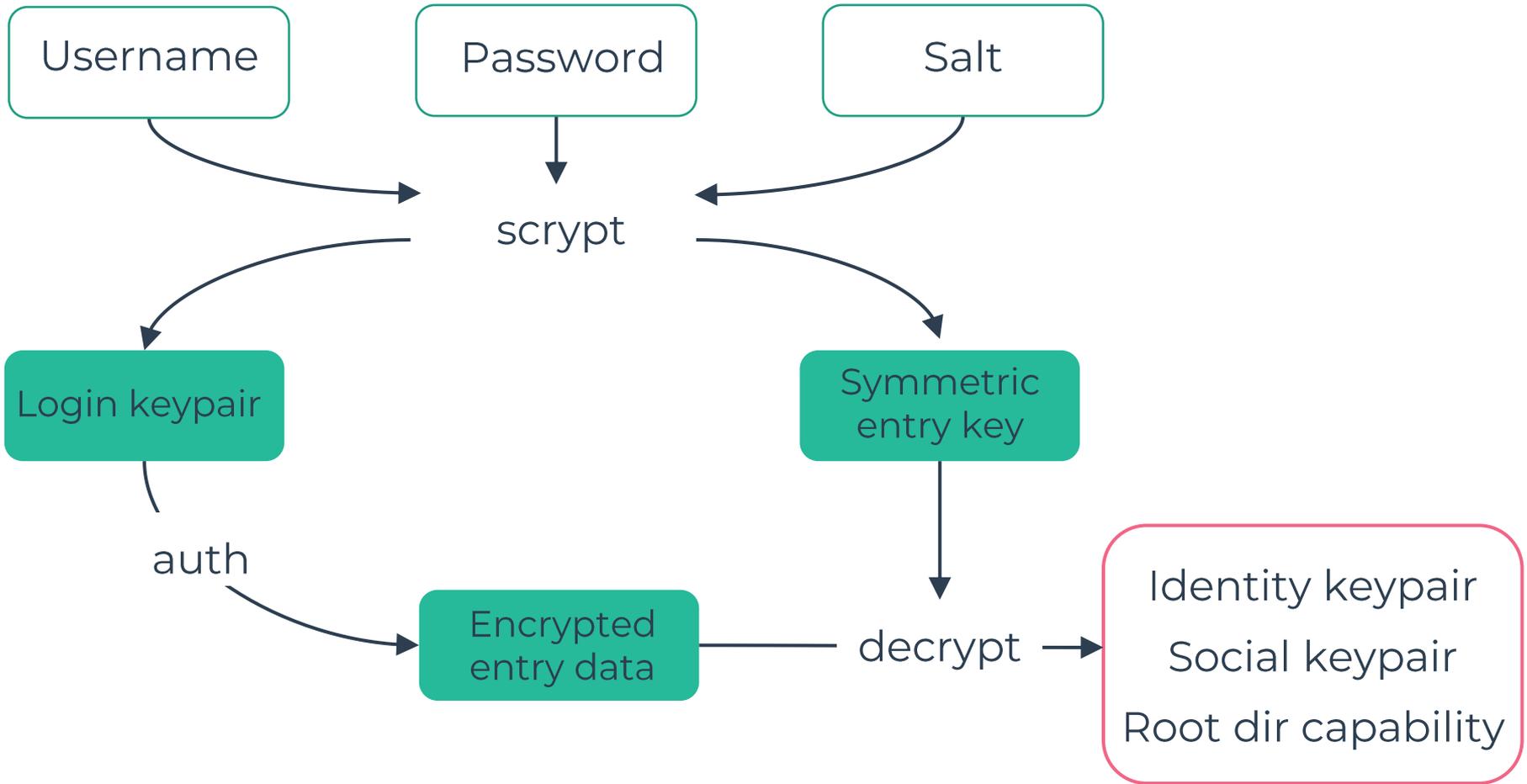
To build a **private web** where end users
are **in control** of their data

