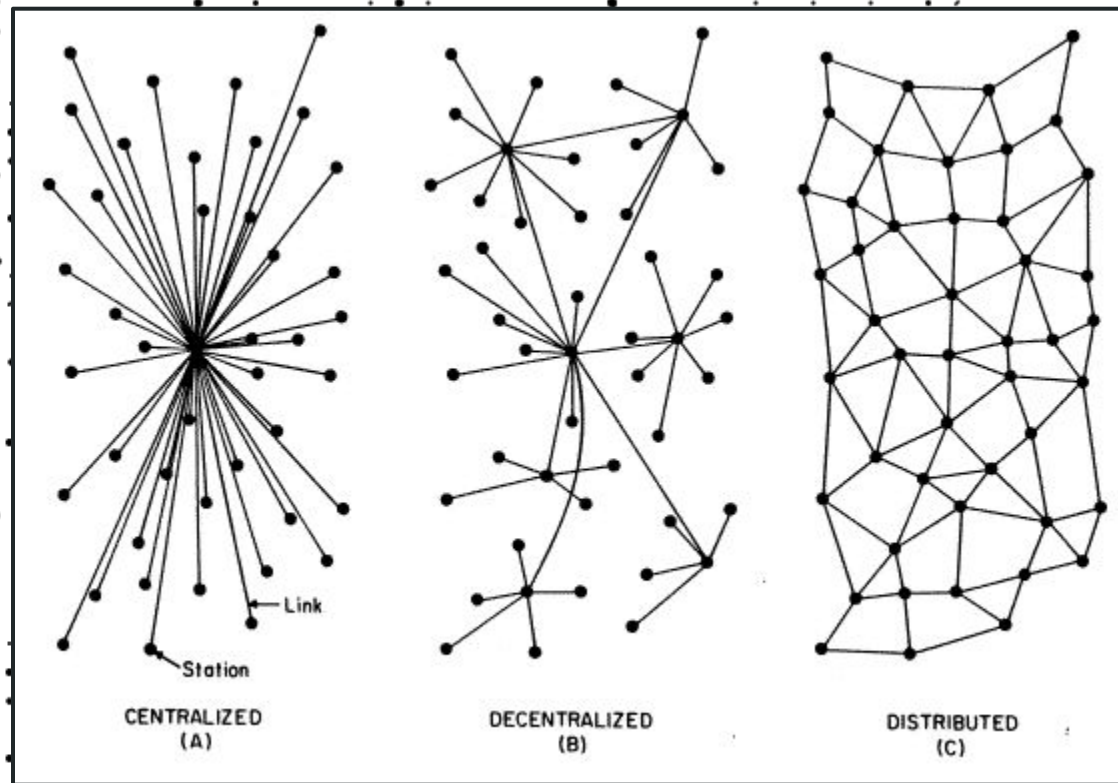


IPID

an open standard for defining and managing your personal online identity

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EQUIFAX

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If you have a credit report, there's a good chance that you're one of the **143 million** American consumers whose sensitive personal information was exposed in a data breach at *Equifax*, one of the nation's three major credit reporting agencies.



“The lack of oversight on how data is stored and how political advertisements are sold raises concerns about the integrity of American elections as well as privacy rights”

. Senator [Amy Klobuchar](#) (D-Minn.) and Senator [John Kennedy](#) (R-La.)



Protocol Labs





Multiformats

Multihash

/sha2-256/256/2cf24dba5fb0a30e26e83...

11202cf24dba5fb0a30e26e83...

Multiaddress

/ip4/127.0.0.1/tcp/8000/http/foo.jpg

047f000001061f4001E0/foo.jpg

Minimal Profile

```
corin@corinsdesktop:~/ipfs/ipid/wallet
```

```
[corin@corinsdesktop ipid]$ tree -a
```

```
.
├── email
├── .id
└── name
```

```
0 directories, 3 files
```

```
[corin@corinsdesktop ipid]$
```


Extended Profile

```
corin@corinsdesktop:~/ipfs/ipid/wallet
```

```
[corin@corinsdesktop ipid]$ tree -a
```

```
.
├── email
├── .id
├── name
├── wallet
│   └── btc
```

```
1 directory, 4 files
```

```
[corin@corinsdesktop ipid]$
```


Extended Profile

```
corin@corinsdesktop:~/ipfs/ipid/blog
[corin@corinsdesktop ipid]$ tree blog
blog
├── 01_introduction.md
├── 02_next_post.md
├── 03_another_post.md
└── 04_a_post.html

0 directories, 4 files
[corin@corinsdesktop ipid]$
```

IPFS Daemon

```
corin@corinsdesktop:~/ipfs/ipid/wallet
```

```
[corin@corinsdesktop ipfs]$ ipfs add -r ipid
```

```
added QmetJ4EEhKUEZrHTeWmumsvF3WzSmA9yf3ZMy6xty2DMjb ipid/email
```

```
added QmRafGmTzWmJfYpLJcjv6MY1TVTTdkbL11mvSaG9CqbK2v ipid/name
```

```
added QmWRoSPZoySadF69M7K55kkPrFzfTTemPLDajeEatNy38Y ipid/wallet/btc
```

```
added QmRmALejiDyTe29uUWyWywwwPJqqoqMVg7fGPbtfwEaTdQ ipid/wallet
```

```
added QmccocgPHdbCWCdU33y1Kceob8KMsAMUtS1i7jSPS1qitc ipid
```

