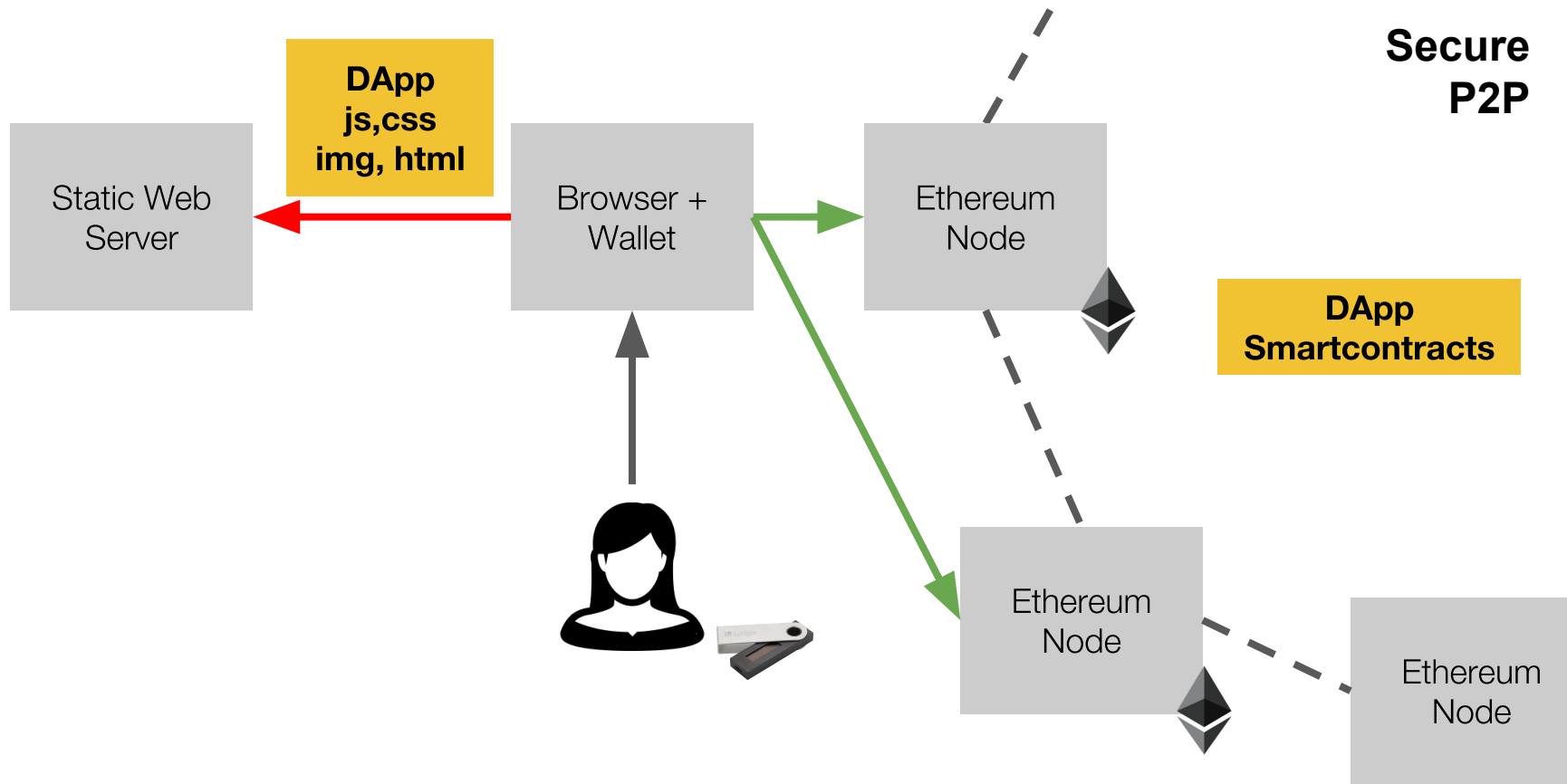




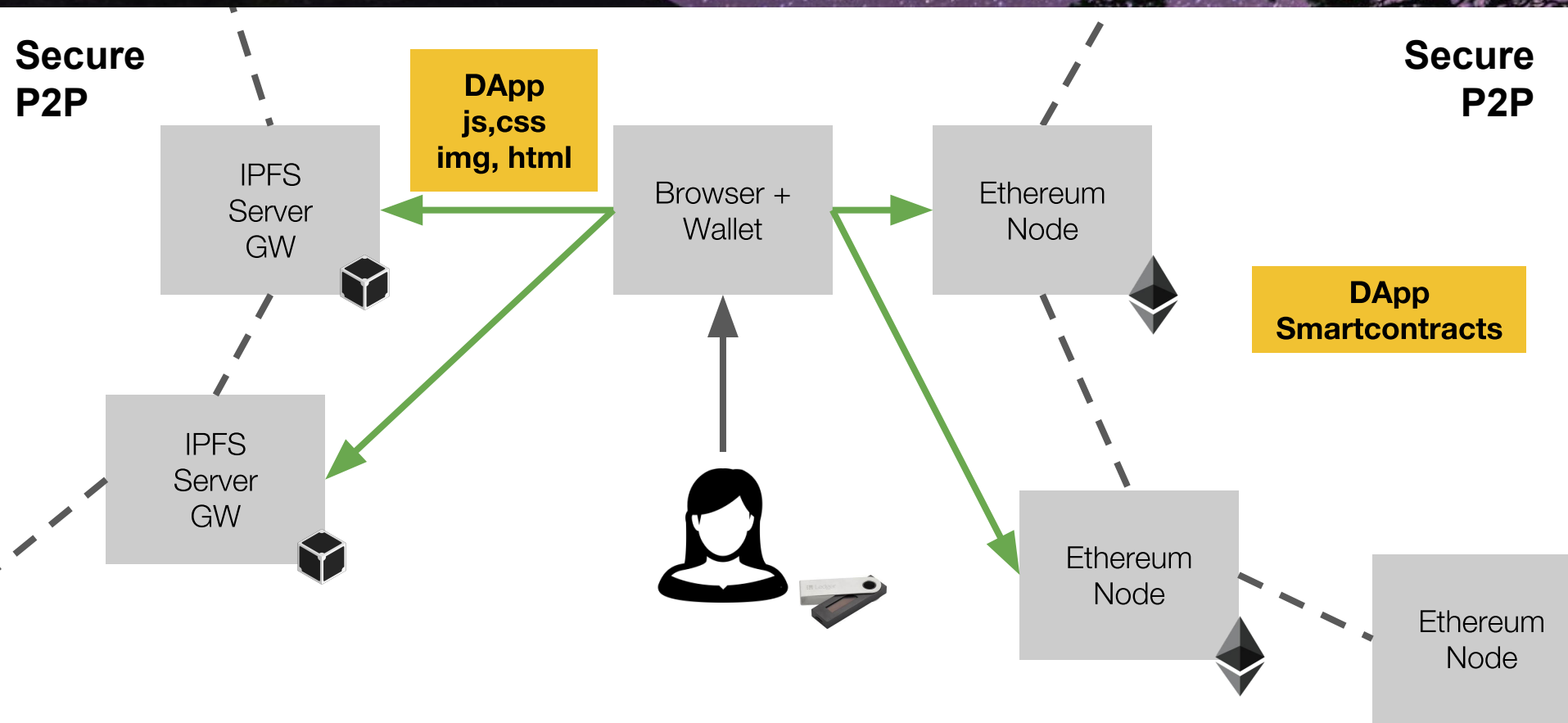
# IPFS Pinning Consortium

[adria@codecontext.io](mailto:adria@codecontext.io)