Drive



Self-certifying web protocol



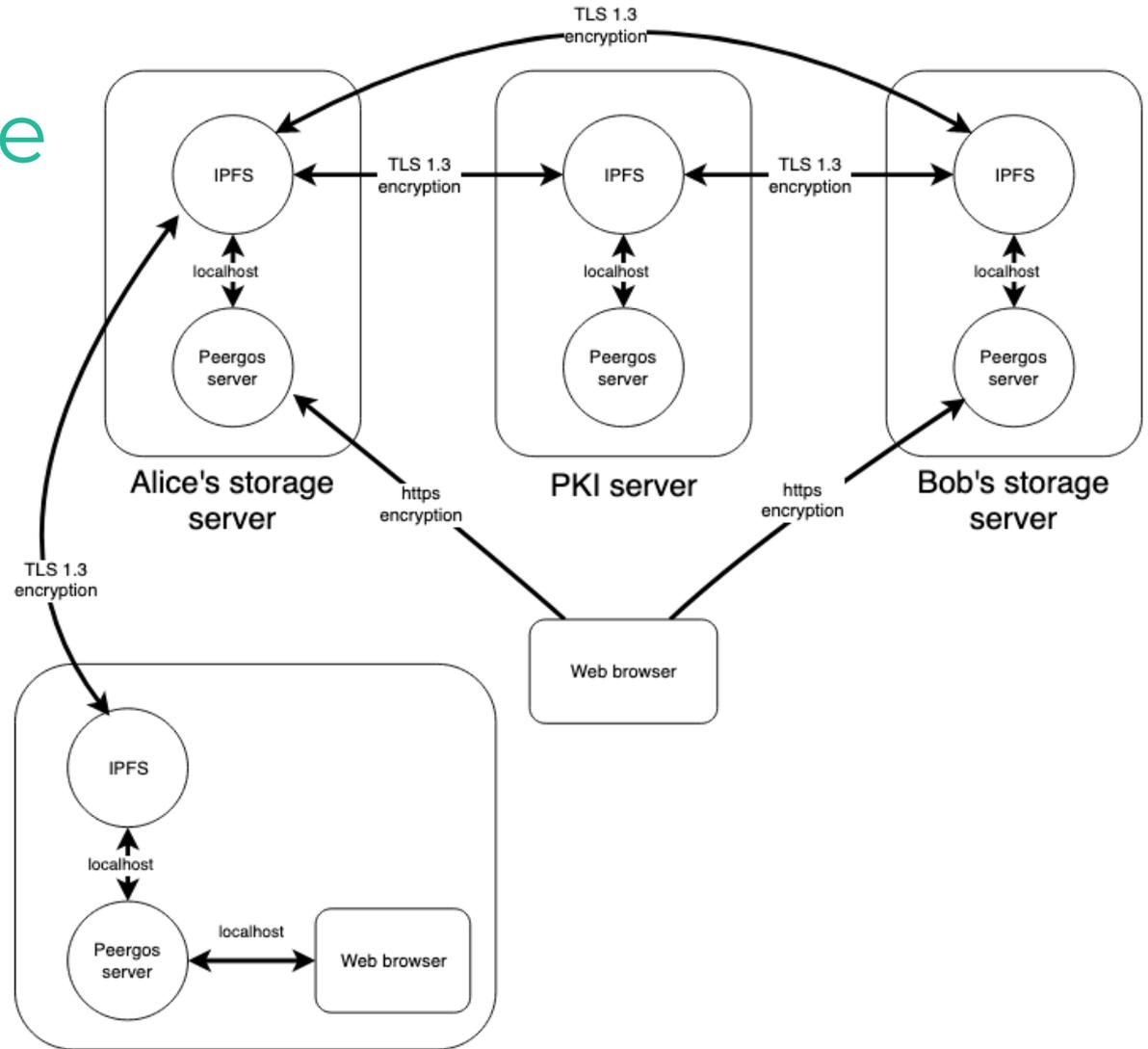


<https://github.com/peergos/ipfs-nucleus>

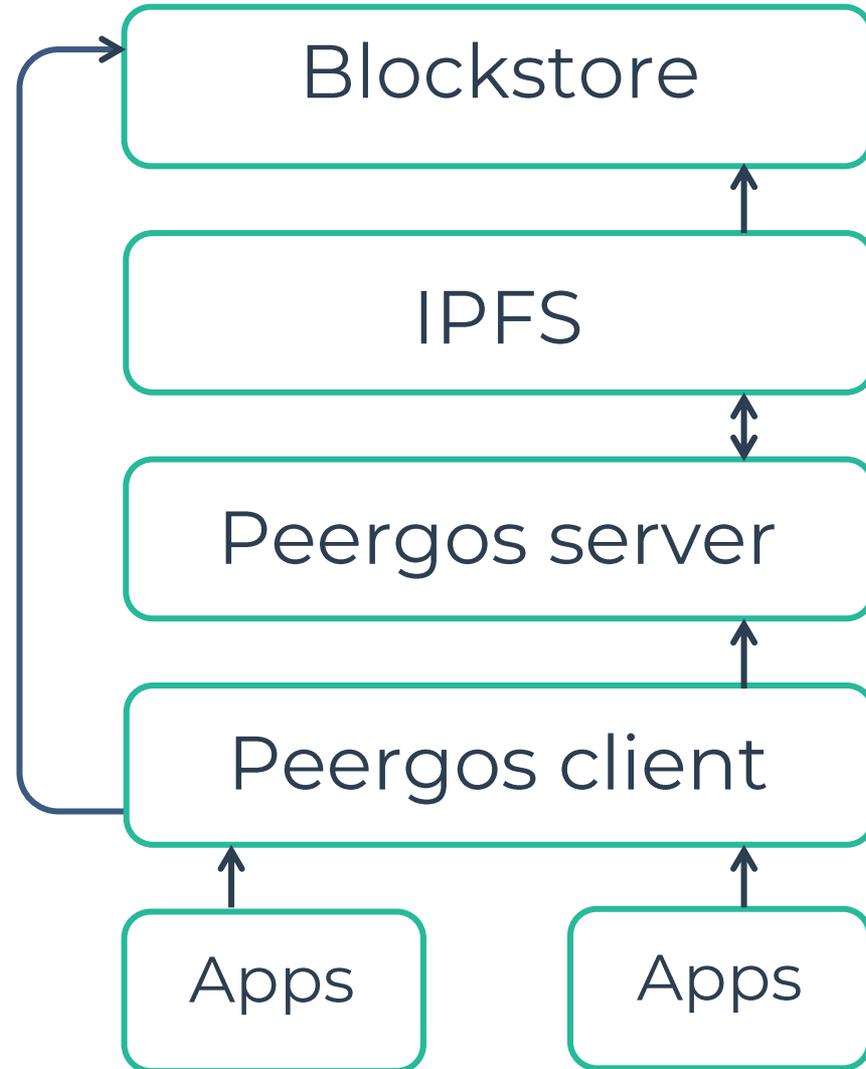
- p2p http proxy
- id
- block.get + Block Level Access Control (BATs)
- block.put
- block.stat
- refs
- block.rm & refs.local (only needed by GC)