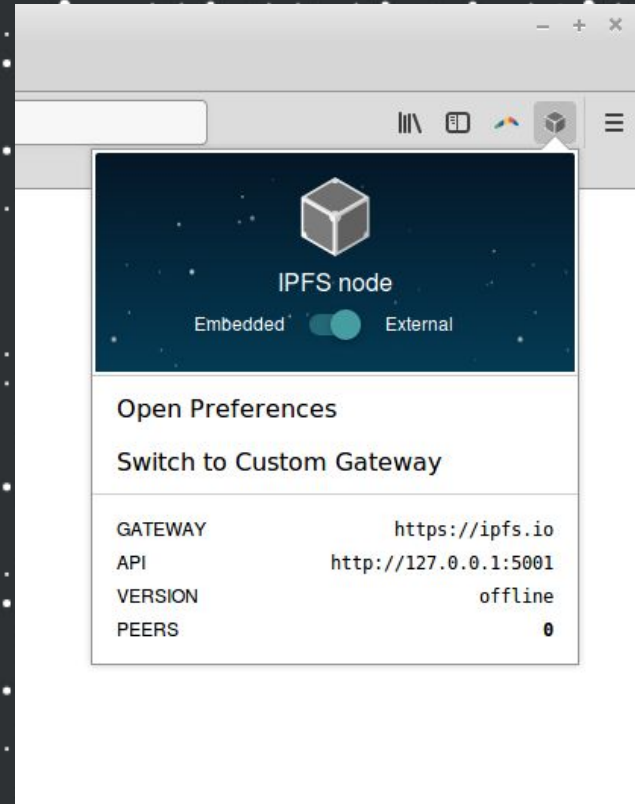
```
[corin@corinsdesktop ipfs]$
```

IPNS Name

```
corin@corinsdesktop:~/ipfs/ipid/wallet
```

```
[corin@corinsdesktop ipfs]$ ipfs name publish /ipfs/QmccocgPHdbCWCdU33y1Kce  
Published to Qmdcfpikbfm3pBaSLPqaDmRpbDRDT12jm19HgXSkM7Ez1X: /ipfs/QmccocgP  
[corin@corinsdesktop ipfs]$
```

IPFS Companion





Reference Implementation

Hosting Multiple Profiles

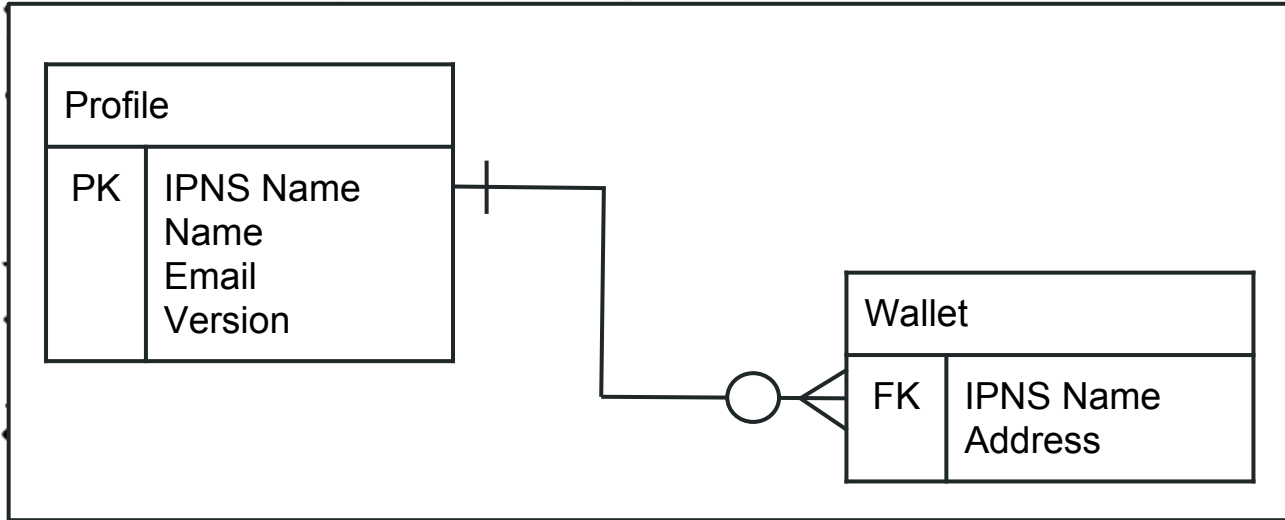
js-ipfs (IPFS implementation)

```
const IPFS = require('ipfs')
const node = new IPFS()

node.on('ready', node.files.add({
  path:    "/ipid/wallet/btc",
  content: "bc1qar0srrr7xfkvy5l643lydnw9re59gtzzwf5mdq"
}))
```

Hosting Multiple Profiles

sqlite3 (Node module)



Generate and Search GUI

JavaScript

Authentication

Passport (Node module)



Example Walkthrough



John Doe

john@email.com

Future Work

manage profiles using blockchain-based smart contracts

- Encrypt parts of footprint and allow requests or payments for sensitive data.
 - Owner can define criteria for data access using smart contracts.
 - For example, a service implementing IPLD could watch the Bitcoin blockchain for a payment to the owner's BTC address.
- Create smart contract managed "groups" which facilitate arbitrarily complex interactions.
 - These groups could have their own IPID data.
 - A group could define arbitrary governance schemes based on its smart contract and thus could represent anything from a company with one person in charge or a town with democratic control.

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