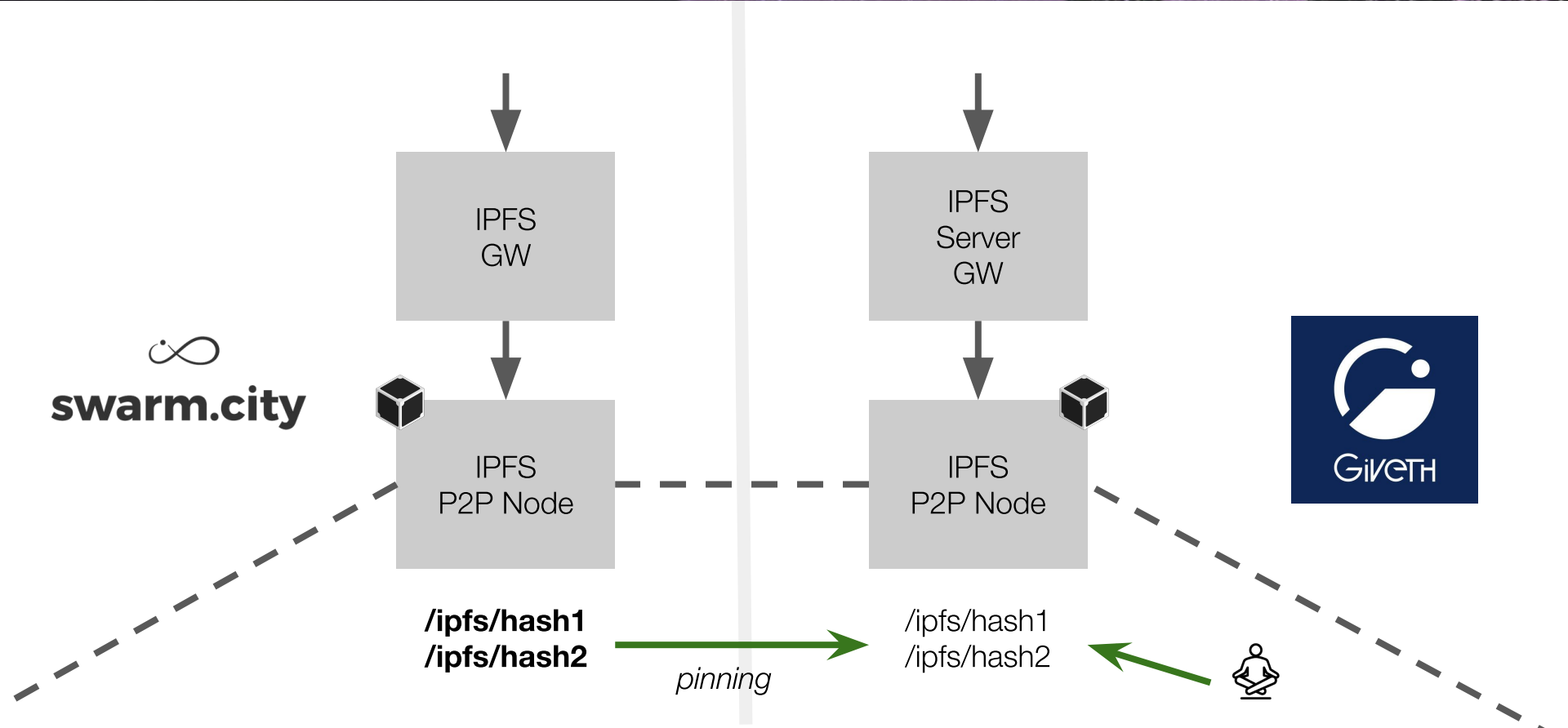
# Why? 🕸 IPFS Pinning Consortium



# Why? 🗨 IPFS Pinning Consortium



# The IPFS 📍 IPFS Pinning Consortium







# The IPFS 📍 IPFS Pinning Consortium

P2P distributed filesystem where files are addressed by their content (hash)