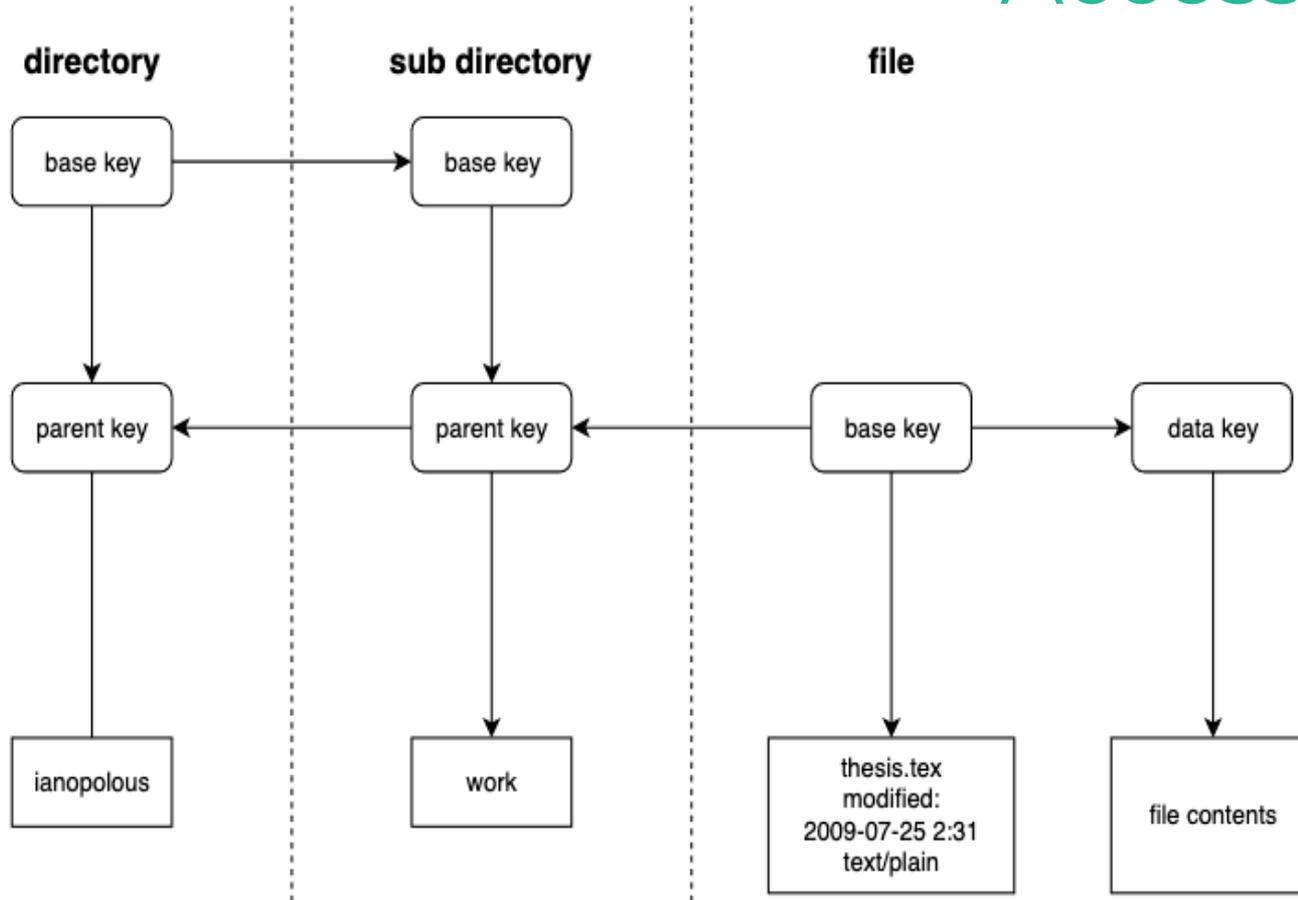
Architecture



Trust boundaries



Access control



Metadata protection

- File – size, name, path, mime type, modified date etc
- Folder – topology
- File/Folder – look the same to the network
- # of Files/Folders
- Sharing – who has access, # have access