`/ipfs/XLHBNmRQ5sJJrdMPuu48pzeyTtRo39tNDR5`

# The IPFS 🐙 IPFS Pinning Consortium

type: blob

```
{
  "data": "c2Rhc2Rhc2RhUw0KREENCnNkYXMNCmZzZA0KZg0KY
XNkZg0KYXMNCmRmDQphc2RmDQpzYWRmc2Zkc2ZzZGYNCnNhZA0
KZnNkDQpmcw0KZGYNCmFzZA0KZnNhDQpkZmENCnNkZg0KYXNkZ
g0Kc2FkdQpmc2ENCmRmDQpzYWRmDQphc2QNCmZhcw0KZGZzZGY
NCnNhZA0KZmENCnNkZ..."
  links: {}
}
```

sha1

XLykqg61DYaQ8NhkcqyU7rLcnSa7dSHQ16x

type: tree

```
{
  "data": ["blob", "tree", "blob"],
  "links": [
    { "hash": "XLykqg61DYaQ8NhkcqyU7rLcnSa7dSHQ16x",
      "name": "less", "size": 189458 },
    { "hash": "XLHBNmRQ5sJJrdMPuu48pzeyTtRo39tNDR5",
      "name": "script", "size": 19441 },
    { "hash": "XLWVQDqxo9Km9zLyquoC9gAP8CL1gWnHZ7z",
      "name": "template/icon.png", "size": 5286 }
  ]
}
```