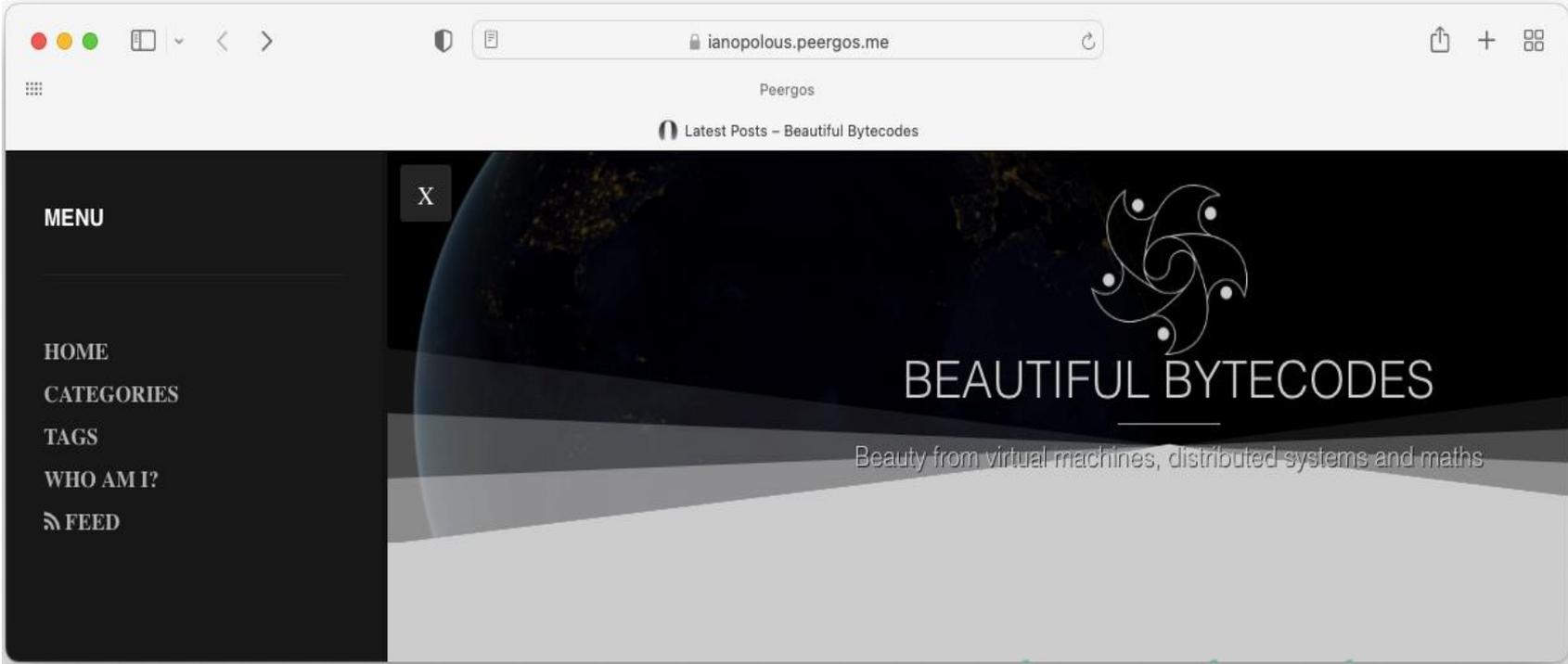
GraalVM™

```
10 @JsType
11 public class MessageEnvelope implements Cborable {
12
13     public final Id author;
14     public final TreeClock timestamp;
15     public final LocalDateTime creationTime; // Stored acc
```

```
1217 @JsMethod
1218 public CompletableFuture<Boolean> sendInitialFollowRequests(String[] targetUsernames) {
1219     Set<String> usernames = new HashSet<>(Arrays.asList(targetUsernames));
1220     return Futures.reduceAll(usernames,
1221         identity: true,
1222         (b, targetUsername) -> sendFollowRequest(targetUsername, SymmetricKey.random()),
1223         (a, b) -> a);
1224 }
```

```
that.context.sendInitialFollowRequests(this.targetUsernames).thenApply(function(success) {
    ...
}).exceptionally(function(throwable) {
    ...
});
```

Static hosting



Social feed

Newsfeed

New Post

bob

alice posted at 2021-12-28 20:32:40

Holiday pics



comment

you commented at 2021-12-28 20:40:13

It's raining in London, as per usual

comment

alice shared the file: BigBuckBunny.mp4



UPGRADE

Calendar

Calendar view

demo  

Calendar Settings

View all

My Calendar

Work

Monthly Today < > Sep 2021

Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31	1 • 12:00 Philosop...	2	3 • 18:30 Dance so...	4
5	6 • 10:00 Weekly c...	7 FOSDEM Confer...	8 • 12:00 Philosop...	9	10 • 18:30 Dance so...	11
12	13 • 10:00 Weekly c...	14 • 21:30 Presentat...				18
19	20 • 10:00 Weekly c...	21				25

Presentation X

2021.09.14 09:30 pm - 10:30 pm

<https://great-videoconferencing.com>

Active

Work

Share Download

Presentation on Peergos

- The stunning properties we have
- How it works under the hood
- Security analysis

Edit Delete

To-do lists

The screenshot displays a 'Project Board' interface with four columns representing different stages of a project. Each column has a title, a list of tasks, and an 'add new item' button. The tasks are numbered and include a trash icon for deletion.