sha1

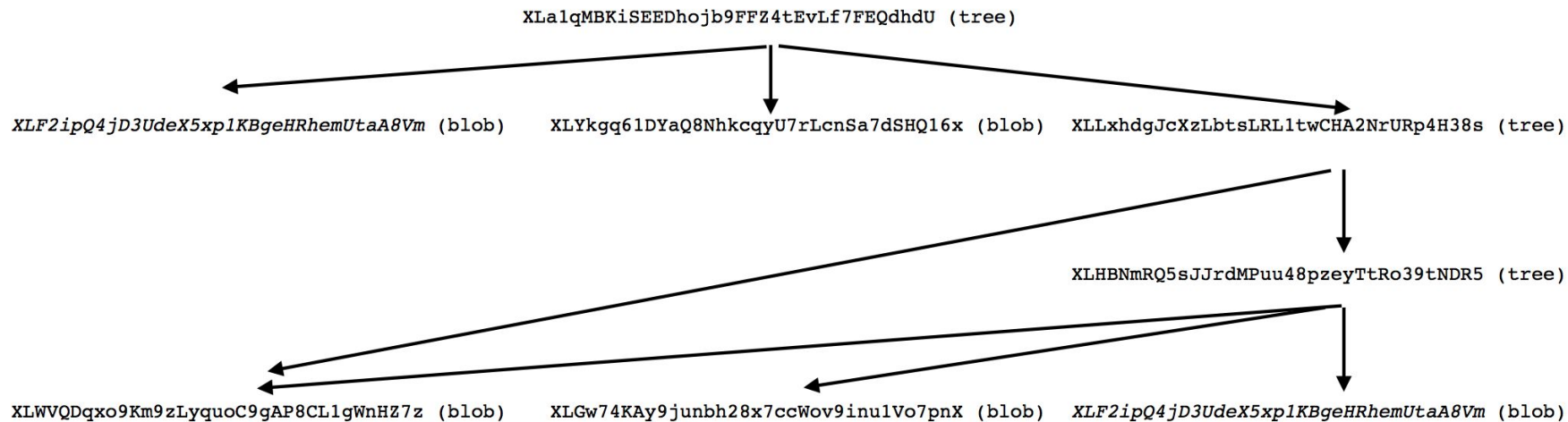
XLGw74KAy9junbh28x7ccWov9inu1Vo7pnX

**/ipfs/XLGw74KAy9junbh28x7ccWov9inu1Vo7pnX/less (content+name)**

**/ipfs/XLHBNmRQ5sJJrdMPuu48pzeyTtRo39tNDR5 (only content)**

*multihash : <function code><digest length><digest bytes>*

# The IPFS 🐙 IPFS Pinning Consortium



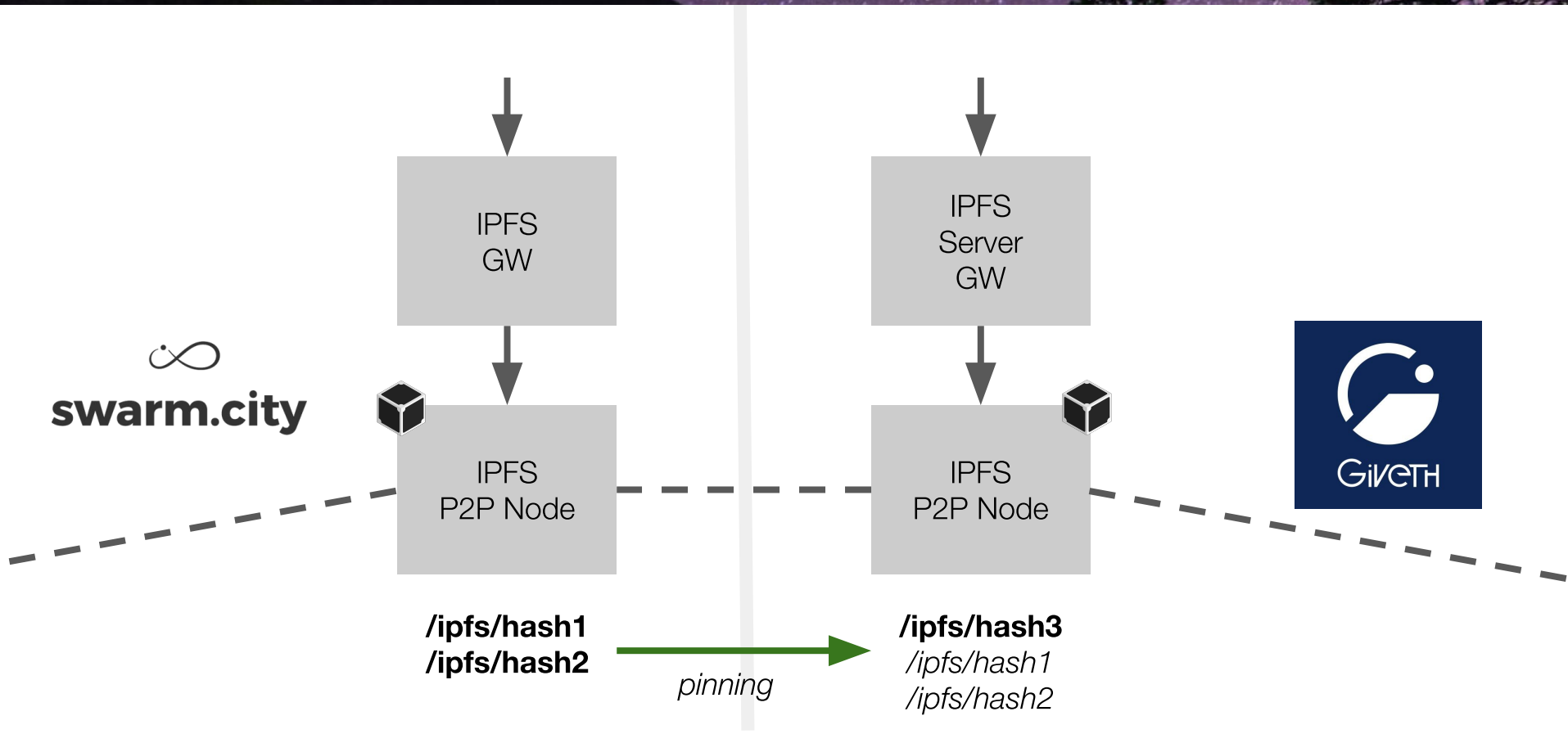


# The IPFS 📍 IPFS Pinning Consortium

<https://ipfs.io/ipfs/QmYwAPJzv5CZsnA625s3Xf2nemtYgPpHdWEz79ojWnPbdG/readme>



# How it works 📍 IPFS Pinning Consortium



# How it works 📍 IPFS Pinning Consortium

∞  
**swarm.city**



IPFS  
P2P Node

**/ipfs/hash1**  
**/ipfs/hash2**  
*/ipfs/hash3*



*cross-pinning*



IPFS  
P2P Node

**/ipfs/hash3**  
*/ipfs/hash1*  
*/ipfs/hash2*

```
{  
  "pin": [  
    "/ipfs/hash3"  
  ]  
}
```

**/ipfs/hash6**



**/ipfs/hash5**

# How it works 🐙 IPFS Pinning Consortium

∞  
**swarm.city**



IPFS  
P2P Node



IPFS  
P2P Node

```
{  
  "pin": [  
    "/ipfs/hash1",  
    "/ipfs/hash2"  
  ]  
}
```

/ipfs/hash1  
/ipfs/hash2  
/ipfs/hash3  
**/ipfs/hash5**

↔  
*cross-pinning*

/ipfs/hash3  
/ipfs/hash1  
/ipfs/hash2  
**/ipfs/hash6**

```
{  
  "pin": [  
    "/ipfs/hash3"  
  ]  
}
```

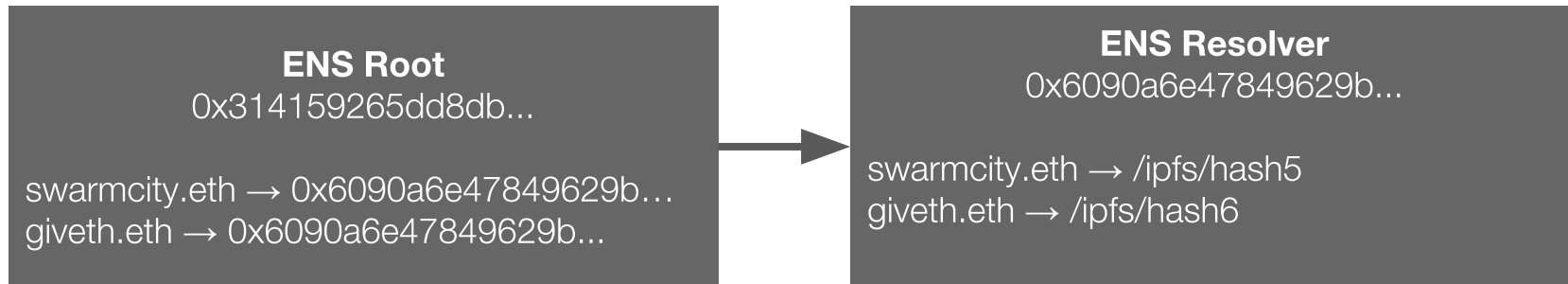
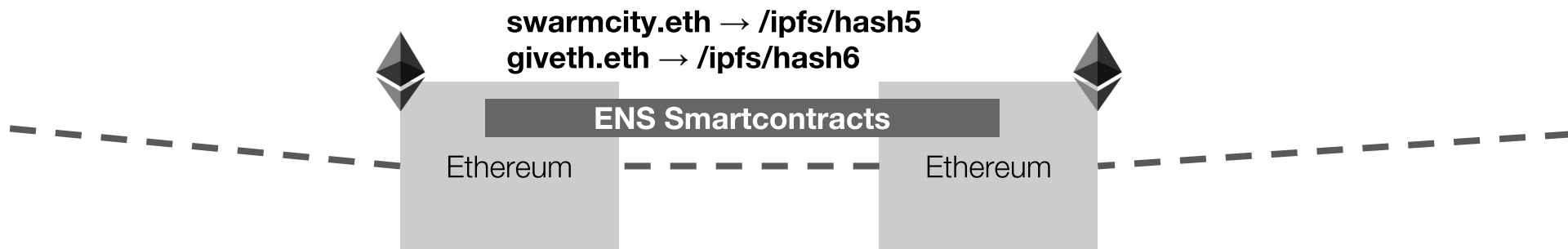
**swarmcity.eth → /ipfs/hash5**  
**giveth.eth → /ipfs/hash6**