Project Board

alice

- Back log**
 - 1. faster x
 - 2. better x
 - 3. cheaper x
- In Development**
 - 1. make shiny x
 - 2. add bells x
 - 3. add whistles x
- In Test**
 - 1. functional bits x
 - 2. non-functional bits x
- Done**
 - 1. MVP x

Sintel - Third Open Movie by Blender Foundation.mp4



Search

Filename contains

Search

Results: 16

Name	Directory	Size	Modified
abcbdbc.bin	/bob/files/base/ddabdb/ceddab	536	2021-12-29 13:11:32
abcbddb.bin	/bob/files/base/ddabdb/aededd	905	2021-12-29 13:11:42
abceebaa.bin	/bob/files/base/ccdaa	515	2021-12-29 13:11:16
abdeebc.bin	/bob/files/base/ccdaa/aedcd	876	2021-12-29 13:12:03
bdeabdc.bin	/bob/files/base/badcca/ccacac	435	2021-12-29 13:12:08
beabdab.bin	/bob/files/base/ddabdb/aededd	981	2021-12-29 13:11:44

Verifying friend: alice



Scan your friend's QR code

Unverified

Or you can read these numbers out to each other (they should match)

06882 44559 99516 80567
 73787 12781 57452 89352
 77396 72808 27052 36700

Share Sintel - Third Open Movie by Blender Foundation.mp4

please select user

- Read Only
 - Read & Write
- Or Group(s):
- Friends
 - Followers (Includes Friends)

Share

Read and Write Access:

charlie

Revoke

Read only Access: None

```
http://localhost:8000/
#%7B%22secretLink%22:true%2c%22link%22:%22%6DZhrRPT4ugkJuUfcQawUq3rwNfbHmJ
fXMmca3urAwibhxJvvqwkTQsMQ1x1n/
6MDZhrRPT4ugkJuUfcNxDyCGFPRjGtAoT3YvRoyenD556TPct8iEYiYpWUg589/7gbGq3LVgKex
6bGFpXct5HKUUu3wV7hNVtWrLcM51gfa/
5Pf7Suhv4oY8T5KNvaKJPSDyKbN4dxPAUYBeZ4efYP8HfU8Tbjh%22%2c%22open%22:true%7D
```

Email bridge



New Message

- Inbox 3
- Sent
- ★ Starred 1
- Trash
- Spam
- Archive

Inbox

Search...

-
-
-
-

test@peergos.com 📅 2021-8-16 12:15:41

✉ **Event: status meeting - Tue Aug 17 2021 12:00:00 GMT+0100**

☆ status meeting

test@peergos.com 2021-8-16 12:15:33

✉ **how about lunch?**

★ What to grab a bite to eat at 1:00pm?

test@peergos.com 📧 2021-8-16 12:12:04

✉ **test email**

☆ Hi Alice,
Just testing out the new email clien...

Group chat

The screenshot shows a group chat interface with a sidebar on the left and a main chat area on the right. The sidebar contains a list of chat items:

- Charlie (2021-12-28 21:11:46) - Document attached
- Holiday Plans** (2021-12-28 21:10:52) - alice invited charlie
- Golf (2021-12-28 21:05:46) - where's the bar? 🍷
- Lunch (2021-12-28 21:03:57) - be there in 5 mins...

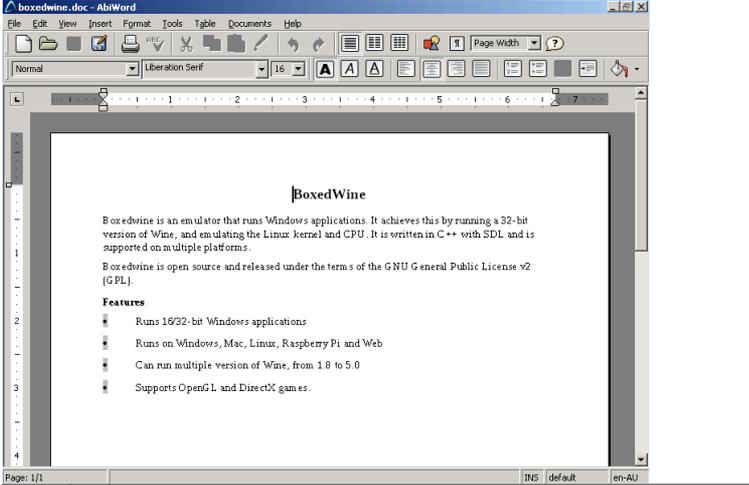
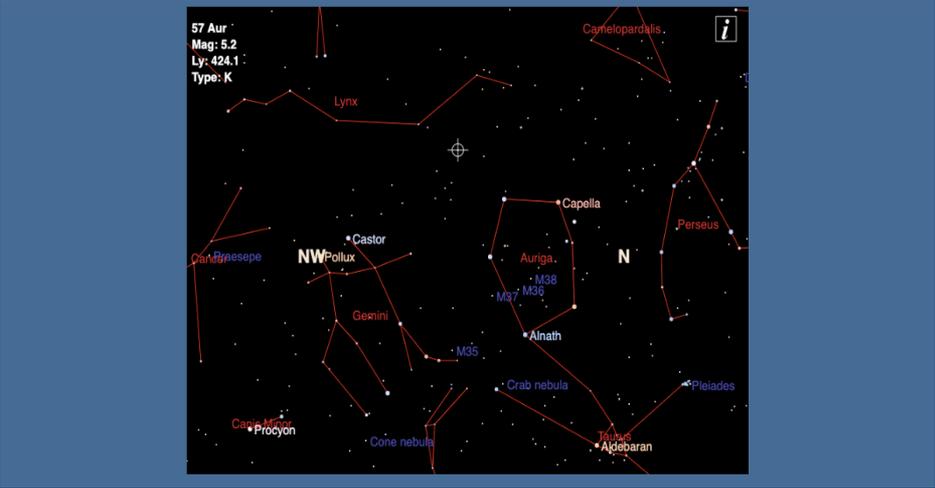
The main chat area is titled "Holiday Plans - you,bob,charlie". It displays a message from Alice: "Enjoy!! 😊" (2021-12-28 20:58:12). Below it is a message from Bob: "It's raining in London 🌧️" (2021-12-28 20:58:31). Another message from Bob: "Now where is my passport?" (2021-12-28 20:59:53). A fourth message from Bob: "And my wallet? 🙄" (2021-12-28 21:01:06). The most recent message is from Alice: "Decided to stay another week" (2021-12-28 21:10:52), which includes an image of a tropical beach and a quote: "Original message: bob | 2021-12-28 20:55:02". The chat area also features a "Type a message" input field and icons for emojis, attachments, and voice recording.



Future developments



alice/astro/IKpegasi.html





IQ Test

Your email address:

What is the answer?

A) -1 B) 42 C) Off-by-One

```
req.open("POST", "form/survey.txt", true);
```

```
{"emailAddress":"test@example.com","answer":"42"}
```



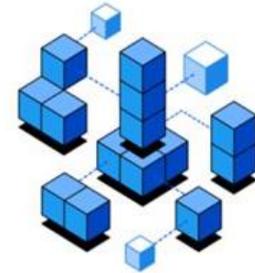
```
fetch('data/list.dat', { method: 'GET' })
```

- | | | |
|----|-----------|---|
| 1. | Milk | x |
| 2. | Bread | x |
| 3. | Chocolate | x |

```
let body = encoder.encode(JSON.stringify(items));  
fetch('data/list.dat',{ method: 'PUT', headers: headers, body: body})
```



**Protocol
Labs**



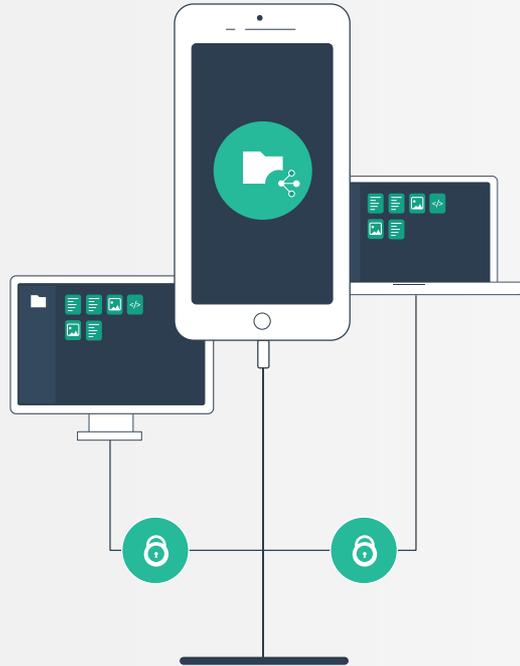


Sign up for an account on beta.peergos.net

50 GiB for £5 per month

Usernames taken on a first come first served basis





Control your data.
Control your destiny.

Questions?

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book.peergos.org



@peergos