**ENS Smartcontracts**

Ethereum

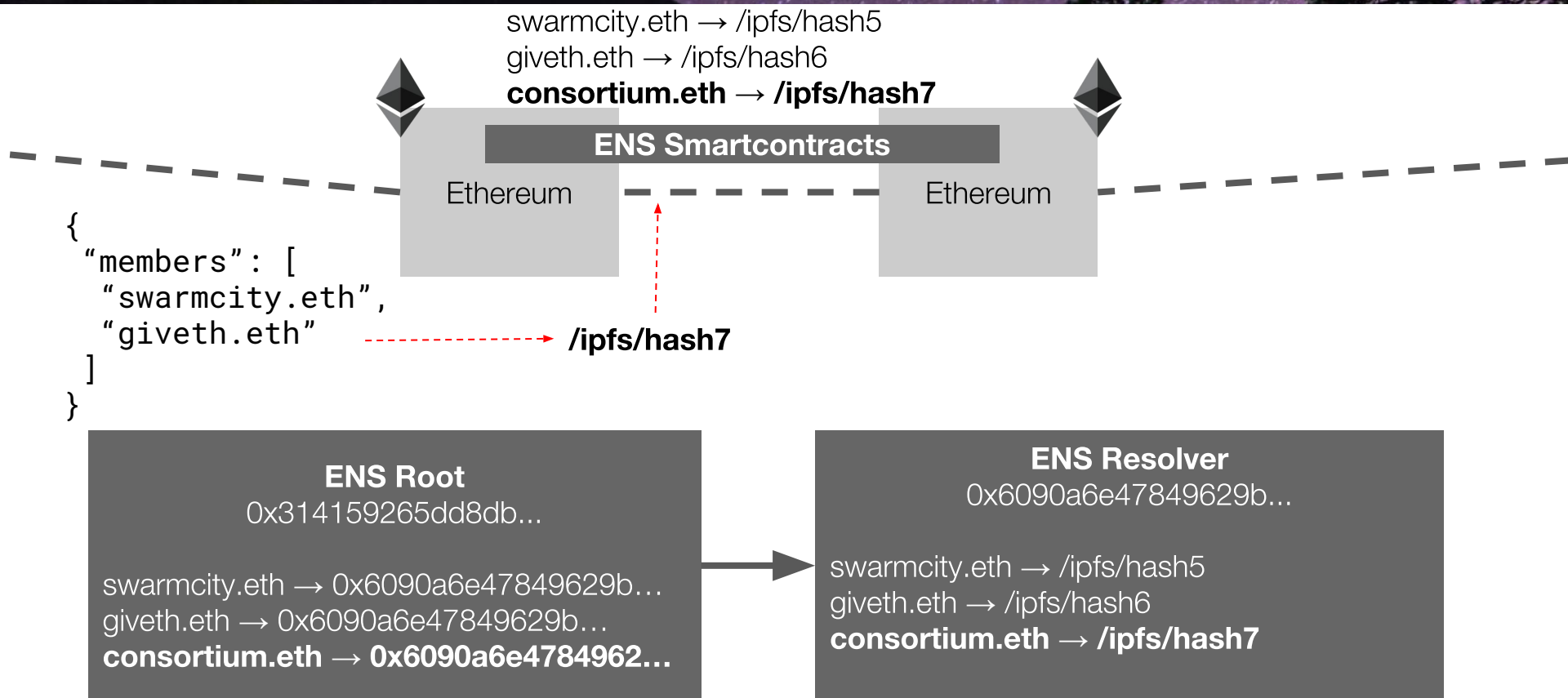
Ethereum

# How it works 🗨 IPFS Pinning Consortium





# How it works 🕸 IPFS Pinning Consortium



# IPFSC clients 📍 IPFS Pinning Consortium

  
**swarm.city**



IPFS  
P2P Node



IPFS  
P2P Node

IPFSProxy (js)  
gipc (golang)

IPFSProxy (js)  
gipc (golang)



Ethereum

**ENS Smartcontracts**



Ethereum



# gipc 🗨 IPFS Pinning Consortium

```
install golang <3  
go get github.com/ipfsconsortium/gipc
```

## NEXT STEPS 📌 IPFS Pinning Consortium

👍 corner cases

☁️ interop testsuite with js client

📡  it :)  
DAppNode

😁 hashes from smartcontract events



# 📍 IPFS Pinning Consortium 📍

eduardo, jordi & adrià @ giveth  
sponnet @ swarmcity

 <https://github.com/ipfsconsortium/gipc>



IPFSconsortium

<https://github.com/adriamb/slides/noncentralconf-ipfsc.pdf>